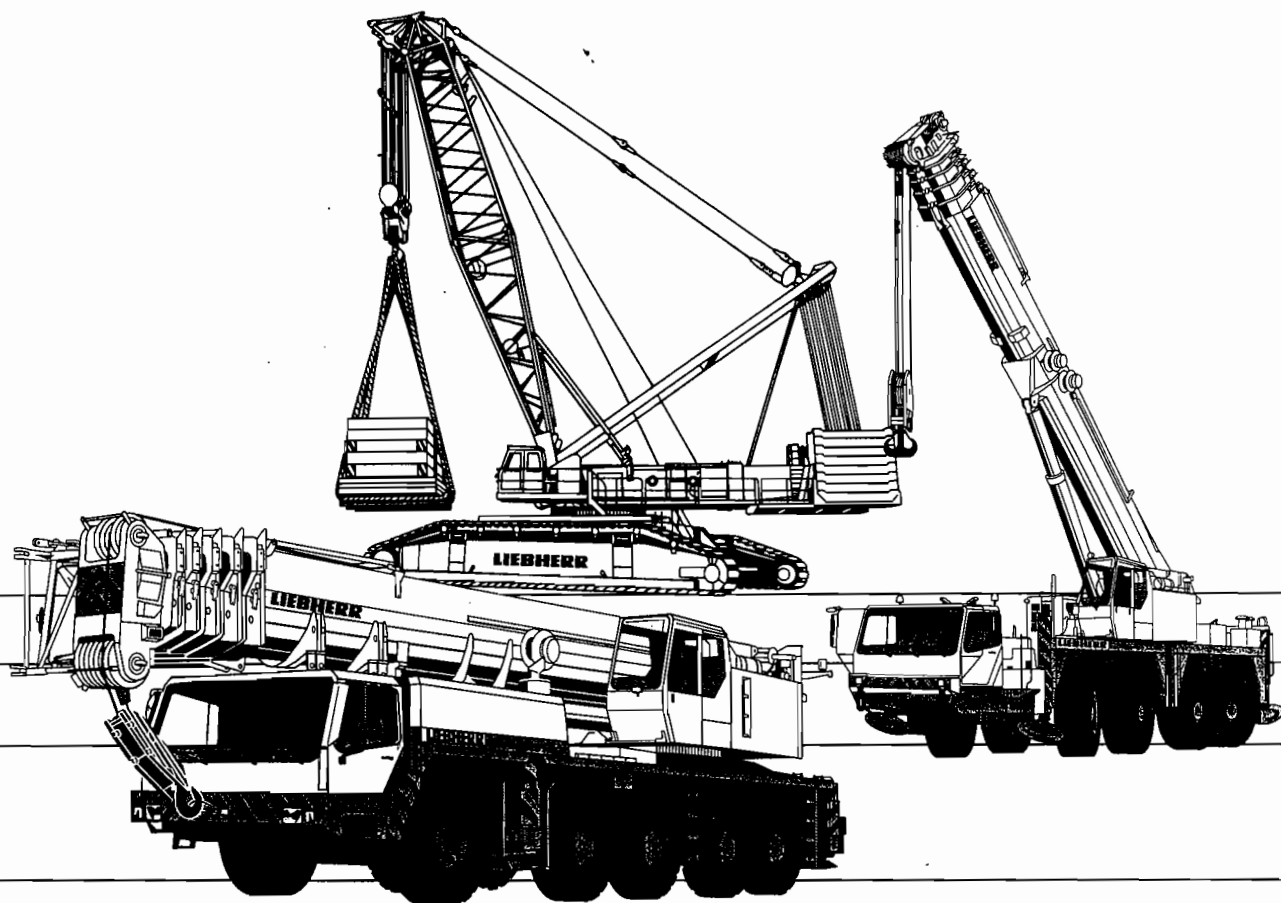




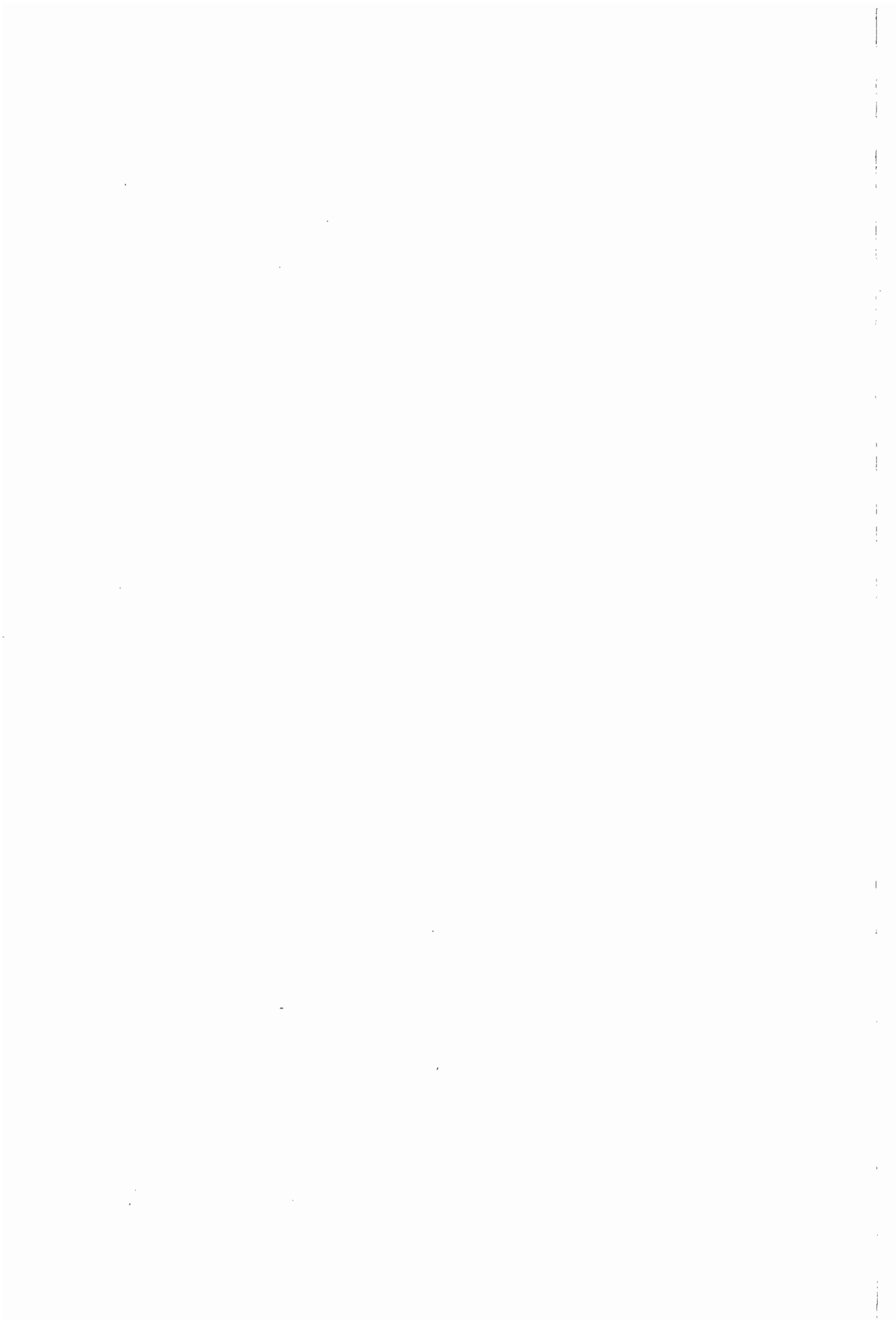
# LTM 1120

## Load charts Traglasttabellen



02

# LIEBHERR





**LIEBHERR**  
**TELESCOPIC BOOM- MOBILE CRANE**  
**TYPE LTM 1120**

**Load charts**  
**and notes for using the load charts**

|                     |                        |
|---------------------|------------------------|
| <b>crane number</b> | <b>0016365</b>         |
| <b>date</b>         | <b>Januar 30, 2001</b> |





## I. INFORMATION FOR USING THE LOAD CAPACITY TABLES

**DANGER:** The regulations specifications in the operating instructions for crane operations are decisive and final. If these are not observed, there is an extremely high risk of ACCIDENTS!

### 1. Explanations

- 1.1 The load capacity value in the load capacity tables are indicated in metric tons.
- 1.2 The working radius is the horizontal distance between the center of gravity of the load from the slewing axis of the crane superstructure as measured from the ground. This also applies when the crane is subjected to loads; i.e., this includes boom flexure.
- 1.3 Crane operations are only permitted with the crane supported. Here, the sliding arms must always be extended to the dimensions specified in the respective load capacity table.
- 1.4 Boom positions other than those specified in the load capacity tables are prohibited.
- 1.5 The boom must only be moved in those ranges for which load capacity values are given, even without a load, as otherwise the crane can topple. In normal operations, this is prevented by the overload safety device. When "Assembly" is engaged, (with the assembly key-operated switch), the boom must only be luffed or lowered within the specified working radius ranges.
- 1.6 The given load capacities include the weight of the slinging tackle, hoisting and take-up tackle. The possible weight of the load to be hoisted is thus less than the weights above.
- 1.7 The number values in the table "Extension condition of the telescopic section in percent" indicate how far the individual telescopic sections must be extended in order to reach a certain boom length (0 = completely retracted, 100 = completely extended). Any extension conditions other than those indicated are prohibited.
- 1.8 If the crane is equipped with tires of size 14.00-25, an additional central ballast is mounted on the crane chassis.

### 2. Crane operating mode "Crane supported"

- 2.1 Before the crane is raised on its supports, the axle suspension must be blocked.
- 2.2 The sliding arms of the hydraulic support jack must be extended (simultaneously on both sides) to the precise dimension specified in the applicable load capacity table.
- 2.3 The sliding arms must be secured by pins.
- 2.4 It is necessary to place stable underlay material under the support pads of the support jacks over a large surface area according to ground conditions.
- 2.5 All wheels must be raised clear of the ground.
- 2.6 The crane must be aligned horizontally with the aid of the level gauges. The horizontal crane position must be checked occasionally, and if necessary corrected, during crane operation.





**3. There is a danger of overloading or toppling the crane if:**

- 3.1 the crane is unsupported and the slewing platform is rotated out of the crane's longitudinal axis. Before slewing the superstructure, the crane must be supported;
- 3.2 the crane is not properly supported on all 4 hydraulic supports and aligned;
- 3.3 the sliding arms are not extended to the precise dimension specified in the correct load capacity table (simultaneously on both sides);
- 3.4 the sliding arms are not secured with pins;
- 3.5 the support pads are not provided with a suitable foundation of stable material in accordance with the relevant ground conditions;
- 3.6 the load specified in the load capacity tables and/or working radii are not strictly adhered to;
- 3.7 there is insufficient distance from trenches, cellars, and holes;
- 3.8 the load begins to swing due to improper control of crane movements;
- 3.9 loads are pulled at an angle. Pulling diagonally to the boom's longitudinal axis is the most dangerous movement, and must never be carried out. Pulling at an angle is prohibited.

**4. Telescopic boom**

- 4.1 The lifting capacity of the telescopic boom with its 3 extendable telescopic sections is limited. The loads stated in the load capacity tables must not be exceeded.
- 4.2 The specifications for the telescopic sections to be extended according to load and required boom length must be observed under all circumstances.
- 4.3 As a general rule, the boom should first be extended to the required length, and then loaded. However, it is possible to extend and retract the boom under partial load. The weight of this partial load is dependent on bearing pad lubrication and the available useable lengths of the telescopic sections.
- 4.4 Even without a load, the telescopic boom may only be moved within the working radius ranges for which values are listed in the load capacity table.

**DANGER : Failure to observe this regulation may lead to accidents**

**5. Rope winches**

**5.1 Winch 1 (main hoisting gear)**

Winch 1 is designed for a maximum rope tension of 78.5 kN. This rope tension must not be exceeded under any circumstances. Accordingly, the minimum number of hoisting rope lines (rope reeving) should be selected according to the weight of the load to be lifted (see Table "Hoisting rope reeving" in Chapter II).

**5.2 Winch 2 (Auxiliary hoisting gear)**

The information given under point 7.1 applies here also.

**5.3 Prevention of rope slack formation:**

- 5.3.1 When retracting the telescopic boom, the winch must be operated in the direction of lifting simultaneously, in order to prevent the hook block from descending to the ground and creating rope slack. The speed of the hoisting rope movement should be matched to that used for retraction.
- 5.3.2 The rope guides on the winches must be supervised by a member of the workforce when additional equipment is being mounted.





## 6. Hoisting rope reeving

6. The hoisting rope must be reeved in between boom head and hook block in accordance with the maximum rope tension of the winch and the weight of the load to be lifted.
- 6.2 If several hoisting rope lines are reeved in, the efficiency of the hook block is reduced due to pulley friction and rope flexure.  
In consequence, with a rope tension of e.g. 78.5 kN, only 742 kN (74.2 t) can be pulled with a 10-fold line reeving, instead of 785 kN (78.5 t).
- 6.3 Consult the table "Hoisting rope reeving" in Chapter II of this manual for the maximum loads in dependence on the number of hoisting rope lines.
- 6.4 The number of hoisting rope lines reeved must be set on the control and display unit of the LICCON overload safety device according to the current hoisting rope reeving total.

## 7. Changing between material handling and installation operation

### 7.1 Load carrying capacity of the crane

The load carrying members of the crane have been designed according to the load criteria for installation /set up operations (load collective classification = "light" = Q1 or L1). Stress collective S1 according to DIN 15018 Part 3 and stress margin range N1 according to DIN 15018 Part 1 or ISO 4301, group A1.

If an installation / set up crane is used material handling, the stress margin ranges increase. Therefore the loads must be reduced since a higher stress group now be applicable. This is especially true if the calculated loads are limited by strength values.

**CAUTION:** For crane value calculation, it has been assumed that the crane will be utilized as an installation crane (load collective classification = "light" = Q1 or L1). If the crane is also used in material handling application, premature wear of all drive sections must be expected, and cracks may occur in load carrying steel members. We therefore strongly recommend, that if the crane is utilized in material handling application, the load values are reduced by 50 %, as compared to the data given in the corresponding load carrying capacity chart.

For details, have material handling data ready and then contact your Liebherr Service Dept.

The size of the cables as well as drive sections of hoist gears are configured according to the load collectives applicable for installation operation (load collective classification = "light" = Q1 or L1):

**ISO 4301/2 or 4308/2**  
**Group A1**  
**Hoist gears M3**  
**Intake gears M2**

If an installation / set up crane is used material handling (load collective classification = "light" = Q1 or L1), the stress margin range increases, the rope runs must therefore be reduced. If this is not assured, then the hoist rope wear out rate will be reached much earlier, and / or the hoist gear must be rebuilt / serviced much earlier.

Please refer to the information regarding wear out criteria for ropes according to DIN 15020, part 2 or ISO 4309 in chapter 8.01 "Repeat crane inspections" in the crane's Operating Instructions.

**NOTE:** In order to keep wear out rate of hoist ropes as low as possible during material handling operation (load collective classification = "medium" or higher), we recommend the use of a special length rope, so that during material handling operation the rope is rolled onto drum of the hoist winch in only one rope layer.  
If several layers are on the rope drum, the wear rate increases. In addition, the winch drive will run cooler, if the crane is operated with only one rope layer.





## 8. LICCON Overload safety device and Limit switch

If the permissible load moment is exceeded, the electronic LICCON overload safety device shuts down the hoisting, boom topping and boom extension movements. It is possible to decrease the load by means of movements in the opposite direction. The LICCON overload safety device must be checked for correct operation on each occasion before operating the crane.

- 8.1 The LICCON overload safety device must be set to the current equipment mode of the crane by means of function keys or by entering the corresponding 2-digit code (see separate operating instructions "LICCON Overload Safety Device for Liebherr Mobile Cranes").
- 8.2 The LICCON overload limit switch is a safety device and must not be used as a shutdown device for operating purposes. The crane operator must assure himself of the weight of a load before attempting to lift it. The fact that the crane is equipped with the LICCON overload safety device does not free the operator from responsibility with regard to operating safety.
- 8.3 The control and display unit of the LICCON overload safety device indicates among other things the working radius, boom length, pulley height, load and degree of crane load utilization. This provides the operator with a constant overview of the working range and crane utilization.
- 8.4 Hoisting limit switches at the head of the telescopic boom and folding fly jib prevent the hook block from running up against the boom head. The hoisting limit switches must be checked for correct operation on each occasion before the crane is operated.
- 8.5 Gear cam limit switches on the cable winches ensure that 3 safety turns remain on the rope drums. When the final cable layer is reached, a visual check is also necessary to ensure that the 3 safety turns are available. If the hoisting gears have been overturned in the lifting direction, or if the hoisting cable has been changed, then the corresponding limit switch must be reset before resuming operation.
- 8.6 The crane operator must check correct operation of the LICCON overload safety device on each occasion before operating the crane. The crane manufacturer will accept no liability for damage to the crane and consequential damage resulting from non-function or disactivation of the LICCON overload safety device.

