



Manual # 99904763

25/180 Technical Specifications

Revision Date 20111215



IOWA MOLD TOOLING CO., INC.

PO Box 189

Garner, IA 50438

Tel: 641-923-3711 FAX: 641-923-2424

Website: <http://www.imt.com>

Copyright © 2009 Iowa Mold Tooling Co., Inc.
All rights reserved

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior written permission of Iowa Mold Tooling Co., Inc.

Iowa Mold Tooling Co., Inc. is an Oshkosh Corporation company.

Printed on 16 September, 2009



Contents

Revisions	ii
Technical Data and Charts	3
25/180 Technical Specifications	3
25/180 Pressure Settings	5
25/180K2 Capacity Chart	6
25/180K3 Capacity Chart	7
25/180K4 Capacity Chart	8
25/180K5 Capacity Chart	9
25/180K6 Capacity Chart	10
25/180K7 Capacity Chart	11
25/180K8 Capacity Chart	12
25/180 Dimensional Drawing	13
25/180 Hydraulic Diagram	14



Revisions

DATE	LOCATION	DESCRIPTION



CHAPTER 1

Technical Data and Charts

In This Chapter

25/180 Technical Specifications	3
25/180 Pressure Settings	4
25/180K2 Capacity Chart	6
25/180K3 Capacity Chart	7
25/180K4 Capacity Chart	8
25/180K5 Capacity Chart	9
25/180K6 Capacity Chart	10
25/180K7 Capacity Chart	11
25/180K8 Capacity Chart	12
25/180 Dimensional Drawing	13
25/180 Hydraulic Diagram	14

25/180 Technical Specifications

25/180	2-Hydraulic	3-Hydraulic	4-Hydraulic	5-Hydraulic	6-Hydraulic	7-Hydraulic	8-Hydraulic
Crane Rating*	176,485 ft-lb (24.4 tm)	168,530 ft-lb (23.3 tm)	164,190 ft-lb (22.7 tm)	161,295 ft-lb (22.3 tm)	157,680 ft-lb (21.8 tm)	151,895 ft-lb (21.0 tm)	148,275 ft-lb (20.5 tm)
Maximum Horizontal Reach	27' 3" (8.3 m)	34' 1" (10.4 m)	41' 0" (12.5 m)	48' 3" (14.7 m)	55' 5" (16.9 m)	62' 8" (19.1 m)	69' 7" (21.2 m)
Maximum Vertical Reach	35' 5" (10.8 m)	42' 4" (12.9 m)	49' 3" (15.0 m)	56' 5" (17.2 m)	63' 8" (19.4 m)	70' 10" (21.6 m)	78' 1" (23.8 m)
Maximum Capacity	20,945 lb (9500 kg)	20,670 lb (9375 kg)	20,450 lb (9275 kg)	20,285 lb (9200 kg)	20,060 lb (9100 kg)	19,730 lb (8950 kg)	19,455 lb (8825 kg)
Max Cap @ Max Reach	6450 lb (2925 kg)	4685 lb (2125 kg)	3585 lb (1625 kg)	2645 lb (1200 kg)	1960 lb (890 kg)	1435 lb (650 kg)	1015 lb (460 kg)
Crane Weight **	5800 lb (2630 kg)	6285 lb (2850 kg)	6745 lb (3060 kg)	7185 lb (3,260 kg)	7605 lb (3450 kg)	7935 lb (3600 kg)	8210 lb (3725 kg)
Hook Approach							
Vertical	8' 8" (2640 mm)	8' 5" (2560 mm)	8' 2" (2480 mm)	7' 10" (2400 mm)	7' 7" (2320 mm)	7' 4" (2240 mm)	7' 1" (2160 mm)
Horizontal	1' 8" (0.52 m)	2' 0" (0.60 m)	2' 3" (0.68 m)	2' 6" (0.76 m)	2' 9" (0.84 m)	3' 0" (0.92 m)	3' 3" (1.00 m)
Center of Gravity - Stored							
Vertical	2' 9" (830 mm)	2' 9" (850 mm)	2' 10" (865 mm)	2' 11" (880 mm)	2' 11" (900 mm)	3' 0" (915 mm)	3' 0" (925 mm)
Horizontal (C/L RotTo Bridge)	11.6" (295 mm)	11.8" (300 mm)	11.8" (300 mm)	11.6" (295 mm)	11.4" (290 mm)	11.2" (285 mm)	11.2" (285 mm)