## 9. Hook blocks and load hooks

| Load [t] | Own weight [t] | Number of rope pulley |
|----------|----------------|-----------------------|
| 125      | 1.08           | 9                     |
| 100      | 1.00           | 7                     |
| 80       | 0.80           | 5                     |
| 63       | 0.56           | 3                     |
| 25       | 0.44           | 1                     |
| 8.5      | 0.12           | ---                   |



**10. Reductions in load capacity of telescopic boom when folding fly jib is fitted**

- 10.1 The load capacity values stated for the telescopic boom in the load capacity tables apply to the boom without installation of a folding fly jib for transport or operating purposes.
- 10.2 If the folding fly jib is mounted on the telescopic boom, the possible loads which the boom can lift are reduced according to the values given in the table below.

| Location of the folding fly jib                                                           | T-14,0 | T-18,8 | T-22,0 | T-23,5 | T-28,3 | T-32,0 | T-37,8 | T-42,5 | T-45,0 |
|-------------------------------------------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Complete folding fly jib at the side of pivot section                                     | 0,95   | 0,71   | 0,60   | 0,56   | 0,47   | 0,40   | 0,35   | 0,31   | 0,30   |
| Folding fly jib K-12 at pulley head of telescopic boom, rest at the side of pivot section | 2,71   | 2,46   | 2,36   | 2,32   | 2,22   | 2,15   | 2,10   | 2,06   | 2,04   |
| Folding fly jib K-18 at pulley head of telescopic boom                                    | 2,91   | 2,64   | 2,52   | 2,48   | 2,37   | 2,29   | 2,23   | 2,19   | 2,17   |
| Folding fly jib K-24 at pulley head of telescopic boom                                    | 4,00   | 3,54   | 3,35   | 3,27   | 3,09   | 2,96   | 2,87   | 2,79   | 2,76   |

**11. Working platform**

- 11.1 If the crane is equipped with a working platform, refer to Chapter II for working radius tables for operation with a working platform. Never exceed or undershoot the working range specified in the working radius tables.
- 11.2 The maximum permissible burden and number of persons which the working platform can carry is stated on the identification plate of the platform. These limits must be observed under all circumstances.





Diagramm 1

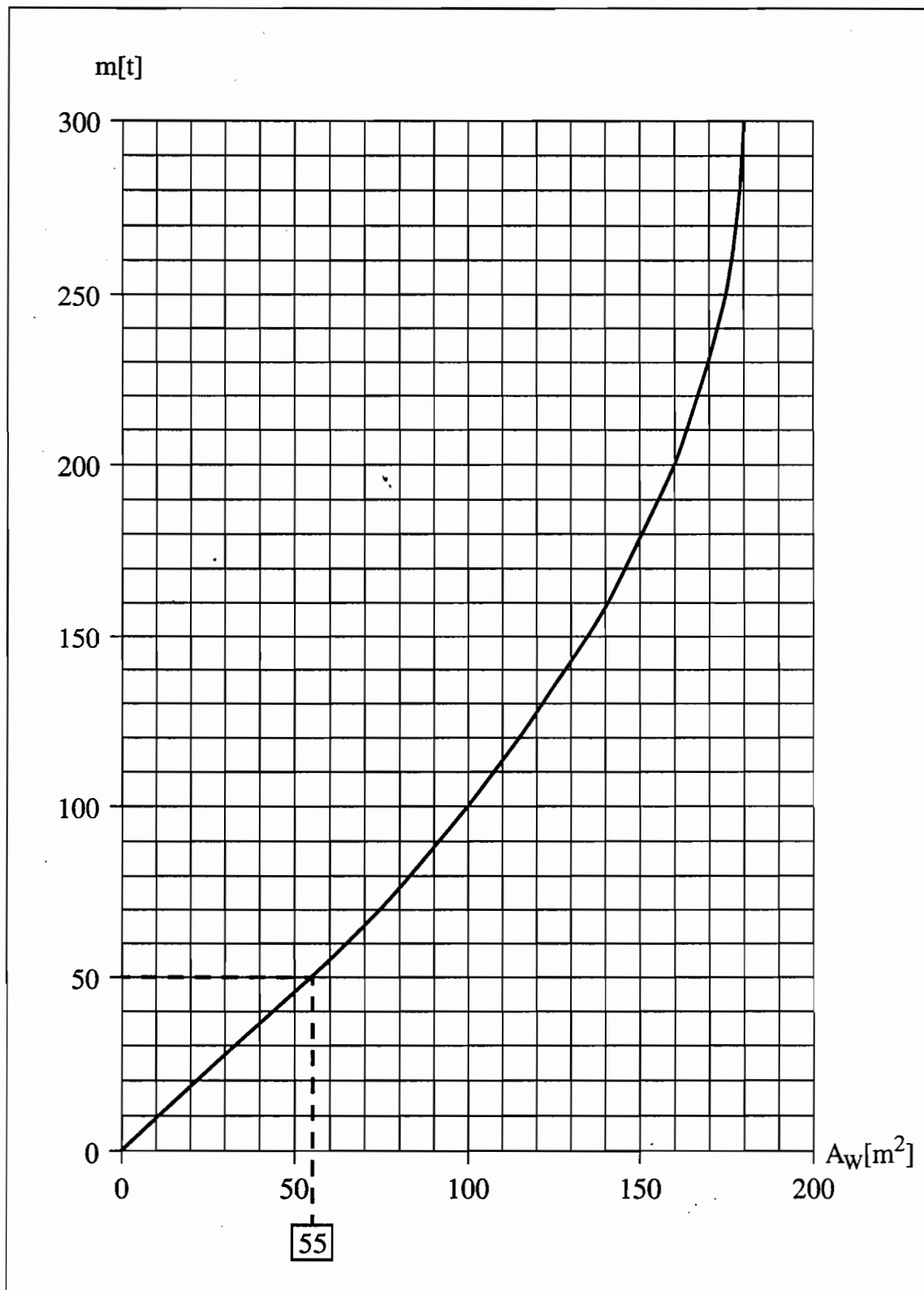
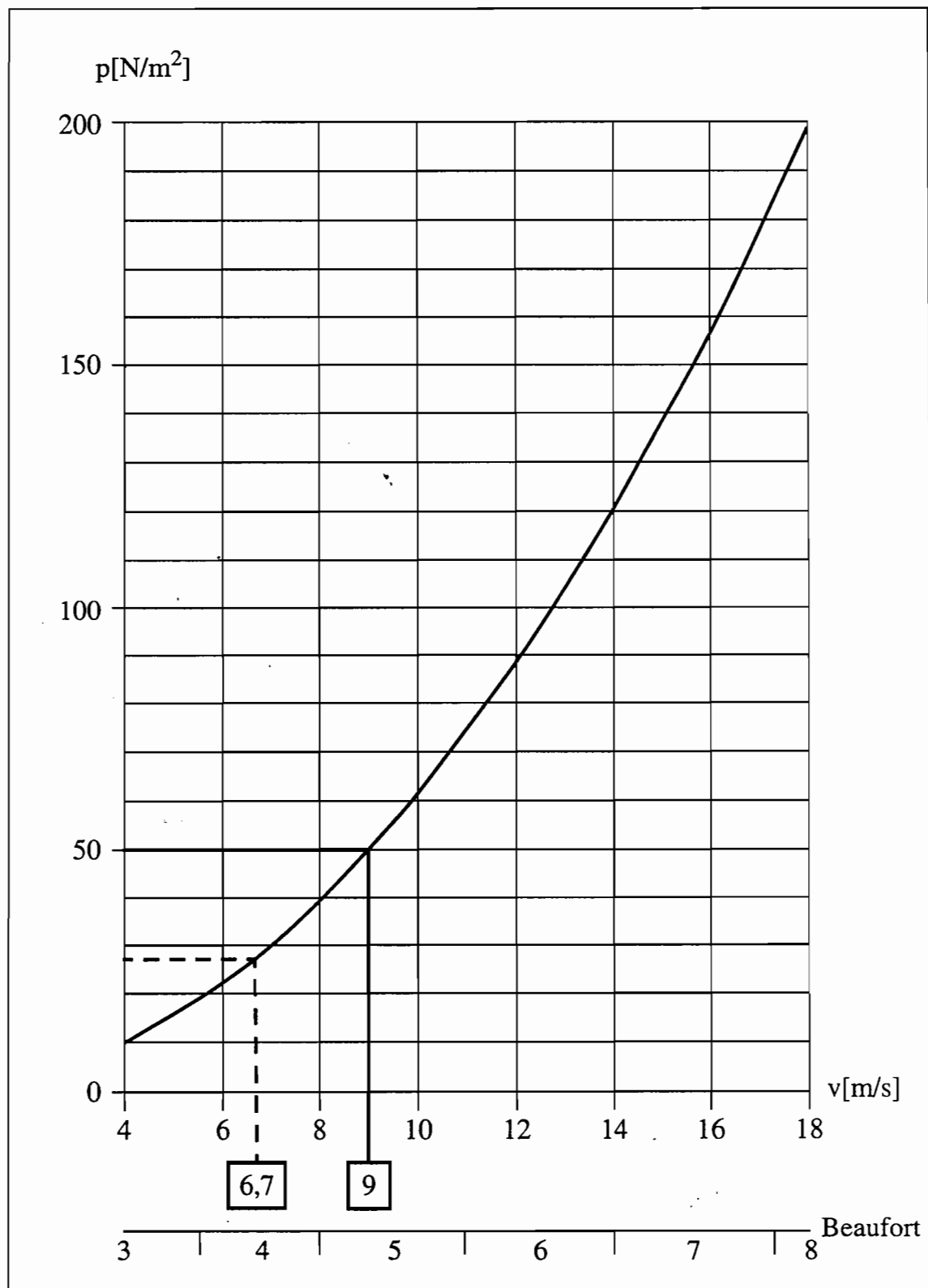
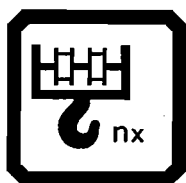


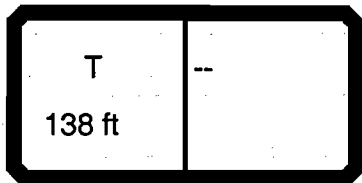


Diagramm 2

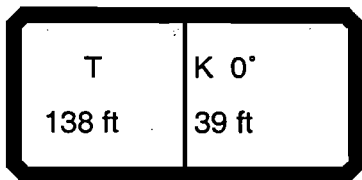




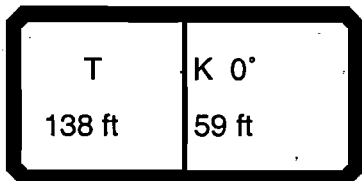
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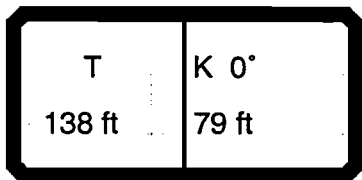
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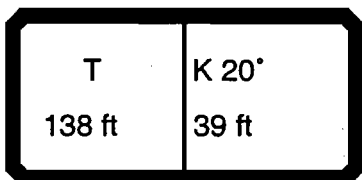
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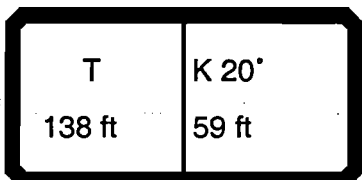
21



27



33



39



|        |       |
|--------|-------|
| T      | K 20° |
| 138 ft | 79 ft |



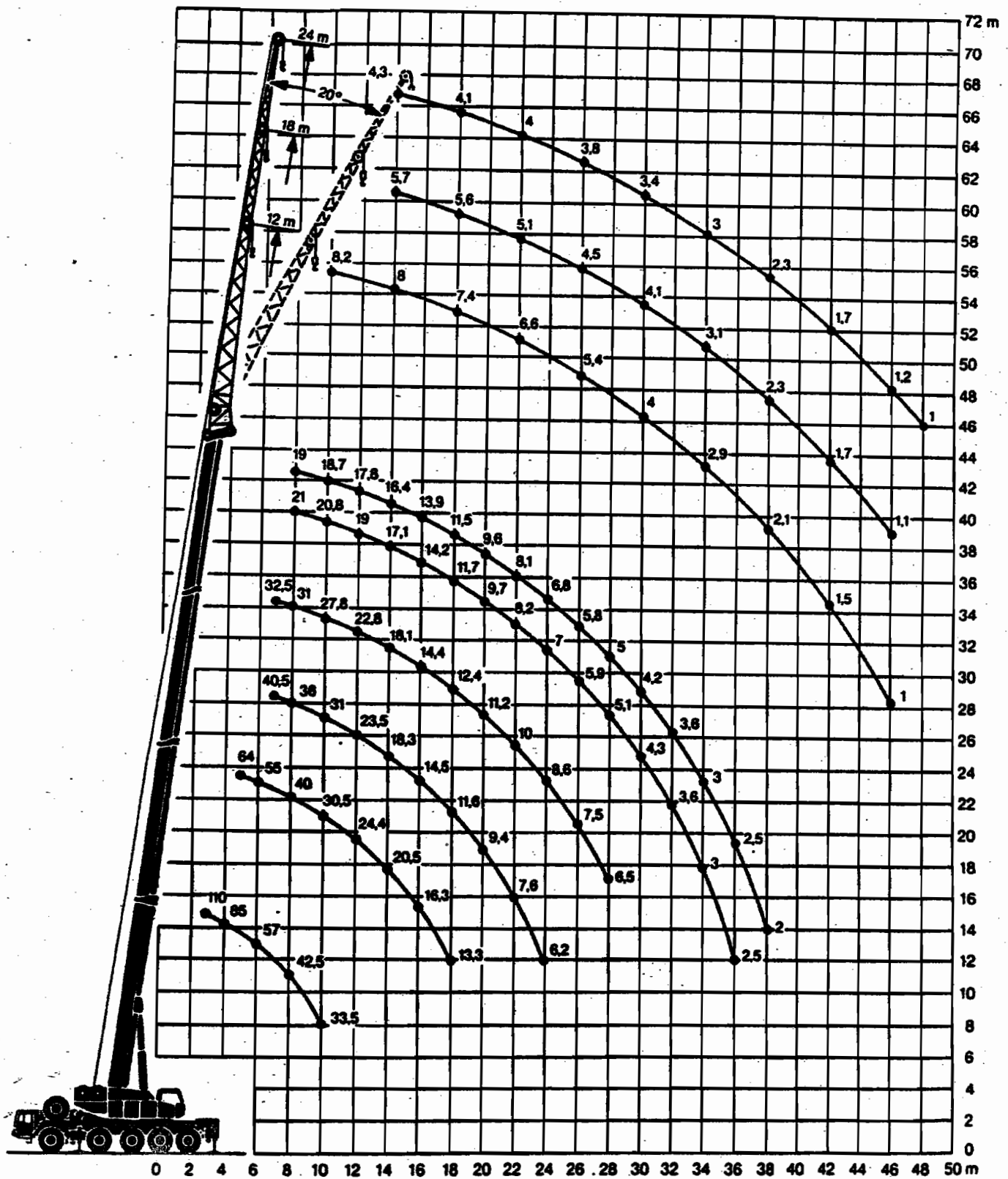
45



|  |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| 1                                                                                 | 18900                                                                              |
| 2                                                                                 | 37900                                                                              |
| 3                                                                                 | 56400                                                                              |
| 4                                                                                 | 74500                                                                              |
| 5                                                                                 | 92800                                                                              |
| 6                                                                                 | 110400                                                                             |
| 7                                                                                 | 127800                                                                             |
| 8                                                                                 | 145000                                                                             |
| 9                                                                                 | 161800                                                                             |
| 10                                                                                | 178600                                                                             |
| 11                                                                                | 195100                                                                             |
| 12                                                                                | 211400                                                                             |
| 13                                                                                | 227000                                                                             |
| 14                                                                                | 242900                                                                             |
| 15                                                                                | 258300                                                                             |
| 16                                                                                | 273500                                                                             |
| 17                                                                                | 288500                                                                             |
| 18                                                                                | 303500                                                                             |