* Crane rating (ft-lb) is the rated load (lb) multiplied by the respective distance (ft) from centerline of rotation with all extensions retracted and the inner and outer booms in a horizontal position, per ANSI B30.22. ** Crane weight does not include stabilizers



25/180 Specifications	
Stabilizer Pad Diameter	8.0" (200 mm)
Crane Storage Height	7' 9" (2355 mm)
Mounting Space ***	3' 6" (1060 mm)
Rotational Torque	24,230 ft-lb (3.4 tm)
Rotation	420°
Optimum Pump Capacity	17 U.S. gpm (65 lpm)
System Pressure	4,135 psi (285 bar)
Oil Reservoir Capacity	42.3 gal (160 L)
Stabilizer Extension Span	
Standard (manual out / hydraulic down)	20' 4" (6200 mm)
Weight	1045 lb (475 kg)
*** Maximum swing clearance radius required is 2'-5" (734 mm) at 8'-5" (2562 mm) from top of chassis frame.	
Minimum Chassis Specifications	
Front Axle Rating (GAWR)	16,000 lb (7255 kg)
Rear Axle Rating (GAWR)	40,000 lb (18,145 kg)
Resistance to Bending Moment	2,700,000 in-lb (311,075 kg-m)



25/180 Pressure Settings

WORKING PRESSURE ON MAIN-RELIEF VALVE & PORT RELIEF VALVES					
FUNCTION	DIRECTION	PORT	25/180		
			PVG32		RSQ240
Main-relief valve			4135 psi (285 bar)		4135 psi (285 bar)
Slewing system	Right	A	P	2320 psi 160 bar (LS)	P
	Left	B	P	2320 psi 160 bar (LS)	P
Boom cylinder	Down	A	915 psi (63 bar)	725 psi (50 bar) (LS)	725 psi (50 bar)
	Up	B	P		P
Outer boom (Jib) cylinder	Up	A	4640 psi (320 bar)		4640 psi (320 bar)
	Down	B	3045 psi (210 bar)	2610 psi (180 bar) (LS)	2900 psi (200 bar)
Extension cylinders	Extend	A	P		P
	Retract	B	P		P
Rotator	Right	A	1815 psi (125 bar)		3190 psi (220 bar)
	Left	B	1815 psi (125 bar)		3190 psi (220 bar)
Grab		A	1815 psi (125 bar)		3190 psi (220 bar)
		B	1815 psi (125 bar)		3190 psi (220 bar)
Separate stabilizer valve			1815 psi (125 bar)		1815 psi (125 bar)

NOTE: Keep outer boom (jib) horizontal when testing and adjusting valves.

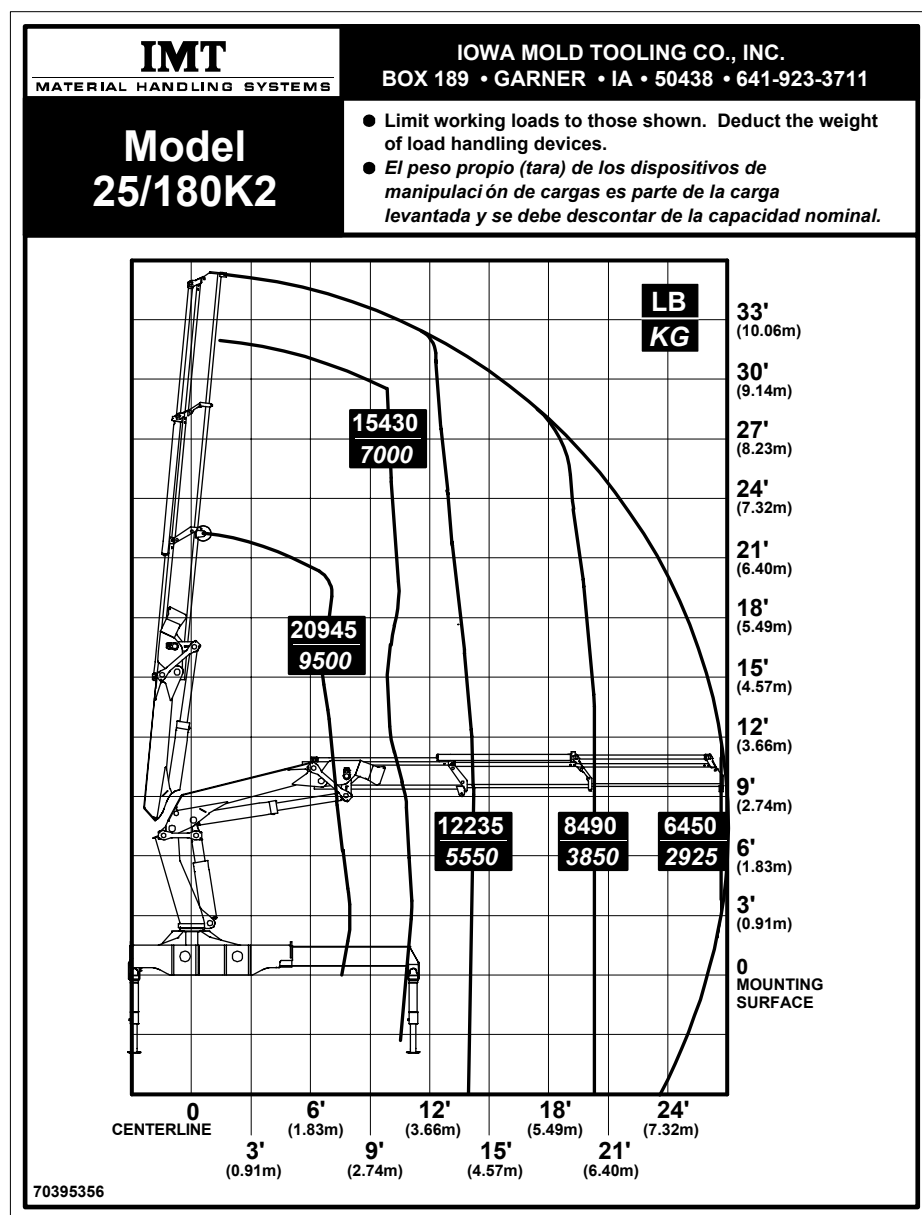
OPENING PRESSURE ON LOAD-HOLDING VALVES			
Function	Direction	Port	
Planetary Gear		A/B	2175 psi (150 bar)
Boom Cylinder C2-T			4570 psi (315 bar)
Jib Cylinder C2-V2			4640 psi (320 bar)
Extension Cylinder C1-C2	Retract	B	6235 psi (430 bar)
	Extend	A	3045 psi (210 bar)

PRESSURE SETTING FOR LOAD MOMENT LIMITATION (LMB)	
Load moment limitation (LMB)	4000 psi (275 bar)