## Lifting heights. Hauteurs de levage.





View thousands of Crane Specifications on [FreeCraneSpecs.com](http://FreeCraneSpecs.com)

|             |    |
|-------------|----|
| T<br>138 ft | -- |
|-------------|----|

01.00

|  |                                             |  |                                                                                                                                           |                                                                                                                                                             |                                                                                                                             |  |  |
|--|---------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|--|--|
|  | <div> <div>T</div> <div>138 ft</div> </div> |  | <div> <div></div> <div>0.0</div> <div>lbs</div> </div> | <div> <div>28.9 x</div> <div></div> <div>18.4</div> <div>ft</div> </div> | <div> <div></div> <div>360°</div> </div> |  |  |
|--|---------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|--|--|

**75 % DIN BS**

WII + 4klbs  
2.75klbs + 4klbs

|        |    |
|--------|----|
| T      | -- |
| 138 ft |    |

0016365

TAB 83101

01.00

[illegible]

|  |             |    |                                                                                                     |                                                                                                             |                                                                                              |  |  |
|--|-------------|----|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--|--|
|  | T<br>138 ft | -- | <br>4.000<br>lbs | <br>28.9 x<br>18.4<br>ft | <br>360° |  |  |
|--|-------------|----|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--|--|

75 % DIN BS

WII + 19.62klbs  
2.75klbs + 19.62klbs

|        |    |
|--------|----|
| T      | -- |
| 138 ft |    |

0016365

TAB 83100

01.00

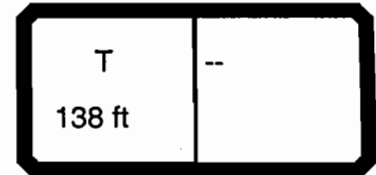
[illegible]

|  |                                |  |                                                                                                                                   |                                                                                  |                                                                                                                   |  |  |
|--|--------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|--|--|
|  | <div>T</div> <div>138 ft</div> |  | <div>  <div>19.600</div> <div>lbs</div> </div> | <div> <math display="block">\frac{28.9 \times}{18.4}</math> <div>ft</div> </div> | <div>  <div>360°</div> </div> |  |  |
|--|--------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|--|--|



75 % DIN BS

WII + 4klbs  
 2.75klbs + 4klbs  
 WII + 35.3klbs



0016365

TAB 83099

01.00

|  ft     |  ft > < lbs |         | CODE >006< |        |        |        |        |        | TL83 0000 .x(x) |  |
|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------|------------|--------|--------|--------|--------|--------|-----------------|--|
|                                                                                          | 44                                                                                           | 73      | 73         | 91     | 106    | 106    | 130    | 138    |                 |  |
| 10                                                                                       | 190,000                                                                                      |         |            |        |        |        |        |        |                 |  |
| 11                                                                                       | 179,000                                                                                      |         |            |        |        |        |        |        |                 |  |
| 12                                                                                       | 169,000                                                                                      |         |            |        |        |        |        |        |                 |  |
| 13                                                                                       | 160,000                                                                                      |         |            |        |        |        |        |        |                 |  |
| 14                                                                                       | 152,000                                                                                      |         |            |        |        |        |        |        |                 |  |
| 15                                                                                       | 144,000                                                                                      | 125,000 | 79,500     |        |        |        |        |        |                 |  |
| 16                                                                                       | 137,000                                                                                      | 115,000 | 79,500     |        |        |        |        |        |                 |  |
| 17                                                                                       | 130,000                                                                                      | 106,000 | 79,500     |        |        |        |        |        |                 |  |
| 18                                                                                       | 123,000                                                                                      | 98,500  | 79,500     |        |        |        |        |        |                 |  |
| 20                                                                                       | 108,000                                                                                      | 84,500  | 79,000     | 79,000 | 71,000 | 56,900 |        |        |                 |  |
| 22                                                                                       | 94,000                                                                                       | 73,500  | 75,500     | 70,000 | 65,000 | 54,200 |        |        |                 |  |
| 24                                                                                       | 81,000                                                                                       | 64,500  | 71,500     | 62,500 | 59,300 | 51,700 |        |        |                 |  |
| 26                                                                                       | 70,000                                                                                       | 57,300  | 66,500     | 55,700 | 53,200 | 49,200 |        |        |                 |  |
| 28                                                                                       | 61,500                                                                                       | 51,500  | 60,500     | 50,400 | 48,500 | 47,100 | 40,800 | 33,100 |                 |  |
| 30                                                                                       | 53,800                                                                                       | 46,200  | 55,100     | 45,600 | 44,100 | 45,000 | 40,400 | 33,100 |                 |  |
| 32                                                                                       | 48,100                                                                                       | 41,900  | 50,600     | 41,500 | 40,300 | 43,300 | 38,800 | 33,100 |                 |  |
| 34                                                                                       |                                                                                              | 38,000  | 46,500     | 38,000 | 37,000 | 41,200 | 36,500 | 32,200 |                 |  |
| 36                                                                                       |                                                                                              | 34,600  | 42,800     | 34,800 | 33,900 | 39,000 | 33,600 | 30,700 |                 |  |
| 38                                                                                       |                                                                                              | 31,100  | 39,100     | 31,500 | 30,800 | 36,800 | 30,800 | 29,200 |                 |  |
| 40                                                                                       |                                                                                              | 27,900  | 35,800     | 28,600 | 28,000 | 34,600 | 28,200 | 27,600 |                 |  |
| 45                                                                                       |                                                                                              | 21,900  | 29,000     | 23,100 | 22,800 | 28,800 | 23,000 | 22,500 |                 |  |
| 50                                                                                       |                                                                                              | 16,900  | 23,800     | 18,800 | 18,600 | 24,200 | 18,900 | 18,500 |                 |  |
| 55                                                                                       |                                                                                              | 12,900  | 19,700     | 15,200 | 15,100 | 20,500 | 15,500 | 15,200 |                 |  |
| 60                                                                                       |                                                                                              |         |            | 12,100 | 12,300 | 17,400 | 12,800 | 12,600 |                 |  |
| 65                                                                                       |                                                                                              |         |            | 9,600  | 10,000 | 15,100 | 10,600 | 10,400 |                 |  |
| 70                                                                                       |                                                                                              |         |            | 7,300  | 8,100  | 13,000 | 8,900  | 8,700  |                 |  |
| 75                                                                                       |                                                                                              |         |            | 5,500  | 6,300  | 11,300 | 7,400  | 7,200  |                 |  |
| 80                                                                                       |                                                                                              |         |            |        | 4,700  | 9,800  | 6,100  | 5,900  |                 |  |
| 85                                                                                       |                                                                                              |         |            |        | 3,400  | 8,300  | 4,900  | 4,700  |                 |  |
| 90                                                                                       |                                                                                              |         |            |        |        | 7,100  | 3,900  | 3,700  |                 |  |
| 95                                                                                       |                                                                                              |         |            |        |        |        | 3,000  | 2,900  |                 |  |
|                                                                                          |                                                                                              |         |            |        |        |        |        |        |                 |  |
|                                                                                          |                                                                                              |         |            |        |        |        |        |        |                 |  |
|                                                                                          |                                                                                              |         |            |        |        |        |        |        |                 |  |
|                                                                                          |                                                                                              |         |            |        |        |        |        |        |                 |  |
|                                                                                          |                                                                                              |         |            |        |        |        |        |        |                 |  |
| * n *                                                                                    | 11                                                                                           | 7       | 5          | 5      | 4      | 4      | 3      | 2      |                 |  |
|                                                                                          |                                                                                              |         |            |        |        |        |        |        |                 |  |
|                                                                                          |                                                                                              |         |            |        |        |        |        |        |                 |  |
|                                                                                          |                                                                                              |         |            |        |        |        |        |        |                 |  |
|  %    | 1 0                                                                                          | 92      | 0          | 92     | 100    | 0      | 92     | 100    |                 |  |
|                                                                                          | 2 0                                                                                          | 0       | 46         | 30     | 50     | 100    | 92     | 100    |                 |  |
|                                                                                          | 3 0                                                                                          | 0       | 46         | 30     | 50     | 100    | 92     | 100    |                 |  |
|  ft/s | 47                                                                                           | 47      | 47         | 47     | 42     | 36     | 36     | 36     |                 |  |



**75 % DIN BS**

WII + 4klbs  
2.75klbs + 4klbs  
WII + 35.3klbs

|             |    |
|-------------|----|
| T<br>138 ft | -- |
|-------------|----|

0016365

TAB 83099

01.00

[illegible]

|  |                                                                                                                                                                                       |                                                                                                                                                   |                                                                                                                                                            |                                                                                                                                            |  |  |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|  | <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">T<br/>138 ft</div> <div style="text-align: center;">--</div> </div> | <div style="text-align: center;">  <p>4.000<br/>lbs</p> </div> | <div style="text-align: center;">  <p>28.9 x<br/>26.2<br/>ft</p> </div> | <div style="text-align: center;">  <p>360°</p> </div> |  |  |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|--|--|



75 % DIN BS

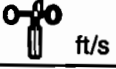
WII + 19.6klbs  
 2.75klbs + 19.6klbs  
 WII + 56.2klbs

|        |    |
|--------|----|
| T      | -- |
| 138 ft |    |

0016365

TAB 83098

01.00

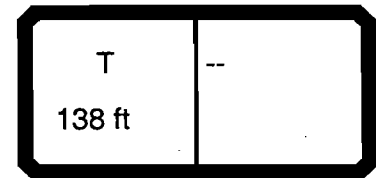
|  ft     |  ft > < lbs |         | CODE >003< |        | TL83 0000 .x(x) |        |        |        |     |  |
|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------|------------|--------|-----------------|--------|--------|--------|-----|--|
|                                                                                          | 44                                                                                           | 73      | 73         | 91     | 106             | 106    | 130    | 138    |     |  |
| 10                                                                                       | 192,000                                                                                      |         |            |        |                 |        |        |        |     |  |
| 11                                                                                       | 182,000                                                                                      |         |            |        |                 |        |        |        |     |  |
| 12                                                                                       | 172,000                                                                                      |         |            |        |                 |        |        |        |     |  |
| 13                                                                                       | 162,000                                                                                      |         |            |        |                 |        |        |        |     |  |
| 14                                                                                       | 154,000                                                                                      |         |            |        |                 |        |        |        |     |  |
| 15                                                                                       | 146,000                                                                                      | 140,000 | 79,500     |        |                 |        |        |        |     |  |
| 16                                                                                       | 139,000                                                                                      | 134,000 | 79,500     |        |                 |        |        |        |     |  |
| 17                                                                                       | 133,000                                                                                      | 128,000 | 79,500     |        |                 |        |        |        |     |  |
| 18                                                                                       | 128,000                                                                                      | 122,000 | 79,500     |        |                 |        |        |        |     |  |
| 20                                                                                       | 117,000                                                                                      | 108,000 | 79,000     | 89,000 | 71,500          | 56,900 |        |        |     |  |
| 22                                                                                       | 107,000                                                                                      | 95,500  | 75,500     | 86,000 | 71,500          | 54,200 |        |        |     |  |
| 24                                                                                       | 97,500                                                                                       | 84,500  | 72,000     | 80,500 | 70,500          | 51,700 |        |        |     |  |
| 26                                                                                       | 88,000                                                                                       | 75,000  | 67,500     | 72,500 | 68,500          | 49,200 |        |        |     |  |
| 28                                                                                       | 78,500                                                                                       | 68,000  | 65,500     | 66,000 | 63,500          | 47,100 | 43,000 | 35,300 |     |  |
| 30                                                                                       | 69,000                                                                                       | 61,500  | 64,000     | 60,000 | 57,800          | 45,000 | 43,000 | 35,300 |     |  |
| 32                                                                                       | 62,000                                                                                       | 56,200  | 61,000     | 55,100 | 53,200          | 43,300 | 43,000 | 35,300 |     |  |
| 34                                                                                       |                                                                                              | 51,500  | 57,800     | 50,800 | 49,200          | 41,700 | 42,200 | 35,300 |     |  |
| 36                                                                                       |                                                                                              | 47,400  | 53,800     | 46,900 | 45,500          | 40,300 | 41,000 | 35,300 |     |  |
| 38                                                                                       |                                                                                              | 43,200  | 49,700     | 43,000 | 41,800          | 38,900 | 39,700 | 35,300 |     |  |
| 40                                                                                       |                                                                                              | 39,300  | 45,900     | 39,500 | 38,400          | 37,500 | 38,000 | 34,700 |     |  |
| 45                                                                                       |                                                                                              | 31,100  | 37,900     | 32,600 | 31,900          | 34,500 | 31,400 | 30,400 |     |  |
| 50                                                                                       |                                                                                              | 24,900  | 31,600     | 26,900 | 26,500          | 31,100 | 26,400 | 25,900 |     |  |
| 55                                                                                       |                                                                                              | 19,900  | 26,600     | 22,300 | 22,200          | 27,400 | 22,300 | 21,800 |     |  |
| 60                                                                                       |                                                                                              |         |            | 18,600 | 18,600          | 23,700 | 18,900 | 18,500 |     |  |
| 65                                                                                       |                                                                                              |         |            | 15,200 | 15,800          | 20,700 | 16,200 | 16,000 |     |  |
| 70                                                                                       |                                                                                              |         |            | 12,600 | 13,400          | 18,200 | 14,000 | 13,700 |     |  |
| 75                                                                                       |                                                                                              |         |            | 10,400 | 11,200          | 16,100 | 12,100 | 11,800 |     |  |
| 80                                                                                       |                                                                                              |         |            |        | 9,300           | 14,100 | 10,400 | 10,200 |     |  |
| 85                                                                                       |                                                                                              |         |            |        | 7,600           | 12,500 | 8,900  | 8,700  |     |  |
| 90                                                                                       |                                                                                              |         |            |        | 6,200           | 11,100 | 7,700  | 7,500  |     |  |
| 95                                                                                       |                                                                                              |         |            |        |                 |        | 6,600  | 6,400  |     |  |
| 100                                                                                      |                                                                                              |         |            |        |                 |        | 5,600  | 5,500  |     |  |
| 105                                                                                      |                                                                                              |         |            |        |                 |        | 4,600  | 4,600  |     |  |
| 110                                                                                      |                                                                                              |         |            |        |                 |        | 3,800  | 3,800  |     |  |
| 115                                                                                      |                                                                                              |         |            |        |                 |        | 3,000  | 3,000  |     |  |
|                                                                                          |                                                                                              |         |            |        |                 |        |        |        |     |  |
|                                                                                          |                                                                                              |         |            |        |                 |        |        |        |     |  |
| * n *                                                                                    | 11                                                                                           | 8       | 5          | 5      | 4               | 4      | 3      | 2      |     |  |
|                                                                                          |                                                                                              |         |            |        |                 |        |        |        |     |  |
|                                                                                          |                                                                                              |         |            |        |                 |        |        |        |     |  |
|  %    | 1                                                                                            | 0       | 92         | 0      | 92              | 100    | 0      | 92     | 100 |  |
|                                                                                          | 2                                                                                            | 0       | 0          | 46     | 30              | 50     | 100    | 92     | 100 |  |
|                                                                                          | 3                                                                                            | 0       | 0          | 46     | 30              | 50     | 100    | 92     | 100 |  |
|  ft/s |                                                                                              | 47      | 47         | 47     | 47              | 42     | 36     | 36     | 36  |  |
|                                                                                          |                                                                                              |         |            |        |                 |        |        |        |     |  |

|  |        |    |                                                                                                |                                                                                                     |                                                                                            |  |  |
|--|--------|----|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--|--|
|  | T      | -- |  56.200 lbs |  28.9 x 18.4 ft |  360° |  |  |
|  | 138 ft |    |                                                                                                |                                                                                                     |                                                                                            |  |  |