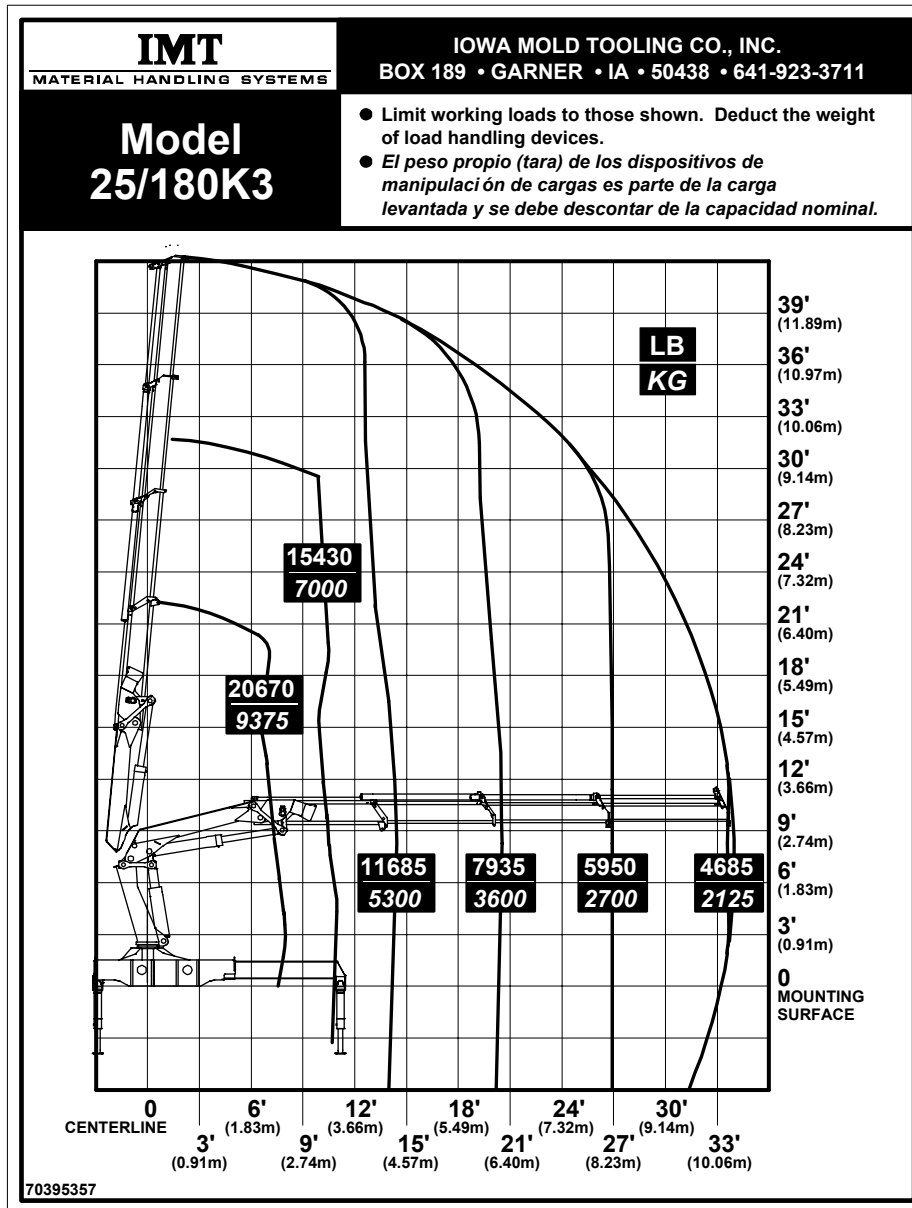
MAXIMUM PUMP PERFORMANCE	
Pump performance	17.2 gal/min (65 lpm)



25/180K2 Capacity Chart

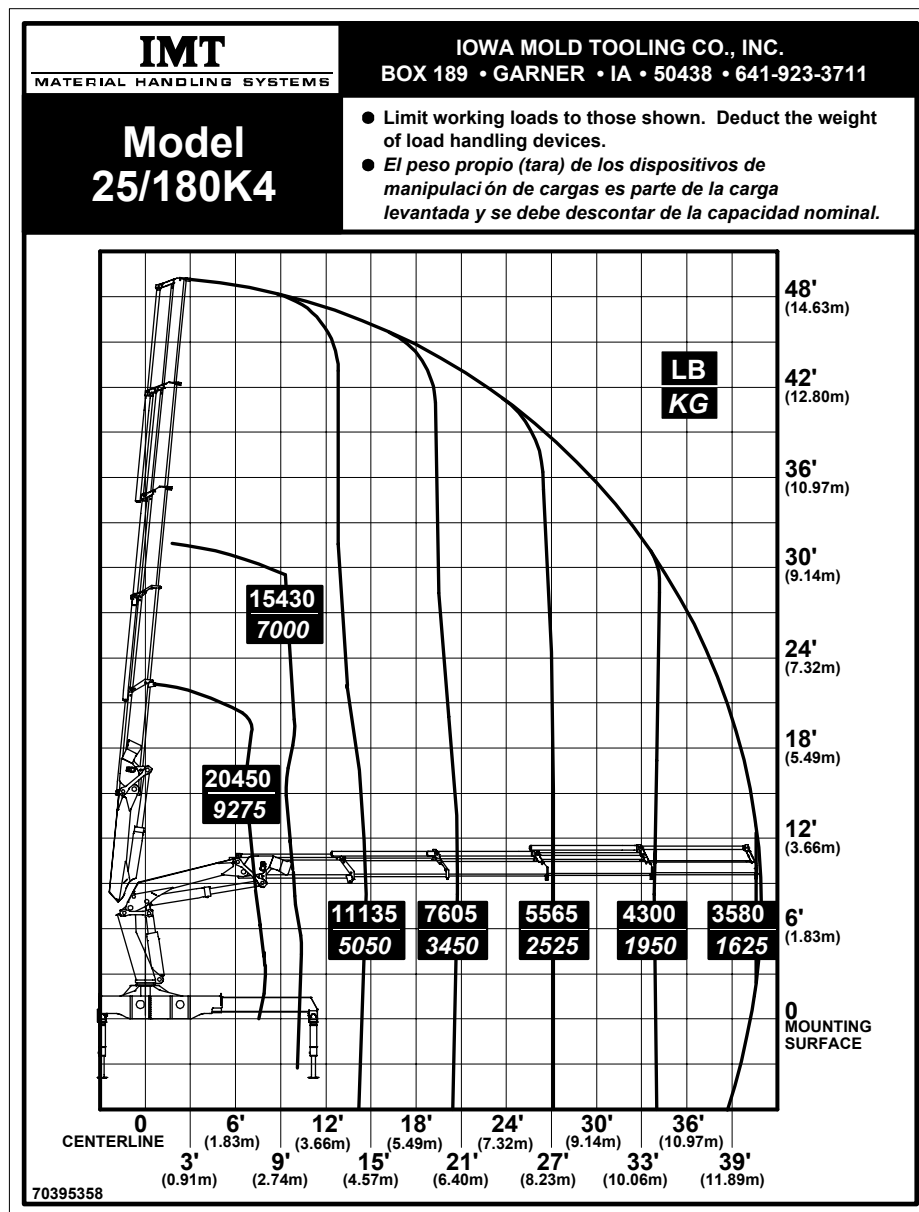


25/180K3 Capacity Chart