75. % DIN BS

WII + 19.6klbs  
 2.75klbs + 19.6klbs  
 WII + 56.2klbs

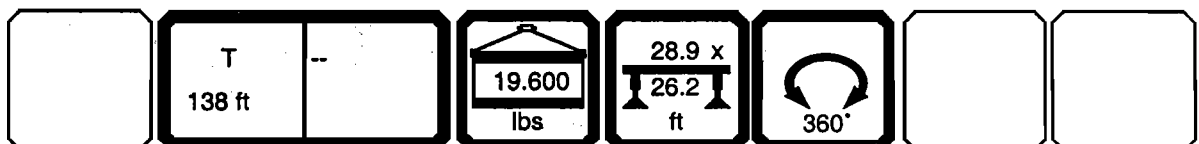


0016365

TAB 83098

01.00

|  ft     |  ft > < lbs |         |        | CODE >007< |        |        | TL83 0000 .x(x) |        |     |
|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------|--------|------------|--------|--------|-----------------|--------|-----|
|                                                                                          | 44                                                                                           | 73      | 73     | 91         | 106    | 106    | 130             | 138    |     |
| 10                                                                                       | 192,000                                                                                      |         |        |            |        |        |                 |        |     |
| 11                                                                                       | 182,000                                                                                      |         |        |            |        |        |                 |        |     |
| 12                                                                                       | 172,000                                                                                      |         |        |            |        |        |                 |        |     |
| 13                                                                                       | 162,000                                                                                      |         |        |            |        |        |                 |        |     |
| 14                                                                                       | 154,000                                                                                      |         |        |            |        |        |                 |        |     |
| 15                                                                                       | 146,000                                                                                      | 140,000 | 79,500 |            |        |        |                 |        |     |
| 16                                                                                       | 139,000                                                                                      | 134,000 | 79,500 |            |        |        |                 |        |     |
| 17                                                                                       | 133,000                                                                                      | 128,000 | 79,500 |            |        |        |                 |        |     |
| 18                                                                                       | 128,000                                                                                      | 122,000 | 79,500 |            |        |        |                 |        |     |
| 20                                                                                       | 117,000                                                                                      | 108,000 | 79,000 | 89,000     | 71,500 | 56,900 |                 |        |     |
| 22                                                                                       | 107,000                                                                                      | 95,500  | 75,500 | 86,000     | 71,500 | 54,200 |                 |        |     |
| 24                                                                                       | 97,500                                                                                       | 84,500  | 72,000 | 80,500     | 70,500 | 51,700 |                 |        |     |
| 26                                                                                       | 88,000                                                                                       | 75,000  | 67,500 | 72,500     | 68,500 | 49,200 |                 |        |     |
| 28                                                                                       | 78,500                                                                                       | 68,000  | 65,500 | 66,000     | 63,500 | 47,100 | 43,000          | 35,300 |     |
| 30                                                                                       | 69,000                                                                                       | 61,500  | 64,000 | 60,000     | 57,800 | 45,000 | 43,000          | 35,300 |     |
| 32                                                                                       | 62,000                                                                                       | 56,200  | 61,000 | 55,100     | 53,200 | 43,300 | 43,000          | 35,300 |     |
| 34                                                                                       |                                                                                              | 51,500  | 57,800 | 50,800     | 49,200 | 41,700 | 42,200          | 35,300 |     |
| 36                                                                                       |                                                                                              | 47,400  | 53,800 | 46,900     | 45,500 | 40,300 | 41,000          | 35,300 |     |
| 38                                                                                       |                                                                                              | 43,200  | 49,700 | 43,000     | 41,800 | 38,900 | 39,700          | 35,300 |     |
| 40                                                                                       |                                                                                              | 39,300  | 45,900 | 39,500     | 38,400 | 37,500 | 38,000          | 34,700 |     |
| 45                                                                                       |                                                                                              | 31,100  | 37,900 | 32,600     | 31,900 | 34,500 | 31,400          | 30,400 |     |
| 50                                                                                       |                                                                                              | 24,900  | 31,600 | 26,900     | 26,500 | 31,100 | 26,400          | 25,900 |     |
| 55                                                                                       |                                                                                              | 19,900  | 26,600 | 22,300     | 22,200 | 27,400 | 22,300          | 21,800 |     |
| 60                                                                                       |                                                                                              |         |        | 18,600     | 18,600 | 23,700 | 18,900          | 18,500 |     |
| 65                                                                                       |                                                                                              |         |        | 15,200     | 15,800 | 20,700 | 16,200          | 16,000 |     |
| 70                                                                                       |                                                                                              |         |        | 12,600     | 13,400 | 18,200 | 14,000          | 13,700 |     |
| 75                                                                                       |                                                                                              |         |        | 10,400     | 11,200 | 16,100 | 12,100          | 11,800 |     |
| 80                                                                                       |                                                                                              |         |        |            | 9,300  | 14,100 | 10,400          | 10,200 |     |
| 85                                                                                       |                                                                                              |         |        |            | 7,600  | 12,500 | 8,900           | 8,700  |     |
| 90                                                                                       |                                                                                              |         |        |            | 6,200  | 11,100 | 7,700           | 7,500  |     |
| 95                                                                                       |                                                                                              |         |        |            |        |        | 6,600           | 6,400  |     |
| 100                                                                                      |                                                                                              |         |        |            |        |        | 5,600           | 5,500  |     |
| 105                                                                                      |                                                                                              |         |        |            |        |        | 4,600           | 4,600  |     |
| 110                                                                                      |                                                                                              |         |        |            |        |        | 3,800           | 3,800  |     |
| 115                                                                                      |                                                                                              |         |        |            |        |        | 3,000           | 3,000  |     |
|                                                                                          |                                                                                              |         |        |            |        |        |                 |        |     |
| * n *                                                                                    | 11                                                                                           | 8       | 5      | 5          | 4      | 4      | 3               | 2      |     |
|                                                                                          |                                                                                              |         |        |            |        |        |                 |        |     |
|  %    | 1                                                                                            | 0       | 92     | 0          | 92     | 100    | 0               | 92     | 100 |
|                                                                                          | 2                                                                                            | 0       | 0      | 46         | 30     | 50     | 100             | 92     | 100 |
|                                                                                          | 3                                                                                            | 0       | 0      | 46         | 30     | 50     | 100             | 92     | 100 |
|  ft/s |                                                                                              | 47      | 47     | 47         | 47     | 42     | 36              | 36     | 36  |
|                                                                                          |                                                                                              |         |        |            |        |        |                 |        |     |





85 % PCSA

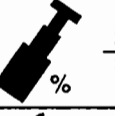
WII + 35.3klbs  
2.75klbs + 35.3klbs

|        |    |
|--------|----|
| T      | -- |
| 138 ft |    |

0016365

TAB 83112

01.00

|  ft     |  ft > < lbs |         | CODE >004< |        |        |        | TL83 0000 .x(x) |        |     |  |
|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------|------------|--------|--------|--------|-----------------|--------|-----|--|
|                                                                                          | 44                                                                                           | 73      | 73         | 91     | 106    | 106    | 130             | 138    |     |  |
| 10                                                                                       | 241,000                                                                                      |         |            |        |        |        |                 |        |     |  |
| 11                                                                                       | 229,000                                                                                      |         |            |        |        |        |                 |        |     |  |
| 12                                                                                       | 216,000                                                                                      |         |            |        |        |        |                 |        |     |  |
| 13                                                                                       | 202,000                                                                                      |         |            |        |        |        |                 |        |     |  |
| 14                                                                                       | 191,000                                                                                      |         |            |        |        |        |                 |        |     |  |
| 15                                                                                       | 180,000                                                                                      | 153,000 | 87,000     |        |        |        |                 |        |     |  |
| 16                                                                                       | 170,000                                                                                      | 149,000 | 87,000     |        |        |        |                 |        |     |  |
| 17                                                                                       | 161,000                                                                                      | 145,000 | 87,000     |        |        |        |                 |        |     |  |
| 18                                                                                       | 152,000                                                                                      | 140,000 | 87,000     |        |        |        |                 |        |     |  |
| 20                                                                                       | 137,000                                                                                      | 130,000 | 86,500     | 97,500 | 79,500 | 62,500 |                 |        |     |  |
| 22                                                                                       | 125,000                                                                                      | 118,000 | 83,000     | 95,000 | 79,500 | 59,600 |                 |        |     |  |
| 24                                                                                       | 114,000                                                                                      | 108,000 | 79,000     | 91,500 | 78,000 | 56,800 |                 |        |     |  |
| 26                                                                                       | 105,000                                                                                      | 98,000  | 74,500     | 87,500 | 75,500 | 54,100 |                 |        |     |  |
| 28                                                                                       | 97,000                                                                                       | 90,500  | 72,000     | 84,500 | 73,000 | 51,800 | 50,900          | 46,100 |     |  |
| 30                                                                                       | 90,000                                                                                       | 83,000  | 70,000     | 81,000 | 71,000 | 49,600 | 50,900          | 46,000 |     |  |
| 32                                                                                       | 83,000                                                                                       | 75,500  | 67,000     | 73,500 | 68,500 | 47,600 | 50,600          | 45,600 |     |  |
| 34                                                                                       |                                                                                              | 69,500  | 65,000     | 67,500 | 64,500 | 45,800 | 49,700          | 45,000 |     |  |
| 36                                                                                       |                                                                                              | 63,500  | 62,500     | 62,500 | 60,000 | 44,300 | 48,300          | 44,300 |     |  |
| 38                                                                                       |                                                                                              | 57,800  | 60,500     | 57,100 | 55,400 | 42,700 | 47,000          | 43,700 |     |  |
| 40                                                                                       |                                                                                              | 52,600  | 58,200     | 52,500 | 51,200 | 41,200 | 45,600          | 42,900 |     |  |
| 45                                                                                       |                                                                                              | 43,400  | 51,500     | 43,700 | 43,000 | 37,900 | 41,900          | 40,200 |     |  |
| 50                                                                                       |                                                                                              | 36,500  | 44,400     | 37,100 | 36,500 | 35,100 | 36,700          | 35,700 |     |  |
| 55                                                                                       |                                                                                              | 30,700  | 37,900     | 31,600 | 31,200 | 32,300 | 31,800          | 31,200 |     |  |
| 60                                                                                       |                                                                                              |         |            | 27,100 | 26,900 | 26,900 | 27,600          | 27,100 |     |  |
| 65                                                                                       |                                                                                              |         |            | 23,400 | 23,400 | 27,400 | 24,200          | 23,800 |     |  |
| 70                                                                                       |                                                                                              |         |            | 20,400 | 20,400 | 25,600 | 21,500          | 21,000 |     |  |
| 75                                                                                       |                                                                                              |         |            | 17,800 | 17,900 | 23,500 | 19,000          | 18,600 |     |  |
| 80                                                                                       |                                                                                              |         |            |        | 15,600 | 21,100 | 16,700          | 16,500 |     |  |
| 85                                                                                       |                                                                                              |         |            |        | 13,800 | 18,900 | 14,900          | 14,700 |     |  |
| 90                                                                                       |                                                                                              |         |            |        | 12,100 | 17,000 | 13,200          | 13,000 |     |  |
| 95                                                                                       |                                                                                              |         |            |        |        |        | 11,700          | 11,500 |     |  |
| 100                                                                                      |                                                                                              |         |            |        |        |        | 10,500          | 10,200 |     |  |
| 105                                                                                      |                                                                                              |         |            |        |        |        | 9,500           | 9,000  |     |  |
| 110                                                                                      |                                                                                              |         |            |        |        |        | 8,300           | 8,200  |     |  |
| 115                                                                                      |                                                                                              |         |            |        |        |        | 7,200           | 7,200  |     |  |
| 120                                                                                      |                                                                                              |         |            |        |        |        |                 | 6,300  |     |  |
|                                                                                          |                                                                                              |         |            |        |        |        |                 |        |     |  |
| * n *                                                                                    | 14                                                                                           | 9       | 5          | 6      | 5      | 4      | 3               | 3      |     |  |
|                                                                                          |                                                                                              |         |            |        |        |        |                 |        |     |  |
|                                                                                          |                                                                                              |         |            |        |        |        |                 |        |     |  |
|  %    | 1                                                                                            | 0       | 92         | 0      | 92     | 100    | 0               | 92     | 100 |  |
|                                                                                          | 2                                                                                            | 0       | 0          | 46     | 30     | 50     | 100             | 92     | 100 |  |
|                                                                                          | 3                                                                                            | 0       | 0          | 46     | 30     | 50     | 100             | 92     | 100 |  |
|  ft/s |                                                                                              | 47      | 47         | 47     | 47     | 42     | 36              | 36     | 36  |  |
|                                                                                          |                                                                                              |         |            |        |        |        |                 |        |     |  |

|                                                                                       |                                                                                |   |    |        |  |                                                                                                                                                                   |                                                                                     |        |     |                                                                                                                                                                                        |        |                                                                                     |      |    |                                                                                                                                              |                                                                                       |      |  |  |
|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|---|----|--------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------|------|----|----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------|--|--|
|                                                                                       | <table><tr><td>T</td><td>--</td></tr><tr><td>138 ft</td><td></td></tr></table> | T | -- | 138 ft |  | <table><tr><td></td></tr><tr><td>35.300</td></tr><tr><td>lbs</td></tr></table> |  | 35.300 | lbs | <table><tr><td>28.9 x</td></tr><tr><td></td></tr><tr><td>26.2</td></tr><tr><td>ft</td></tr></table> | 28.9 x |  | 26.2 | ft | <table><tr><td></td></tr><tr><td>360°</td></tr></table> |  | 360° |  |  |
| T                                                                                     | --                                                                             |   |    |        |  |                                                                                                                                                                   |                                                                                     |        |     |                                                                                                                                                                                        |        |                                                                                     |      |    |                                                                                                                                              |                                                                                       |      |  |  |
| 138 ft                                                                                |                                                                                |   |    |        |  |                                                                                                                                                                   |                                                                                     |        |     |                                                                                                                                                                                        |        |                                                                                     |      |    |                                                                                                                                              |                                                                                       |      |  |  |
|    |                                                                                |   |    |        |  |                                                                                                                                                                   |                                                                                     |        |     |                                                                                                                                                                                        |        |                                                                                     |      |    |                                                                                                                                              |                                                                                       |      |  |  |
| 35.300                                                                                |                                                                                |   |    |        |  |                                                                                                                                                                   |                                                                                     |        |     |                                                                                                                                                                                        |        |                                                                                     |      |    |                                                                                                                                              |                                                                                       |      |  |  |
| lbs                                                                                   |                                                                                |   |    |        |  |                                                                                                                                                                   |                                                                                     |        |     |                                                                                                                                                                                        |        |                                                                                     |      |    |                                                                                                                                              |                                                                                       |      |  |  |
| 28.9 x                                                                                |                                                                                |   |    |        |  |                                                                                                                                                                   |                                                                                     |        |     |                                                                                                                                                                                        |        |                                                                                     |      |    |                                                                                                                                              |                                                                                       |      |  |  |
|    |                                                                                |   |    |        |  |                                                                                                                                                                   |                                                                                     |        |     |                                                                                                                                                                                        |        |                                                                                     |      |    |                                                                                                                                              |                                                                                       |      |  |  |
| 26.2                                                                                  |                                                                                |   |    |        |  |                                                                                                                                                                   |                                                                                     |        |     |                                                                                                                                                                                        |        |                                                                                     |      |    |                                                                                                                                              |                                                                                       |      |  |  |
| ft                                                                                    |                                                                                |   |    |        |  |                                                                                                                                                                   |                                                                                     |        |     |                                                                                                                                                                                        |        |                                                                                     |      |    |                                                                                                                                              |                                                                                       |      |  |  |
|  |                                                                                |   |    |        |  |                                                                                                                                                                   |                                                                                     |        |     |                                                                                                                                                                                        |        |                                                                                     |      |    |                                                                                                                                              |                                                                                       |      |  |  |
| 360°                                                                                  |                                                                                |   |    |        |  |                                                                                                                                                                   |                                                                                     |        |     |                                                                                                                                                                                        |        |                                                                                     |      |    |                                                                                                                                              |                                                                                       |      |  |  |