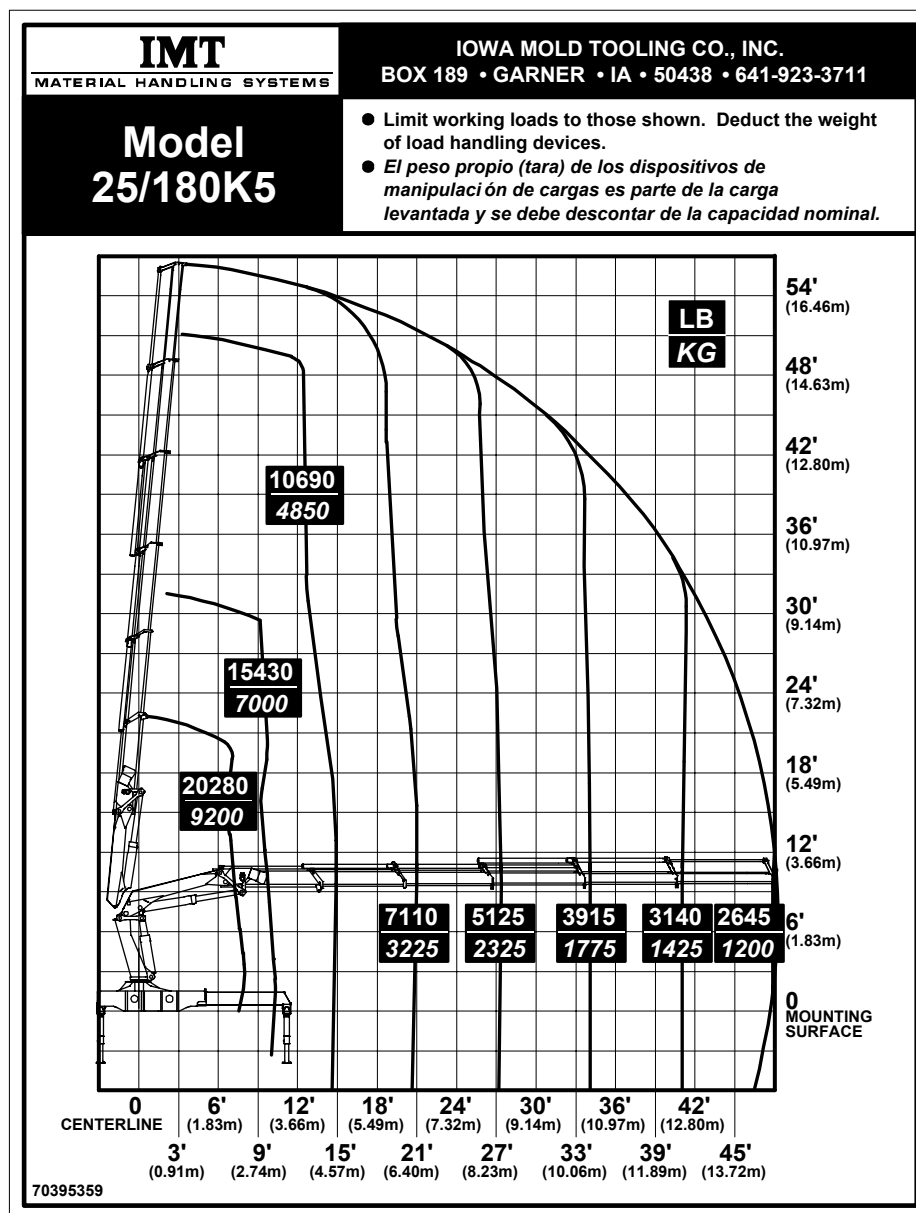


25/180K4 Capacity Chart

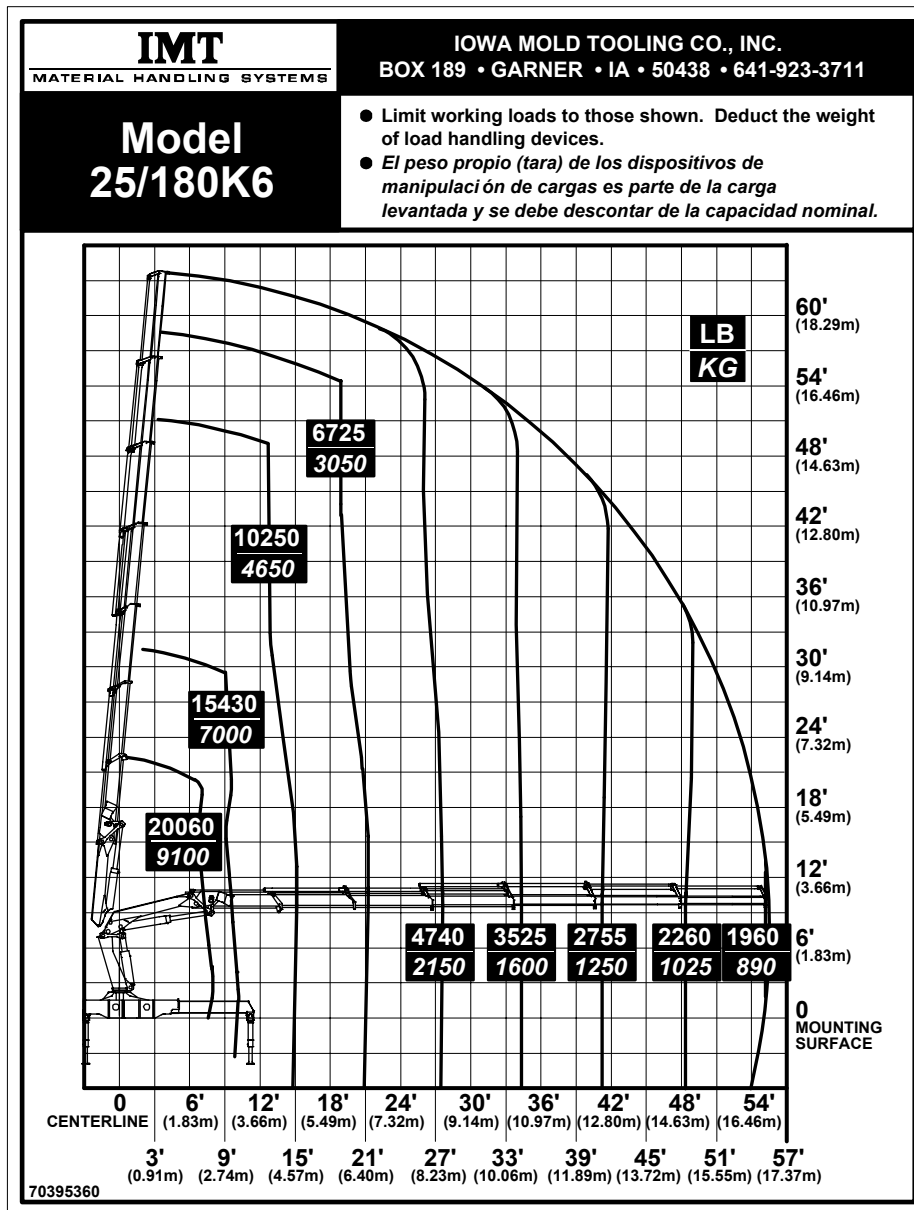




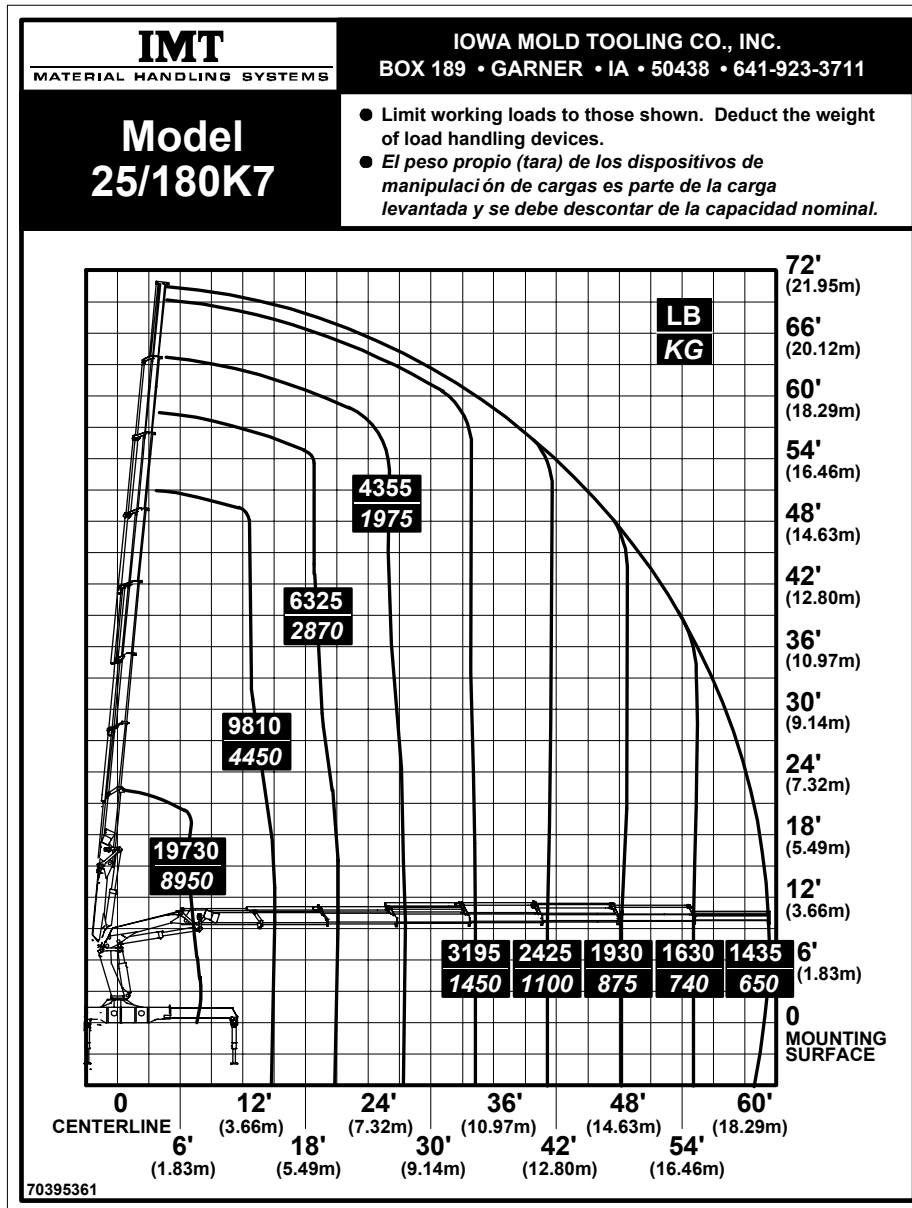
25/180K5 Capacity Chart