85 % PCSA

Wll + 56.2klbs  
2.75klbs + 56.2klbs

|        |    |
|--------|----|
| T      | -- |
| 138 ft |    |

0016365

TAB 83111

01.00

|  ft     |  ft > < lbs |         | CODE >001< |        |        |        | TL83 0000 .x(x) |        |     |  |
|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------|------------|--------|--------|--------|-----------------|--------|-----|--|
|                                                                                          | 44                                                                                           | 73      | 73         | 91     | 106    | 106    | 130             | 138    |     |  |
| 10                                                                                       | 241,000                                                                                      |         |            |        |        |        |                 |        |     |  |
| 11                                                                                       | 230,000                                                                                      |         |            |        |        |        |                 |        |     |  |
| 12                                                                                       | 220,000                                                                                      |         |            |        |        |        |                 |        |     |  |
| 13                                                                                       | 211,000                                                                                      |         |            |        |        |        |                 |        |     |  |
| 14                                                                                       | 199,000                                                                                      |         |            |        |        |        |                 |        |     |  |
| 15                                                                                       | 187,000                                                                                      | 153,000 | 87,000     |        |        |        |                 |        |     |  |
| 16                                                                                       | 178,000                                                                                      | 149,000 | 87,000     |        |        |        |                 |        |     |  |
| 17                                                                                       | 169,000                                                                                      | 146,000 | 87,000     |        |        |        |                 |        |     |  |
| 18                                                                                       | 161,000                                                                                      | 142,000 | 87,000     |        |        |        |                 |        |     |  |
| 20                                                                                       | 146,000                                                                                      | 135,000 | 86,500     | 97,500 | 79,500 | 62,500 |                 |        |     |  |
| 22                                                                                       | 132,000                                                                                      | 126,000 | 83,000     | 95,000 | 79,500 | 59,600 |                 |        |     |  |
| 24                                                                                       | 120,000                                                                                      | 116,000 | 79,000     | 91,500 | 78,000 | 56,800 |                 |        |     |  |
| 26                                                                                       | 110,000                                                                                      | 106,000 | 74,500     | 87,500 | 75,500 | 54,100 |                 |        |     |  |
| 28                                                                                       | 103,000                                                                                      | 97,500  | 72,000     | 85,500 | 73,000 | 51,800 | 50,900          | 46,100 |     |  |
| 30                                                                                       | 95,500                                                                                       | 90,000  | 70,000     | 83,000 | 71,000 | 49,600 | 50,900          | 46,000 |     |  |
| 32                                                                                       | 88,500                                                                                       | 83,000  | 67,000     | 80,500 | 68,500 | 47,600 | 50,600          | 45,600 |     |  |
| 34                                                                                       |                                                                                              | 77,500  | 65,000     | 77,000 | 66,000 | 45,800 | 49,700          | 45,000 |     |  |
| 36                                                                                       |                                                                                              | 73,000  | 62,500     | 73,000 | 64,000 | 44,300 | 48,300          | 44,300 |     |  |
| 38                                                                                       |                                                                                              | 68,500  | 60,500     | 69,000 | 61,500 | 42,700 | 47,000          | 43,700 |     |  |
| 40                                                                                       |                                                                                              | 64,000  | 58,600     | 65,000 | 59,600 | 41,200 | 45,600          | 42,900 |     |  |
| 45                                                                                       |                                                                                              | 54,800  | 54,700     | 55,600 | 54,500 | 37,900 | 42,100          | 40,200 |     |  |
| 50                                                                                       |                                                                                              | 47,500  | 50,900     | 48,200 | 47,700 | 35,100 | 39,100          | 37,400 |     |  |
| 55                                                                                       |                                                                                              | 40,900  | 46,500     | 41,900 | 41,300 | 32,300 | 36,400          | 34,600 |     |  |
| 60                                                                                       |                                                                                              |         |            | 36,400 | 36,000 | 29,600 | 33,700          | 32,000 |     |  |
| 65                                                                                       |                                                                                              |         |            | 32,100 | 31,800 | 27,400 | 31,400          | 29,800 |     |  |
| 70                                                                                       |                                                                                              |         |            | 28,100 | 28,200 | 25,600 | 28,700          | 27,900 |     |  |
| 75                                                                                       |                                                                                              |         |            | 24,800 | 25,200 | 24,200 | 26,000          | 25,600 |     |  |
| 80                                                                                       |                                                                                              |         |            |        | 22,500 | 22,900 | 23,300          | 23,000 |     |  |
| 85                                                                                       |                                                                                              |         |            |        | 20,000 | 21,900 | 21,100          | 20,900 |     |  |
| 90                                                                                       |                                                                                              |         |            |        | 17,800 | 21,200 | 19,100          | 18,800 |     |  |
| 95                                                                                       |                                                                                              |         |            |        |        |        | 17,200          | 17,000 |     |  |
| 100                                                                                      |                                                                                              |         |            |        |        |        | 15,600          | 15,500 |     |  |
| 105                                                                                      |                                                                                              |         |            |        |        |        | 14,100          | 14,100 |     |  |
| 110                                                                                      |                                                                                              |         |            |        |        |        | 12,900          | 12,800 |     |  |
| 115                                                                                      |                                                                                              |         |            |        |        |        | 11,800          | 11,500 |     |  |
| 120                                                                                      |                                                                                              |         |            |        |        |        |                 | 10,400 |     |  |
|                                                                                          |                                                                                              |         |            |        |        |        |                 |        |     |  |
| * n *                                                                                    | 14                                                                                           | 9       | 5          | 6      | 5      | 4      | 3               | 3      |     |  |
|                                                                                          |                                                                                              |         |            |        |        |        |                 |        |     |  |
|  %    | 1                                                                                            | 0       | 92         | 0      | 92     | 100    | 0               | 92     | 100 |  |
|                                                                                          | 2                                                                                            | 0       | 0          | 46     | 30     | 50     | 100             | 92     | 100 |  |
|                                                                                          | 3                                                                                            | 0       | 0          | 46     | 30     | 50     | 100             | 92     | 100 |  |
|  ft/s |                                                                                              | 47      | 47         | 47     | 47     | 42     | 36              | 36     | 36  |  |
|                                                                                          |                                                                                              |         |            |        |        |        |                 |        |     |  |

|  |        |    |        |         |      |  |  |
|--|--------|----|--------|---------|------|--|--|
|  | T      | -- | 56.200 | 28.9 x  | 360° |  |  |
|  | 138 ft |    | lbs    | 26.2 ft |      |  |  |



85 % PCSA

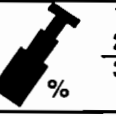
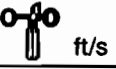
WII + 35.3klbs  
2.75klbs + 35.3klbs

|        |    |
|--------|----|
| T      | -- |
| 138 ft |    |

0016365

TAB 83112

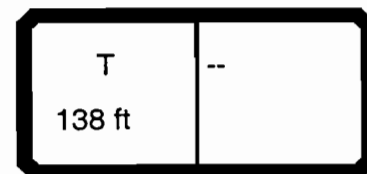
01.00

|  ft     |  ft > < lbs |         | CODE >005< |        |        |        | TL83 0000 .x(x) |        |     |  |
|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------|------------|--------|--------|--------|-----------------|--------|-----|--|
|                                                                                          | 44                                                                                           | 73      | 73         | 91     | 106    | 106    | 130             | 138    |     |  |
| 10                                                                                       | 261,000                                                                                      |         |            |        |        |        |                 |        |     |  |
| 11                                                                                       | 241,000                                                                                      |         |            |        |        |        |                 |        |     |  |
| 12                                                                                       | 223,000                                                                                      |         |            |        |        |        |                 |        |     |  |
| 13                                                                                       | 207,000                                                                                      |         |            |        |        |        |                 |        |     |  |
| 14                                                                                       | 193,000                                                                                      |         |            |        |        |        |                 |        |     |  |
| 15                                                                                       | 180,000                                                                                      | 153,000 | 87,000     |        |        |        |                 |        |     |  |
| 16                                                                                       | 170,000                                                                                      | 149,000 | 87,000     |        |        |        |                 |        |     |  |
| 17                                                                                       | 161,000                                                                                      | 145,000 | 87,000     |        |        |        |                 |        |     |  |
| 18                                                                                       | 152,000                                                                                      | 140,000 | 87,000     |        |        |        |                 |        |     |  |
| 20                                                                                       | 137,000                                                                                      | 130,000 | 86,500     | 97,500 | 79,500 | 62,500 |                 |        |     |  |
| 22                                                                                       | 125,000                                                                                      | 118,000 | 83,000     | 95,000 | 79,500 | 59,600 |                 |        |     |  |
| 24                                                                                       | 114,000                                                                                      | 108,000 | 79,000     | 91,500 | 78,000 | 56,800 |                 |        |     |  |
| 26                                                                                       | 105,000                                                                                      | 98,000  | 74,500     | 87,500 | 75,500 | 54,100 |                 |        |     |  |
| 28                                                                                       | 97,000                                                                                       | 90,500  | 72,000     | 84,500 | 73,000 | 51,800 | 50,900          | 46,100 |     |  |
| 30                                                                                       | 90,000                                                                                       | 83,000  | 70,000     | 81,000 | 71,000 | 49,600 | 50,900          | 46,000 |     |  |
| 32                                                                                       | 84,000                                                                                       | 75,500  | 67,000     | 73,500 | 68,500 | 47,600 | 50,600          | 45,600 |     |  |
| 34                                                                                       |                                                                                              | 69,500  | 65,000     | 67,500 | 64,500 | 45,800 | 49,700          | 45,000 |     |  |
| 36                                                                                       |                                                                                              | 63,500  | 62,500     | 62,500 | 60,000 | 44,300 | 48,300          | 44,300 |     |  |
| 38                                                                                       |                                                                                              | 57,800  | 60,500     | 57,100 | 55,400 | 42,700 | 47,000          | 43,700 |     |  |
| 40                                                                                       |                                                                                              | 52,600  | 58,200     | 52,500 | 51,200 | 41,200 | 45,600          | 42,900 |     |  |
| 45                                                                                       |                                                                                              | 43,400  | 51,500     | 43,700 | 43,000 | 37,900 | 41,900          | 40,200 |     |  |
| 50                                                                                       |                                                                                              | 36,500  | 44,400     | 37,100 | 36,500 | 35,100 | 36,700          | 35,700 |     |  |
| 55                                                                                       |                                                                                              | 30,700  | 37,900     | 31,600 | 31,200 | 32,300 | 31,800          | 31,200 |     |  |
| 60                                                                                       |                                                                                              |         |            | 27,100 | 26,900 | 26,900 | 27,600          | 27,100 |     |  |
| 65                                                                                       |                                                                                              |         |            | 23,400 | 23,400 | 27,400 | 24,200          | 23,800 |     |  |
| 70                                                                                       |                                                                                              |         |            | 20,400 | 20,400 | 25,600 | 21,500          | 21,000 |     |  |
| 75                                                                                       |                                                                                              |         |            | 17,800 | 17,900 | 23,500 | 19,000          | 18,600 |     |  |
| 80                                                                                       |                                                                                              |         |            |        | 15,600 | 21,100 | 16,700          | 16,500 |     |  |
| 85                                                                                       |                                                                                              |         |            |        | 13,800 | 18,900 | 14,900          | 14,700 |     |  |
| 90                                                                                       |                                                                                              |         |            |        | 12,100 | 17,000 | 13,200          | 13,000 |     |  |
| 95                                                                                       |                                                                                              |         |            |        |        |        | 11,700          | 11,500 |     |  |
| 100                                                                                      |                                                                                              |         |            |        |        |        | 10,500          | 10,200 |     |  |
| 105                                                                                      |                                                                                              |         |            |        |        |        | 9,500           | 9,000  |     |  |
| 110                                                                                      |                                                                                              |         |            |        |        |        | 8,300           | 8,200  |     |  |
| 115                                                                                      |                                                                                              |         |            |        |        |        | 7,200           | 7,200  |     |  |
| 120                                                                                      |                                                                                              |         |            |        |        |        |                 | 6,300  |     |  |
|                                                                                          |                                                                                              |         |            |        |        |        |                 |        |     |  |
| * n *                                                                                    | 16                                                                                           | 9       | 5          | 6      | 5      | 4      | 3               | 3      |     |  |
|                                                                                          |                                                                                              |         |            |        |        |        |                 |        |     |  |
|  %    | 1                                                                                            | 0       | 92         | 0      | 92     | 100    | 0               | 92     | 100 |  |
|                                                                                          | 2                                                                                            | 0       | 0          | 46     | 30     | 50     | 100             | 92     | 100 |  |
|                                                                                          | 3                                                                                            | 0       | 0          | 46     | 30     | 50     | 100             | 92     | 100 |  |
|  ft/s |                                                                                              | 47      | 47         | 47     | 47     | 42     | 36              | 36     | 36  |  |
|                                                                                          |                                                                                              |         |            |        |        |        |                 |        |     |  |

|  |        |    |        |        |      |    |  |  |
|--|--------|----|--------|--------|------|----|--|--|
|  | T      | -- | 35.300 | 28.9 x | 26.2 | 0° |  |  |
|  | 138 ft |    | lbs    | ft     |      |    |  |  |



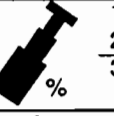
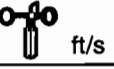
85 % PCSA

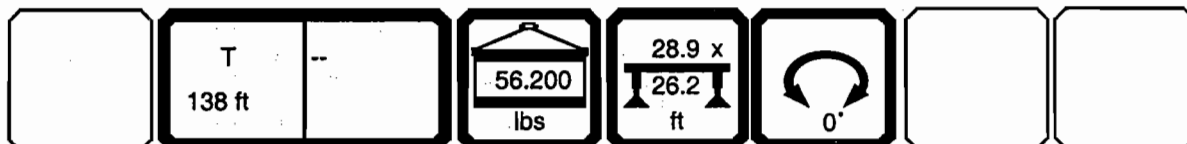
WII + 56.2klbs  
2.75klbs + 56.2klbs

0016365

TAB 83111

01.00

|  ft     |  ft > < lbs |         |        | CODE >002< |        |        | TL83 0000 .x(x) |        |     |
|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------|--------|------------|--------|--------|-----------------|--------|-----|
|                                                                                          | 44                                                                                           | 73      | 73     | 91         | 106    | 106    | 130             | 138    |     |
| 10                                                                                       | 283,000                                                                                      |         |        |            |        |        |                 |        |     |
| 11                                                                                       | 257,000                                                                                      |         |        |            |        |        |                 |        |     |
| 12                                                                                       | 236,000                                                                                      |         |        |            |        |        |                 |        |     |
| 13                                                                                       | 218,000                                                                                      |         |        |            |        |        |                 |        |     |
| 14                                                                                       | 204,000                                                                                      |         |        |            |        |        |                 |        |     |
| 15                                                                                       | 191,000                                                                                      | 153,000 | 87,000 |            |        |        |                 |        |     |
| 16                                                                                       | 181,000                                                                                      | 149,000 | 87,000 |            |        |        |                 |        |     |
| 17                                                                                       | 171,000                                                                                      | 146,000 | 87,000 |            |        |        |                 |        |     |
| 18                                                                                       | 162,000                                                                                      | 142,000 | 87,000 |            |        |        |                 |        |     |
| 20                                                                                       | 146,000                                                                                      | 135,000 | 86,500 | 97,500     | 79,500 | 62,500 |                 |        |     |
| 22                                                                                       | 132,000                                                                                      | 126,000 | 83,000 | 95,000     | 79,500 | 59,600 |                 |        |     |
| 24                                                                                       | 120,000                                                                                      | 116,000 | 79,000 | 91,500     | 78,000 | 56,800 |                 |        |     |
| 26                                                                                       | 110,000                                                                                      | 106,000 | 74,500 | 87,500     | 75,500 | 54,100 |                 |        |     |
| 28                                                                                       | 103,000                                                                                      | 97,500  | 72,000 | 85,500     | 73,000 | 51,800 | 50,900          | 46,100 |     |
| 30                                                                                       | 95,500                                                                                       | 90,000  | 70,000 | 83,000     | 71,000 | 49,600 | 50,900          | 46,000 |     |
| 32                                                                                       | 88,500                                                                                       | 83,000  | 67,000 | 80,500     | 68,500 | 47,600 | 50,600          | 45,600 |     |
| 34                                                                                       |                                                                                              | 77,500  | 65,000 | 77,000     | 66,000 | 45,800 | 49,700          | 45,000 |     |
| 36                                                                                       |                                                                                              | 73,000  | 62,500 | 73,000     | 64,000 | 44,300 | 48,300          | 44,300 |     |
| 38                                                                                       |                                                                                              | 68,500  | 60,500 | 69,000     | 61,500 | 42,700 | 47,000          | 43,700 |     |
| 40                                                                                       |                                                                                              | 64,000  | 58,600 | 65,000     | 59,600 | 41,200 | 45,600          | 42,900 |     |
| 45                                                                                       |                                                                                              | 54,800  | 54,700 | 55,600     | 54,500 | 37,900 | 42,100          | 40,200 |     |
| 50                                                                                       |                                                                                              | 47,500  | 50,900 | 48,200     | 47,700 | 35,100 | 39,100          | 37,400 |     |
| 55                                                                                       |                                                                                              | 40,900  | 46,500 | 41,900     | 41,300 | 32,300 | 36,400          | 34,600 |     |
| 60                                                                                       |                                                                                              |         |        | 36,400     | 36,000 | 29,600 | 33,700          | 32,000 |     |
| 65                                                                                       |                                                                                              |         |        | 32,100     | 31,800 | 27,400 | 31,400          | 29,800 |     |
| 70                                                                                       |                                                                                              |         |        | 28,100     | 28,200 | 25,600 | 28,700          | 27,900 |     |
| 75                                                                                       |                                                                                              |         |        | 24,800     | 25,200 | 24,200 | 26,000          | 25,600 |     |
| 80                                                                                       |                                                                                              |         |        |            | 22,500 | 22,900 | 23,300          | 23,000 |     |
| 85                                                                                       |                                                                                              |         |        |            | 20,000 | 21,900 | 21,100          | 20,900 |     |
| 90                                                                                       |                                                                                              |         |        |            | 17,800 | 21,200 | 19,100          | 18,800 |     |
| 95                                                                                       |                                                                                              |         |        |            |        |        | 17,200          | 17,000 |     |
| 100                                                                                      |                                                                                              |         |        |            |        |        | 15,600          | 15,500 |     |
| 105                                                                                      |                                                                                              |         |        |            |        |        | 14,100          | 14,100 |     |
| 110                                                                                      |                                                                                              |         |        |            |        |        | 12,900          | 12,800 |     |
| 115                                                                                      |                                                                                              |         |        |            |        |        | 11,800          | 11,500 |     |
| 120                                                                                      |                                                                                              |         |        |            |        |        |                 | 10,400 |     |
|                                                                                          |                                                                                              |         |        |            |        |        |                 |        |     |
| * n *                                                                                    | 17                                                                                           | 9       | 5      | 6          | 5      | 4      | 3               | 3      |     |
|                                                                                          |                                                                                              |         |        |            |        |        |                 |        |     |
|  %    | 1                                                                                            | 0       | 92     | 0          | 92     | 100    | 0               | 92     | 100 |
|                                                                                          | 2                                                                                            | 0       | 0      | 46         | 30     | 50     | 100             | 92     | 100 |
|                                                                                          | 3                                                                                            | 0       | 0      | 46         | 30     | 50     | 100             | 92     | 100 |
|  ft/s |                                                                                              | 47      | 47     | 47         | 47     | 42     | 36              | 36     | 36  |
|                                                                                          |                                                                                              |         |        |            |        |        |                 |        |     |



66 % NEN  
75 % DIN BS

WII + 4klbs  
2.75klbs + 4klbs  
WII + 35.3klbs

|        |       |
|--------|-------|
| T      | K 0°  |
| 138 ft | 39 ft |

0016365

TAB 83055

01.00

[illegible]

|  |             |               |                                                                                                      |                                                                                                             |                                                                                             |  |  |
|--|-------------|---------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--|--|
|  | T<br>138 ft | K 0°<br>39 ft | <br>35.300<br>lbs | <br>28.9 x<br>18.4<br>ft | <br>360° |  |  |
|--|-------------|---------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--|--|

66 % NEN  
75 % DIN BS

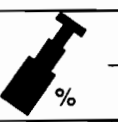
WII + 4klbs  
2.75klbs + 4klbs  
WII + 35.3klbs

|        |       |
|--------|-------|
| T      | K 0°  |
| 138 ft | 39 ft |

0016365

TAB 83055

01.00

|    |             |  ft > lbs | CODE >017<     |                   | TL83 0010 .x(x) |  |  |  |  |  |
|-------------------------------------------------------------------------------------|-------------|--------------------------------------------------------------------------------------------|----------------|-------------------|-----------------|--|--|--|--|--|
|                                                                                     | ft          | 111                                                                                        | 130            | 138               |                 |  |  |  |  |  |
| 30                                                                                  | 26,500      |                                                                                            |                |                   |                 |  |  |  |  |  |
| 32                                                                                  | 26,500      |                                                                                            |                |                   |                 |  |  |  |  |  |
| 34                                                                                  | 26,500      | 19,400                                                                                     | 15,900         |                   |                 |  |  |  |  |  |
| 36                                                                                  | 26,500      | 19,400                                                                                     | 15,900         |                   |                 |  |  |  |  |  |
| 38                                                                                  | 26,500      | 19,400                                                                                     | 15,900         |                   |                 |  |  |  |  |  |
| 40                                                                                  | 26,000      | 19,400                                                                                     | 15,900         |                   |                 |  |  |  |  |  |
| 45                                                                                  | 21,900      | 19,400                                                                                     | 15,900         |                   |                 |  |  |  |  |  |
| 50                                                                                  | 18,300      | 17,100                                                                                     | 14,900         |                   |                 |  |  |  |  |  |
| 55                                                                                  | 15,300      | 14,500                                                                                     | 13,200         |                   |                 |  |  |  |  |  |
| 60                                                                                  | 12,900      | 12,200                                                                                     | 11,100         |                   |                 |  |  |  |  |  |
| 65                                                                                  | 10,800      | 10,200                                                                                     | 9,300          |                   |                 |  |  |  |  |  |
| 70                                                                                  | 9,100       | 8,600                                                                                      | 7,900          |                   |                 |  |  |  |  |  |
| 75                                                                                  | 7,600       | 7,300                                                                                      | 6,600          |                   |                 |  |  |  |  |  |
| 80                                                                                  | 6,400       | 6,100                                                                                      | 5,500          |                   |                 |  |  |  |  |  |
| 85                                                                                  | 5,400       | 4,900                                                                                      | 4,500          |                   |                 |  |  |  |  |  |
| 90                                                                                  | 4,300       | 4,100                                                                                      | 3,600          |                   |                 |  |  |  |  |  |
| 95                                                                                  | 3,600       | 3,200                                                                                      | 2,900          |                   |                 |  |  |  |  |  |
| 100                                                                                 | 2,900       |                                                                                            |                |                   |                 |  |  |  |  |  |
|                                                                                     |             |                                                                                            |                |                   |                 |  |  |  |  |  |
|                                                                                     |             |                                                                                            |                |                   |                 |  |  |  |  |  |
|                                                                                     |             |                                                                                            |                |                   |                 |  |  |  |  |  |
|                                                                                     |             |                                                                                            |                |                   |                 |  |  |  |  |  |
|                                                                                     |             |                                                                                            |                |                   |                 |  |  |  |  |  |
|                                                                                     |             |                                                                                            |                |                   |                 |  |  |  |  |  |
|                                                                                     |             |                                                                                            |                |                   |                 |  |  |  |  |  |
|                                                                                     |             |                                                                                            |                |                   |                 |  |  |  |  |  |
|                                                                                     |             |                                                                                            |                |                   |                 |  |  |  |  |  |
|                                                                                     |             |                                                                                            |                |                   |                 |  |  |  |  |  |
|                                                                                     |             |                                                                                            |                |                   |                 |  |  |  |  |  |
|                                                                                     |             |                                                                                            |                |                   |                 |  |  |  |  |  |
|                                                                                     |             |                                                                                            |                |                   |                 |  |  |  |  |  |
|                                                                                     |             |                                                                                            |                |                   |                 |  |  |  |  |  |
| * n *                                                                               | 2           | 2                                                                                          | 1              |                   |                 |  |  |  |  |  |
|                                                                                     |             |                                                                                            |                |                   |                 |  |  |  |  |  |
|                                                                                     |             |                                                                                            |                |                   |                 |  |  |  |  |  |
|  | 1<br>2<br>3 | 92<br>61<br>61                                                                             | 92<br>92<br>92 | 100<br>100<br>100 |                 |  |  |  |  |  |
|  | ft/s        | 90                                                                                         | 90             | 90                |                 |  |  |  |  |  |

|  |                                |                                  |                                             |                                                             |                             |  |  |
|--|--------------------------------|----------------------------------|---------------------------------------------|-------------------------------------------------------------|-----------------------------|--|--|
|  | <div>T</div> <div>138 ft</div> | <div>K 0°</div> <div>39 ft</div> | <div></div> <div>4.000</div> <div>lbs</div> | <div></div> <div>28.9 x</div> <div>26.2</div> <div>ft</div> | <div></div> <div>360°</div> |  |  |
|--|--------------------------------|----------------------------------|---------------------------------------------|-------------------------------------------------------------|-----------------------------|--|--|

66 % NEN  
75 % DIN BS

WII + 19.6klbs  
2.75klbs + 19.6klbs  
WII + 56.2klbs

|        |       |
|--------|-------|
| T      | K 0°  |
| 138 ft | 39 ft |

0016365

TAB 83054

01.00

[illegible]

|  |                                |                                  |                                                                                                                                 |                                                                                                                                                |                                                                                                                |  |  |
|--|--------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|--|--|
|  | <div>T</div> <div>138 ft</div> | <div>K 0°</div> <div>39 ft</div> | <div></div> <div>56.200</div> <div>lbs</div> | <div>28.9 x</div> <div></div> <div>18.4</div> <div>ft</div> | <div></div> <div>360°</div> |  |  |
|--|--------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|--|--|

66 % NEN  
75 % DIN BS

WII + 19.6klbs  
2.75klbs + 19.6klbs  
WII + 56.2klbs

|        |       |
|--------|-------|
| T      | K 0°  |
| 138 ft | 39 ft |

0016365

TAB 83054

01.00

| ft    |             | ft > < lbs     | CODE >015<     |                   | TL83 0010 .x(x) |  |  |  |  |  |
|-------|-------------|----------------|----------------|-------------------|-----------------|--|--|--|--|--|
|       | 111         | 130            | 138            |                   |                 |  |  |  |  |  |
| 30    | 27,600      |                |                |                   |                 |  |  |  |  |  |
| 32    | 27,600      |                |                |                   |                 |  |  |  |  |  |
| 34    | 27,600      | 20,500         | 17,000         |                   |                 |  |  |  |  |  |
| 36    | 27,600      | 20,500         | 17,000         |                   |                 |  |  |  |  |  |
| 38    | 27,600      | 20,500         | 17,000         |                   |                 |  |  |  |  |  |
| 40    | 27,300      | 20,500         | 17,000         |                   |                 |  |  |  |  |  |
| 45    | 25,300      | 20,500         | 17,000         |                   |                 |  |  |  |  |  |
| 50    | 23,300      | 20,400         | 17,000         |                   |                 |  |  |  |  |  |
| 55    | 21,000      | 19,400         | 16,700         |                   |                 |  |  |  |  |  |
| 60    | 18,500      | 17,600         | 16,000         |                   |                 |  |  |  |  |  |
| 65    | 16,000      | 15,300         | 14,100         |                   |                 |  |  |  |  |  |
| 70    | 13,900      | 13,400         | 12,400         |                   |                 |  |  |  |  |  |
| 75    | 12,200      | 11,600         | 10,800         |                   |                 |  |  |  |  |  |
| 80    | 10,600      | 10,100         | 9,400          |                   |                 |  |  |  |  |  |
| 85    | 9,100       | 8,900          | 8,200          |                   |                 |  |  |  |  |  |
| 90    | 8,100       | 7,700          | 7,100          |                   |                 |  |  |  |  |  |
| 95    | 7,100       | 6,600          | 6,100          |                   |                 |  |  |  |  |  |
| 100   | 6,100       | 5,700          | 5,300          |                   |                 |  |  |  |  |  |
| 105   | 5,300       | 5,100          | 4,400          |                   |                 |  |  |  |  |  |
| 110   | 4,500       | 4,200          | 3,700          |                   |                 |  |  |  |  |  |
| 115   | 3,800       | 3,600          | 3,200          |                   |                 |  |  |  |  |  |
| 120   | 3,300       | 3,100          | 2,700          |                   |                 |  |  |  |  |  |
|       |             |                |                |                   |                 |  |  |  |  |  |
|       |             |                |                |                   |                 |  |  |  |  |  |
|       |             |                |                |                   |                 |  |  |  |  |  |
|       |             |                |                |                   |                 |  |  |  |  |  |
|       |             |                |                |                   |                 |  |  |  |  |  |
|       |             |                |                |                   |                 |  |  |  |  |  |
|       |             |                |                |                   |                 |  |  |  |  |  |
|       |             |                |                |                   |                 |  |  |  |  |  |
|       |             |                |                |                   |                 |  |  |  |  |  |
|       |             |                |                |                   |                 |  |  |  |  |  |
| * n * | 2           | 2              | 1              |                   |                 |  |  |  |  |  |
|       |             |                |                |                   |                 |  |  |  |  |  |
|       |             |                |                |                   |                 |  |  |  |  |  |
| %     | 1<br>2<br>3 | 92<br>61<br>61 | 92<br>92<br>92 | 100<br>100<br>100 |                 |  |  |  |  |  |
| ft/s  | 90          | 90             | 90             |                   |                 |  |  |  |  |  |

|  |                                |                                  |                                                                                                                                 |                                                                                                                                                |                                                                                                                  |  |  |
|--|--------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|
|  | <div>T</div> <div>138 ft</div> | <div>K 0°</div> <div>39 ft</div> | <div></div> <div>19.600</div> <div>lbs</div> | <div>28.9 x</div> <div></div> <div>26.2</div> <div>ft</div> | <div></div> <div>360°</div> |  |  |
|--|--------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|

**85 % PCSA**

WII + 35.3klbs  
2.75klbs + 35.3klbs

|        |       |
|--------|-------|
| T      | K 0°  |
| 138 ft | 39 ft |

0016365

TAB 83078

01.00

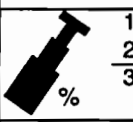
|                                                                                     |             |  ft |                |  ft > lbs | CODE > 013< | TL83 0010 .x(x) |  |  |  |  |  |
|-------------------------------------------------------------------------------------|-------------|--------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------------|-------------|-----------------|--|--|--|--|--|
|                                                                                     | ft          | 111                                                                                  | 130            | 138                                                                                        |             |                 |  |  |  |  |  |
| 30                                                                                  | 31,900      |                                                                                      |                |                                                                                            |             |                 |  |  |  |  |  |
| 32                                                                                  | 31,500      |                                                                                      |                |                                                                                            |             |                 |  |  |  |  |  |
| 34                                                                                  | 31,200      | 23,700                                                                               | 19,800         |                                                                                            |             |                 |  |  |  |  |  |
| 36                                                                                  | 30,900      | 23,600                                                                               | 19,700         |                                                                                            |             |                 |  |  |  |  |  |
| 38                                                                                  | 30,600      | 23,500                                                                               | 19,700         |                                                                                            |             |                 |  |  |  |  |  |
| 40                                                                                  | 30,100      | 23,300                                                                               | 19,600         |                                                                                            |             |                 |  |  |  |  |  |
| 45                                                                                  | 27,800      | 22,800                                                                               | 19,400         |                                                                                            |             |                 |  |  |  |  |  |
| 50                                                                                  | 25,600      | 22,400                                                                               | 19,100         |                                                                                            |             |                 |  |  |  |  |  |
| 55                                                                                  | 23,600      | 22,100                                                                               | 18,500         |                                                                                            |             |                 |  |  |  |  |  |
| 60                                                                                  | 22,000      | 21,600                                                                               | 17,700         |                                                                                            |             |                 |  |  |  |  |  |
| 65                                                                                  | 20,500      | 20,200                                                                               | 17,100         |                                                                                            |             |                 |  |  |  |  |  |
| 70                                                                                  | 19,100      | 19,000                                                                               | 16,400         |                                                                                            |             |                 |  |  |  |  |  |
| 75                                                                                  | 18,000      | 17,900                                                                               | 15,500         |                                                                                            |             |                 |  |  |  |  |  |
| 80                                                                                  | 16,900      | 16,600                                                                               | 14,600         |                                                                                            |             |                 |  |  |  |  |  |
| 85                                                                                  | 15,500      | 15,100                                                                               | 13,900         |                                                                                            |             |                 |  |  |  |  |  |
| 90                                                                                  | 13,900      | 13,600                                                                               | 12,900         |                                                                                            |             |                 |  |  |  |  |  |
| 95                                                                                  | 12,400      | 12,200                                                                               | 11,800         |                                                                                            |             |                 |  |  |  |  |  |
| 100                                                                                 | 11,100      | 10,900                                                                               | 10,700         |                                                                                            |             |                 |  |  |  |  |  |
| 105                                                                                 | 9,900       | 9,700                                                                                | 9,500          |                                                                                            |             |                 |  |  |  |  |  |
| 110                                                                                 | 8,900       | 8,700                                                                                | 8,500          |                                                                                            |             |                 |  |  |  |  |  |
| 115                                                                                 | 8,000       | 7,800                                                                                | 7,600          |                                                                                            |             |                 |  |  |  |  |  |
| 120                                                                                 | 7,200       | 7,000                                                                                | 6,700          |                                                                                            |             |                 |  |  |  |  |  |
| 125                                                                                 | 6,400       | 6,300                                                                                | 5,900          |                                                                                            |             |                 |  |  |  |  |  |
| 130                                                                                 | 5,700       | 5,500                                                                                | 5,200          |                                                                                            |             |                 |  |  |  |  |  |
| 135                                                                                 | 5,000       | 4,900                                                                                | 4,600          |                                                                                            |             |                 |  |  |  |  |  |
| 140                                                                                 |             | 4,400                                                                                | 4,000          |                                                                                            |             |                 |  |  |  |  |  |
| 145                                                                                 |             | 3,900                                                                                | 3,500          |                                                                                            |             |                 |  |  |  |  |  |
| 150                                                                                 |             | 3,400                                                                                | 3,000          |                                                                                            |             |                 |  |  |  |  |  |
| 155                                                                                 |             | 2,900                                                                                | 2,600          |                                                                                            |             |                 |  |  |  |  |  |
|                                                                                     |             |                                                                                      |                |                                                                                            |             |                 |  |  |  |  |  |
|                                                                                     |             |                                                                                      |                |                                                                                            |             |                 |  |  |  |  |  |
|                                                                                     |             |                                                                                      |                |                                                                                            |             |                 |  |  |  |  |  |
|                                                                                     |             |                                                                                      |                |                                                                                            |             |                 |  |  |  |  |  |
| * n *                                                                               | 2           | 2                                                                                    | 2              |                                                                                            |             |                 |  |  |  |  |  |
|                                                                                     |             |                                                                                      |                |                                                                                            |             |                 |  |  |  |  |  |
|                                                                                     |             |                                                                                      |                |                                                                                            |             |                 |  |  |  |  |  |
|                                                                                     |             |                                                                                      |                |                                                                                            |             |                 |  |  |  |  |  |
|  | 1<br>2<br>3 | 92<br>61<br>61                                                                       | 92<br>92<br>92 | 100<br>100<br>100                                                                          |             |                 |  |  |  |  |  |
|  | ft/s:       | 90                                                                                   | 90             | 90                                                                                         |             |                 |  |  |  |  |  |

Diagram of a hanging scale with a weight of 35.300 lbs. The scale is labeled "T" and "K 0°". The weight is labeled "28.9 x" and "26.2 ft". The scale is labeled "360°".

85 % PCSA

WII + 56.2klbs  
2.75klbs + 56.2klbs

|        |       |
|--------|-------|
| T      | K 0°  |
| 138 ft | 39 ft |

0016365

TAB 83072

01.00

|         |             |  ft > < lbs | CODE )011<     | TL83 0010 .x(x)   |  |  |  |  |  |  |
|------------------------------------------------------------------------------------------|-------------|----------------------------------------------------------------------------------------------|----------------|-------------------|--|--|--|--|--|--|
| ft                                                                                       | 111         | 130                                                                                          | 138            |                   |  |  |  |  |  |  |
| 30                                                                                       | 31,900      |                                                                                              |                |                   |  |  |  |  |  |  |
| 32                                                                                       | 31,500      |                                                                                              |                |                   |  |  |  |  |  |  |
| 34                                                                                       | 31,200      | 23,700                                                                                       | 19,800         |                   |  |  |  |  |  |  |
| 36                                                                                       | 30,900      | 23,600                                                                                       | 19,700         |                   |  |  |  |  |  |  |
| 38                                                                                       | 30,600      | 23,500                                                                                       | 19,700         |                   |  |  |  |  |  |  |
| 40                                                                                       | 30,100      | 23,300                                                                                       | 19,600         |                   |  |  |  |  |  |  |
| 45                                                                                       | 27,800      | 22,800                                                                                       | 19,400         |                   |  |  |  |  |  |  |
| 50                                                                                       | 25,600      | 22,400                                                                                       | 19,100         |                   |  |  |  |  |  |  |
| 55                                                                                       | 23,600      | 22,100                                                                                       | 18,500         |                   |  |  |  |  |  |  |
| 60                                                                                       | 22,000      | 21,600                                                                                       | 17,700         |                   |  |  |  |  |  |  |
| 65                                                                                       | 20,500      | 20,200                                                                                       | 17,100         |                   |  |  |  |  |  |  |
| 70                                                                                       | 19,100      | 19,000                                                                                       | 16,400         |                   |  |  |  |  |  |  |
| 75                                                                                       | 18,000      | 17,900                                                                                       | 15,500         |                   |  |  |  |  |  |  |
| 80                                                                                       | 16,900      | 16,800                                                                                       | 14,600         |                   |  |  |  |  |  |  |
| 85                                                                                       | 15,900      | 15,900                                                                                       | 13,900         |                   |  |  |  |  |  |  |
| 90                                                                                       | 15,100      | 15,100                                                                                       | 13,100         |                   |  |  |  |  |  |  |
| 95                                                                                       | 14,400      | 14,400                                                                                       | 12,500         |                   |  |  |  |  |  |  |
| 100                                                                                      | 13,700      | 13,700                                                                                       | 12,000         |                   |  |  |  |  |  |  |
| 105                                                                                      | 13,000      | 13,000                                                                                       | 11,500         |                   |  |  |  |  |  |  |
| 110                                                                                      | 12,500      | 12,500                                                                                       | 10,800         |                   |  |  |  |  |  |  |
| 115                                                                                      | 12,000      | 11,900                                                                                       | 10,400         |                   |  |  |  |  |  |  |
| 120                                                                                      | 11,300      | 11,100                                                                                       | 10,000         |                   |  |  |  |  |  |  |
| 125                                                                                      | 10,300      | 10,100                                                                                       | 9,700          |                   |  |  |  |  |  |  |
| 130                                                                                      | 9,500       | 9,300                                                                                        | 8,800          |                   |  |  |  |  |  |  |
| 135                                                                                      | 8,800       | 8,400                                                                                        | 8,100          |                   |  |  |  |  |  |  |
| 140                                                                                      |             | 7,600                                                                                        | 7,400          |                   |  |  |  |  |  |  |
| 145                                                                                      |             | 7,000                                                                                        | 6,800          |                   |  |  |  |  |  |  |
| 150                                                                                      |             | 6,500                                                                                        | 6,100          |                   |  |  |  |  |  |  |
| 155                                                                                      |             | 6,000                                                                                        | 5,500          |                   |  |  |  |  |  |  |
|                                                                                          |             |                                                                                              |                |                   |  |  |  |  |  |  |
|                                                                                          |             |                                                                                              |                |                   |  |  |  |  |  |  |
|                                                                                          |             |                                                                                              |                |                   |  |  |  |  |  |  |
|                                                                                          |             |                                                                                              |                |                   |  |  |  |  |  |  |
| * n *                                                                                    | 2           | 2                                                                                            | 2              |                   |  |  |  |  |  |  |
|                                                                                          |             |                                                                                              |                |                   |  |  |  |  |  |  |
|                                                                                          |             |                                                                                              |                |                   |  |  |  |  |  |  |
|  %    | 1<br>2<br>3 | 92<br>61<br>61                                                                               | 92<br>92<br>92 | 100<br>100<br>100 |  |  |  |  |  |  |
|  ft/s | 90          | 90                                                                                           | 90             |                   |  |  |  |  |  |  |

|  |                                |                                  |                                                                                                                                 |                                                                                                                                                |                                                                                                                |  |  |
|--|--------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|--|--|
|  | <div>T</div> <div>138 ft</div> | <div>K 0°</div> <div>39 ft</div> | <div></div> <div>56.200</div> <div>lbs</div> | <div></div> <div>28.9 x</div> <div>26.2</div> <div>ft</div> | <div></div> <div>360°</div> |  |  |
|--|--------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|--|--|

66 % NEN  
75 % DIN BS

WII + 4klbs  
2.75klbs + 4klbs  
WII + 35.3klbs

|        |       |
|--------|-------|
| T      | K 0°  |
| 138 ft | 59 ft |

0016365

TAB 83055

01.00

[illegible]

|  |                                |                                  |                                                                                                                                 |                                                                |                                                                                                                 |  |  |
|--|--------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--|--|
|  | <div>T</div> <div>138 ft</div> | <div>K 0°</div> <div>59 ft</div> | <div></div> <div>35.300</div> <div>lbs</div> | <div><math>\frac{28.9 \times}{18.4}</math></div> <div>ft</div> | <div></div> <div>360°</div> |  |  |
|--|--------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--|--|

66 % NEN  
75 % DIN BS

WII + 4klbs  
2.75klbs + 4klbs  
WII + 35.3klbs

|        |       |
|--------|-------|
| T      | K 0°  |
| 138 ft | 59 ft |

0016365

TAB 83055

01.00

[illegible]

|  |             |               |                                                                                                     |                                                                                                             |                                                                                             |  |  |
|--|-------------|---------------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--|--|
|  | T<br>138 ft | K 0°<br>59 ft | <br>4.000<br>lbs | <br>28.9 x<br>26.2<br>ft | <br>360° |  |  |
|--|-------------|---------------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--|--|

66 % NEN  
75 % DIN BS

WII + 19.6klbs  
2.75klbs + 19.6klbs  
WII + 56.2klbs

|        |       |
|--------|-------|
| T      | K 0°  |
| 138 ft | 59 ft |

0016365

TAB 83054

01.00

[illegible]

|  |                                |                                  |                                                                                                                                 |                                                                                                                                                |                                                                                                                 |  |  |
|--|--------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--|--|
|  | <div>T</div> <div>138 ft</div> | <div>K 0°</div> <div>59 ft</div> | <div></div> <div>56.200</div> <div>lbs</div> | <div>28.9 x</div> <div></div> <div>18.4</div> <div>ft</div> | <div></div> <div>360°</div> |  |  |
|--|--------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--|--|

66 % NEN  
75 % DIN BS

WII + 19.6klbs  
2.75klbs + 19.6klbs  
WII + 56.2klbs

|        |       |
|--------|-------|
| T      | K 0°  |
| 138 ft | 59 ft |

0016365

TAB 83054

01.00

[illegible]

|  |                                |                                  |                                                                                                                                 |                                                                                                                                                |                                                                                                                 |  |  |
|--|--------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--|--|
|  | <div>T</div> <div>138 ft</div> | <div>K 0°</div> <div>59 ft</div> | <div></div> <div>19.600</div> <div>lbs</div> | <div></div> <div>28.9 x</div> <div>26.2</div> <div>ft</div> | <div></div> <div>360°</div> |  |  |
|--|--------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--|--|

85 % PCSA

WII + 35.3klbs  
2.75klbs + 35.3klbs

|        |       |
|--------|-------|
| T      | K 0°  |
| 138 ft | 59 ft |

0016365

TAB 83078

01.00

[illegible]

6 days week  
2 hrs  
2 months

|  |                                |                                  |                                                                                                                                 |                                                                                                                                                |                                                                                                                  |  |  |
|--|--------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|
|  | <div>T</div> <div>138 ft</div> | <div>K 0'</div> <div>59 ft</div> | <div></div> <div>35.300</div> <div>lbs</div> | <div></div> <div>28.9 x</div> <div>26.2</div> <div>ft</div> | <div></div> <div>360°</div> |  |  |
|--|--------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|

85 % PCSA

WII + 56.2klbs  
2.75klbs + 56.2klbs

|        |       |
|--------|-------|
| T      | K 0°  |
| 138 ft | 59 ft |

0016365

TAB 83072

01.00

[illegible]

|  |             |               |                                                                                                      |                                                                                                             |                                                                                               |  |  |
|--|-------------|---------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--|--|
|  | T<br>138 ft | K 0°<br>59 ft | <br>56.200<br>lbs | <br>28.9 x<br>26.2<br>ft | <br>360° |  |  |
|--|-------------|---------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--|--|

66 % NEN  
75 % DIN BS

WII + 4klbs  
2.75klbs + 4klbs  
WII + 35.3klbs

|        |       |
|--------|-------|
| T      | K 0°  |
| 138 ft | 79 ft |

0016365

TAB 83055

01.00

[illegible]

|  |                                |                                  |                                                                                                                                 |                                                                                                                                                                  |                                                                                                                  |  |  |
|--|--------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|
|  | <div>T</div> <div>138 ft</div> | <div>K 0'</div> <div>79 ft</div> | <div></div> <div>35.300</div> <div>lbs</div> | <div><math>28.9 \times</math></div> <div></div> <div>18.4</div> <div>ft</div> | <div></div> <div>360°</div> |  |  |
|--|--------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|

66 % NEN  
75 % DIN BS

WII + 4klbs  
2.75klbs + 4klbs  
WII + 35.3klbs

|        |       |
|--------|-------|
| T      | K 0°  |
| 138 ft | 79 ft |

0016365

TAB 83055

01.00

[illegible]

|  |                                |                                  |                                                                                                                                |                                                                                                                                                |                                                                                                                  |  |  |
|--|--------------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|
|  | <div>T</div> <div>138 ft</div> | <div>K 0°</div> <div>79 ft</div> | <div></div> <div>4.000</div> <div>lbs</div> | <div></div> <div>28.9 x</div> <div>26.2</div> <div>ft</div> | <div></div> <div>360°</div> |  |  |
|--|--------------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|

66 % NEN  
75 % DIN BS

WII + 19.6klbs  
2.75klbs + 19.6klbs  
WII + 56.2klbs

|             |               |
|-------------|---------------|
| T<br>138 ft | K 0°<br>79 ft |
|-------------|---------------|

0016365

TAB 83054

01.00

[illegible]

|  |                                |                                  |                                                                                                                                 |                                                                                                                                                |                                                                                                                  |  |  |
|--|--------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|
|  | <div>T</div> <div>138 ft</div> | <div>K 0'</div> <div>79 ft</div> | <div></div> <div>56.200</div> <div>lbs</div> | <div></div> <div>28.9 x</div> <div>18.4</div> <div>ft</div> | <div></div> <div>360°</div> |  |  |
|--|--------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|

66 % NEN  
75 % DIN BS

WII + 19.6klbs  
2.75klbs + 19.6klbs  
WII + 56.2klbs

|        |       |
|--------|-------|
| T      | K 0°  |
| 138 ft | 79 ft |

0016365

TAB 83054

01.00

[illegible]

|  |                                |                                  |                                                                                                                                 |                                                                                                                                                |                                                                                                                  |  |  |
|--|--------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|
|  | <div>T</div> <div>138 ft</div> | <div>K 0'</div> <div>79 ft</div> | <div></div> <div>19.600</div> <div>lbs</div> | <div></div> <div>28.9 x</div> <div>26.2</div> <div>ft</div> | <div></div> <div>360°</div> |  |  |
|--|--------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|

85 % PCSA

WII + 35.3klbs  
2.75klbs + 35.3klbs

|        |       |
|--------|-------|
| T      | K 0°  |
| 138 ft | 79 ft |

0016365

TAB 83078

01.00

[illegible]

|  |             |               |                                                                                                      |                                                                                                                   |                                                                                               |  |  |
|--|-------------|---------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--|--|
|  | T<br>138 ft | K 0°<br>79 ft | <br>35.300<br>lbs |  $\frac{28.9 \times}{26.2}$ ft | <br>360° |  |  |
|--|-------------|---------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--|--|

85 % PCSA

WII + 56.2klbs  
2.75klbs + 56.2klbs

|        |       |
|--------|-------|
| T      | K 0°  |
| 138 ft | 79 ft |

0016365

TAB 83072

01.00

[illegible]

|  |                                |                                  |                                                                                                                                 |                                                                                                                                                |                                                                                                                 |  |  |
|--|--------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--|--|
|  | <div>T</div> <div>138 ft</div> | <div>K 0°</div> <div>79 ft</div> | <div></div> <div>56.200</div> <div>lbs</div> | <div>28.9 x</div> <div></div> <div>26.2</div> <div>ft</div> | <div></div> <div>360°</div> |  |  |
|--|--------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--|--|

66 % NEN  
75 % DIN BS

WII + 4klbs  
2.75klbs + 4klbs  
WII + 35.3klbs

|             |                |
|-------------|----------------|
| T<br>138 ft | K 20°<br>39 ft |
|-------------|----------------|

0016365

TAB 83140

01.00

[illegible]

|  |             |                |                                                                                                     |                                                                                                             |                                                                                             |  |  |
|--|-------------|----------------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--|--|
|  | T<br>138 ft | K 20"<br>39 ft | <br>4.000<br>lbs | <br>28.9 x<br>26.2<br>ft | <br>360° |  |  |
|--|-------------|----------------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--|--|

66 % NEN  
75 % DIN BS

WII + 19.6klbs  
2.75klbs + 19.6klbs  
WII + 56.2klbs

|        |       |
|--------|-------|
| T      | K 20° |
| 138 ft | 39 ft |

0016365

TAB 83139

01.00

[illegible]

|  |                                |                                   |                                                                                                                                 |                                                                                                                                                                  |                                                                                                                  |  |  |
|--|--------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|
|  | <div>T</div> <div>138 ft</div> | <div>K 20°</div> <div>39 ft</div> | <div></div> <div>56.200</div> <div>lbs</div> | <div><math>28.9 \times</math></div> <div></div> <div>18.4</div> <div>ft</div> | <div></div> <div>360°</div> |  |  |
|--|--------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|

66 % NEN  
75 % DIN BS

WII + 19.6klbs  
2.75klbs + 19.6klbs  
WII + 56.2klbs

|             |                |
|-------------|----------------|
| T<br>138 ft | K 20°<br>39 ft |
|-------------|----------------|

0016365

TAB 83139

01.00

[illegible]

|  |                                |                                   |                                                                                                                                 |                                                                                                                                                |                                                                                                                  |  |  |
|--|--------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|
|  | <div>T</div> <div>138 ft</div> | <div>K 20°</div> <div>39 ft</div> | <div></div> <div>19.600</div> <div>lbs</div> | <div></div> <div>28.9 x</div> <div>26.2</div> <div>ft</div> | <div></div> <div>360°</div> |  |  |
|--|--------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|

85 % PCSA

WII +.35.3klbs  
2.75klbs + 35.3klbs

|        |       |
|--------|-------|
| T      | K 20° |
| 138 ft | 39 ft |

0016365

TAB 83143

01.00

[illegible]

|  |             |                |                                                                                                      |                                                                                                             |                                                                                               |  |  |
|--|-------------|----------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--|--|
|  | T<br>138 ft | K 20°<br>39 ft | <br>35.300<br>lbs | <br>28.9 x<br>26.2<br>ft | <br>360° |  |  |
|--|-------------|----------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--|--|

85 % PCSA

WII + 56.2klbs  
2.75klbs + 56.2klbs

|             |                |
|-------------|----------------|
| T<br>138 ft | K 20°<br>39 ft |
|-------------|----------------|

0016365

TAB 83142

01.00

[illegible]

|  |             |                |                                                                                                      |                                                                                                             |                                                                                              |  |  |
|--|-------------|----------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--|--|
|  | T<br>138 ft | K 20°<br>39 ft | <br>56.200<br>lbs | <br>28.9 x<br>26.2<br>ft | <br>360° |  |  |
|--|-------------|----------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--|--|

66 % NEN  
75 % DIN BS

WII + 4klbs  
2.75klbs + 4klbs  
WII + 35.3klbs

|        |       |
|--------|-------|
| T      | K 20° |
| 138 ft | 59 ft |

0016365

TAB 83140

01.00

[illegible]

|  |                                |                                   |                                                                                                                                 |                                                                                                                                                |                                                                                                                 |  |  |
|--|--------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--|--|
|  | <div>T</div> <div>138 ft</div> | <div>K 20°</div> <div>59 ft</div> | <div></div> <div>35.300</div> <div>lbs</div> | <div></div> <div>28.9 x</div> <div>18.4</div> <div>ft</div> | <div></div> <div>360°</div> |  |  |
|--|--------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--|--|

66 % NEN  
75 % DIN BS

WII + 4klbs  
2.75klbs + 4klbs  
WII + 35.3klbs

|             |                |
|-------------|----------------|
| T<br>138 ft | K 20°<br>59 ft |
|-------------|----------------|

0016365

TAB 83140

01.00

[illegible]

|  |                                |                                   |                                                                                                                                |                                                                                                                                                |                                                                                                                  |  |  |
|--|--------------------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|
|  | <div>T</div> <div>138 ft</div> | <div>K 20°</div> <div>59 ft</div> | <div></div> <div>4.000</div> <div>lbs</div> | <div></div> <div>28.9 x</div> <div>26.2</div> <div>ft</div> | <div></div> <div>360°</div> |  |  |
|--|--------------------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|

66 % NEN  
75 % DIN BS

WII + 19.6klbs  
2.75klbs + 19.6klbs  
WII + 56.2klbs

|        |       |
|--------|-------|
| T      | K 20° |
| 138 ft | 59 ft |

0016365

TAB 83139

01.00

[illegible]

|  |                                |                                   |                                                                                                                                 |                                                                                                                                                |                                                                                                                  |  |  |
|--|--------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|
|  | <div>T</div> <div>138 ft</div> | <div>K 20°</div> <div>59 ft</div> | <div></div> <div>56.200</div> <div>lbs</div> | <div></div> <div>28.9 x</div> <div>18.4</div> <div>ft</div> | <div></div> <div>360°</div> |  |  |
|--|--------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|

66 % NEN -  
75 % DIN BS

WII + 19.6klbs  
2.75klbs + 19.6klbs  
WII + 56.2klbs

|        |       |
|--------|-------|
| T      | K 20° |
| 138 ft | 59 ft |

0016365

TAB 83139

01.00

[illegible]

|  |                                |                                   |                                                                                                                                 |                                                                                                                                                |                                                                                                                  |  |  |
|--|--------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|
|  | <div>T</div> <div>138 ft</div> | <div>K 20'</div> <div>59 ft</div> | <div></div> <div>19.600</div> <div>lbs</div> | <div>28.9 x</div> <div></div> <div>26.2</div> <div>ft</div> | <div></div> <div>360°</div> |  |  |
|--|--------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|

**85 % PCSA**

WII + 35.3klbs  
2.75klbs + 35.3klbs

|        |       |
|--------|-------|
| T      | K 20° |
| 138 ft | 59 ft |

0016365

TAB 83143

01.00

[illegible]

|  |                        |                           |                                                                                                              |                                                                                                                         |                                                                                                   |  |  |
|--|------------------------|---------------------------|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--|--|
|  | <p>T</p> <p>138 ft</p> | <p>K 20"</p> <p>59 ft</p> |  <p>35.300</p> <p>lbs</p> | <p>28.9 x</p>  <p>26.2</p> <p>ft</p> |  <p>360°</p> |  |  |
|--|------------------------|---------------------------|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--|--|

85 % PCSA

WII + 56.2klbs  
2.75klbs + 56.2klbs

|        |       |
|--------|-------|
| T      | K 20° |
| 138 ft | 59 ft |

0016365

TAB 83142

01.00

[illegible]

|  |             |                |                                                                                                      |                                                                                                             |                                                                                             |  |  |
|--|-------------|----------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--|--|
|  | T<br>138 ft | K 20"<br>59 ft | <br>56.200<br>lbs | <br>28.9 x<br>26.2<br>ft | <br>360° |  |  |
|--|-------------|----------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--|--|

66 % NEN  
75 % DIN BS

WII + 4klbs  
2.75klbs + 4klbs  
WII + 35.3klbs

|        |       |
|--------|-------|
| T      | K 20° |
| 138 ft | 79 ft |

0016365

TAB 83140

01.00

[illegible]

|  |             |                |                                                                                                      |                                                                                                             |                                                                                              |  |  |
|--|-------------|----------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--|--|
|  | T<br>138 ft | K 20"<br>79 ft | <br>35.300<br>lbs | <br>28.9 x<br>18.4<br>ft | <br>360° |  |  |
|--|-------------|----------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--|--|

66 % NEN  
75 % DIN BS

WII + 4klbs  
2.75klbs + 4klbs  
WII + 35.3klbs

|        |       |
|--------|-------|
| T      | K 20° |
| 138 ft | 79 ft |

0016365

TAB 83140

01.00

[illegible]

|  |             |                |                                                                                                     |                                                                                                             |                                                                                             |  |  |
|--|-------------|----------------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--|--|
|  | T<br>138 ft | K 20"<br>79 ft | <br>4.000<br>lbs | <br>28.9 x<br>26.2<br>ft | <br>360° |  |  |
|--|-------------|----------------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--|--|

66 % NEN  
75 % DIN BS

WII + 19.6klbs  
2.75klbs + 19.6klbs  
WII + 56.2klbs

|             |                |
|-------------|----------------|
| T<br>138 ft | K 20°<br>79 ft |
|-------------|----------------|

0016365

TAB 83139

01.00

[illegible]

|  |                                |                                   |                                                                                                                                 |                                                                                                                                                |                                                                                                                  |  |  |
|--|--------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|
|  | <div>T</div> <div>138 ft</div> | <div>K 20°</div> <div>79 ft</div> | <div></div> <div>56.200</div> <div>lbs</div> | <div></div> <div>28.9 x</div> <div>18.4</div> <div>ft</div> | <div></div> <div>360°</div> |  |  |
|--|--------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|

66 % NEN  
75 % DIN BS

WII + 19.6klbs  
2.75klbs + 19.6klbs  
WII + 56.2klbs

|        |       |
|--------|-------|
| T      | K 20° |
| 138 ft | 79 ft |

0016365

TAB 83139

01.00

[illegible]

|  |                                |                                   |                                                                                                                                 |                                                                                                                                                                  |                                                                                                                |  |  |
|--|--------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|--|--|
|  | <div>T</div> <div>138 ft</div> | <div>K 20'</div> <div>79 ft</div> | <div></div> <div>19.600</div> <div>lbs</div> | <div><math>28.9 \times</math></div> <div></div> <div>26.2</div> <div>ft</div> | <div></div> <div>360°</div> |  |  |
|--|--------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|--|--|

**85 % PCSA**

WII + 35.3klbs  
2.75klbs + 35.3klbs

|        |       |
|--------|-------|
| T      | K 20° |
| 138 ft | 79 ft |

0016365

TAB 83143

01.00

[illegible]

|  |                                |                                   |                                                                                                                                 |                                                                                                                                                |                                                                                                                 |  |  |
|--|--------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--|--|
|  | <div>T</div> <div>138 ft</div> | <div>K 20°</div> <div>79 ft</div> | <div></div> <div>35.300</div> <div>lbs</div> | <div></div> <div>28.9 x</div> <div>26.2</div> <div>ft</div> | <div></div> <div>360°</div> |  |  |
|--|--------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--|--|

85 % PCSA

WII + 56.2klbs  
2.75klbs + 56.2klbs

|        |       |
|--------|-------|
| T      | K 20° |
| 138 ft | 79 ft |

0016365

TAB 83142

01.00

[illegible]

|  |                                |                                   |                                                                                                                                 |                                                                                                                                                |                                                                                                                 |  |  |
|--|--------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--|--|
|  | <div>T</div> <div>138 ft</div> | <div>K 20°</div> <div>79 ft</div> | <div></div> <div>56.200</div> <div>lbs</div> | <div></div> <div>28.9 x</div> <div>26.2</div> <div>ft</div> | <div></div> <div>360°</div> |  |  |
|--|--------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--|--|

66 % NEN  
75 % DIN BS

WII + 56.2klbs  
2.75klbs + 56.2klbs

236

|             |               |
|-------------|---------------|
| T<br>138 ft | K 0°<br>98 ft |
|-------------|---------------|

0016365

**TAB 83206**

01.00

[illegible]

|  |            |              |                                                                                               |                                                                                                       |                                                                                     |  |  |
|--|------------|--------------|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|--|
|  | T<br>128 # | K 0°<br>98 # | <br>56.200 | <br>28.9 x<br>26.2 |  |  |  |
|--|------------|--------------|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|--|





### **III - Supplement**

**Explanation of symbols LTM 1120**

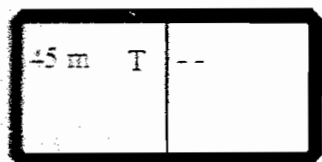


**Hoisting rope reeving**

This symbol appears on the hoisting rope reeving table (1st table of chapter II) and indicates the required number of hoisting rope reeving to achieve a certain load capacity.

**Load capacity in metric tons [t]**

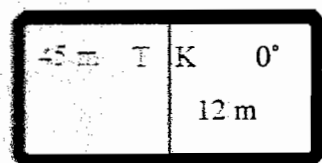
This symbol appears on the hoisting rope reeving table (1st table of chapter II) and indicates the max. permissible load capacity depending on hoisting rope reeving.

**Operating mode**

2part symbol

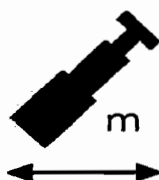
left side = Main boom mode

- Length of the main boom ex.: 40m
- Main boom type ex.: T=Telescopic boom

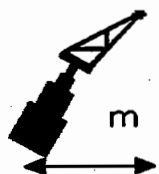


right side = Additional jib mode

- Additional jib type ex.: K=folding fly jib
- Angle of the additional jib ex.: 0° = 0 deg. offset from main boom
- Additional jib length ex.: 12m

**Working radius of the telescopic boom**

The working radius is the horizontal distance of the center of gravity of the load to the slewing axis of the crane superstructure as measured from the ground beneath the load.

**Working radius of the additional jib**

The working radius is the horizontal distance of the center of gravity of the load to the slewing axis of the crane superstructure as measured from the ground beneath the load.





#### Telescopic boom length /units of measurement

In the row beneath this symbol the different boom length of the crane are indicated in columns. The letters next to the symbol indicate the units of measurement in the actual load chart, par example "m>t" means that all lengths are given in meters [m] and all weights are given in metric tons [t]. Other possible units of measurement are feet [ft] and pounds [lbs] (lifting capacities in [kips] = 1000 lbs).

CODE > 03 <

#### Short code

2-place short code; can be directly entered into the LICCON overload safety device in order to call up the corresponding load chart.

\* n \*

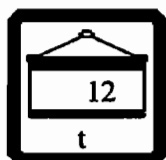
#### Hoisting rope reeving

Appears in the load charts as a line below the load capacity values. Indicates the number of hoisting rope reeving required to hoist the maximum load in the corresponding load chart column.



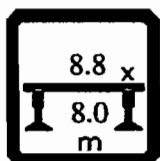
#### Extension conditions of the telescopic boom sections

Indications i percent for the individual telescopic sections (Tele 1 / Tele 2 / Tele 3 / Tele 4). Indication 0 = completely retracted, 100 = completely extended. Extension conditions other than those specified in the load charts are prohibited.



#### Counterweight

In this symbol, the size of the counterweight is indicated in metric tons [t] which must be on the crane superstructure in order to achieve the values of the given load chart. In diesem Symbol ist die Größe des Gegengewichts in Tonnen [t] angegeben, das sich am Kranoberwagen befinden muß, um die Werte der vorliegenden Tabelle erreichen zu können.



#### Crane operations "Crane supported"

Indication of the support base (ex.: 8.8m x 8.0m = length width). The hydraulic supports of the crane must be extended to the dimensions specified in this symbol and pinned when the corresponding load chart is being worked with.





#### **Slewing range**

Slewing range data of the crane superstructure for the corresponding load capacity table:

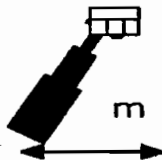
360° = unlimited slewing permissible

0° = working range to the rear



#### **Permissible wind speed**

Indication of wind speed in [m/s] up to which crane operation is permissible depending on boom length. If the wind speed exceeds the indicated value, crane operations must be terminated, and if necessary, equipment must be removed from the crane.



#### **Working radius with the working platform**

The working radius for operations with the working platform concern the pulley assembly in the boom head and are measured from the slewing midpoint. By variably positioning the working platform, their working radii are correspondingly larger.



#### **Working radius range**

Indication of the permissible working radius range in the working radius tables for crane operations with working platform.