25/180K6 Capacity Chart

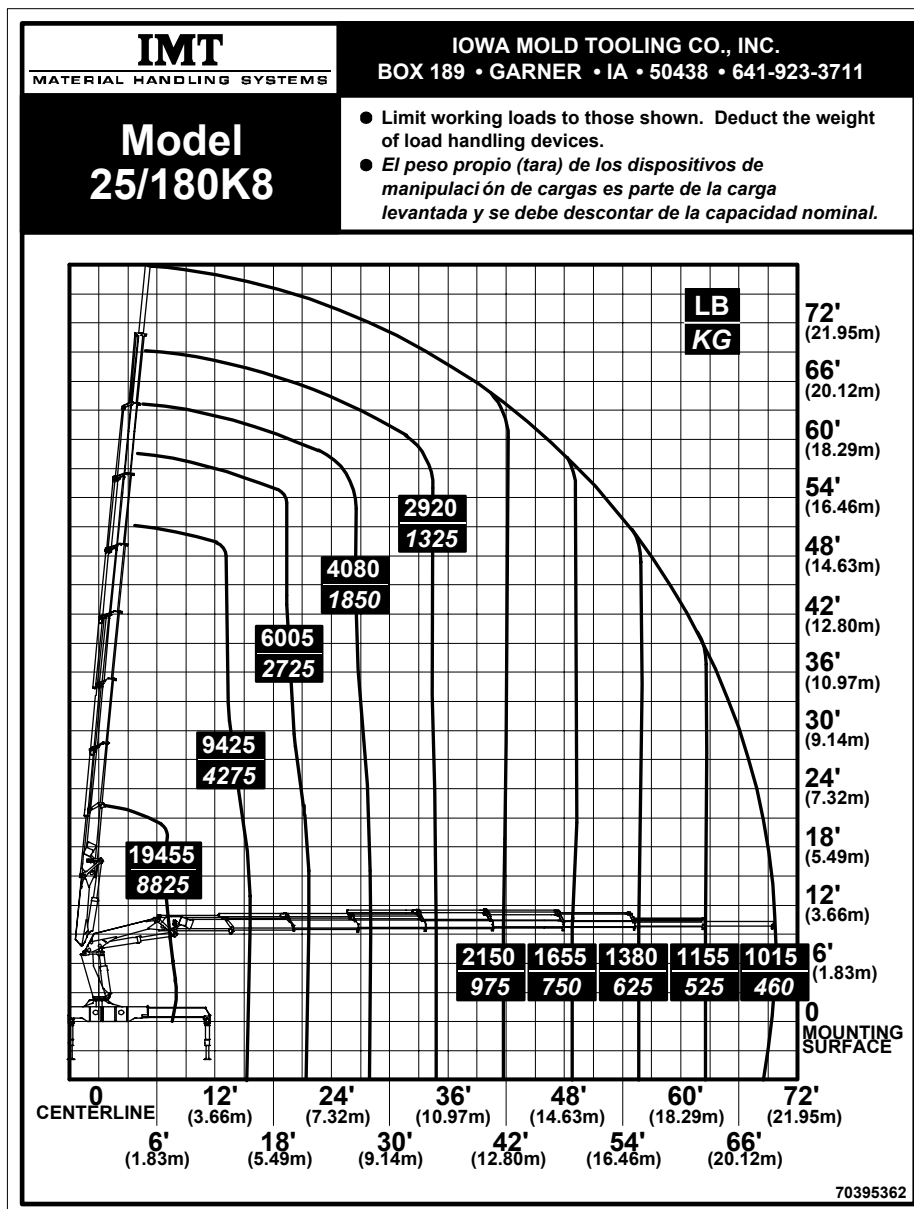


25/180K7 Capacity Chart



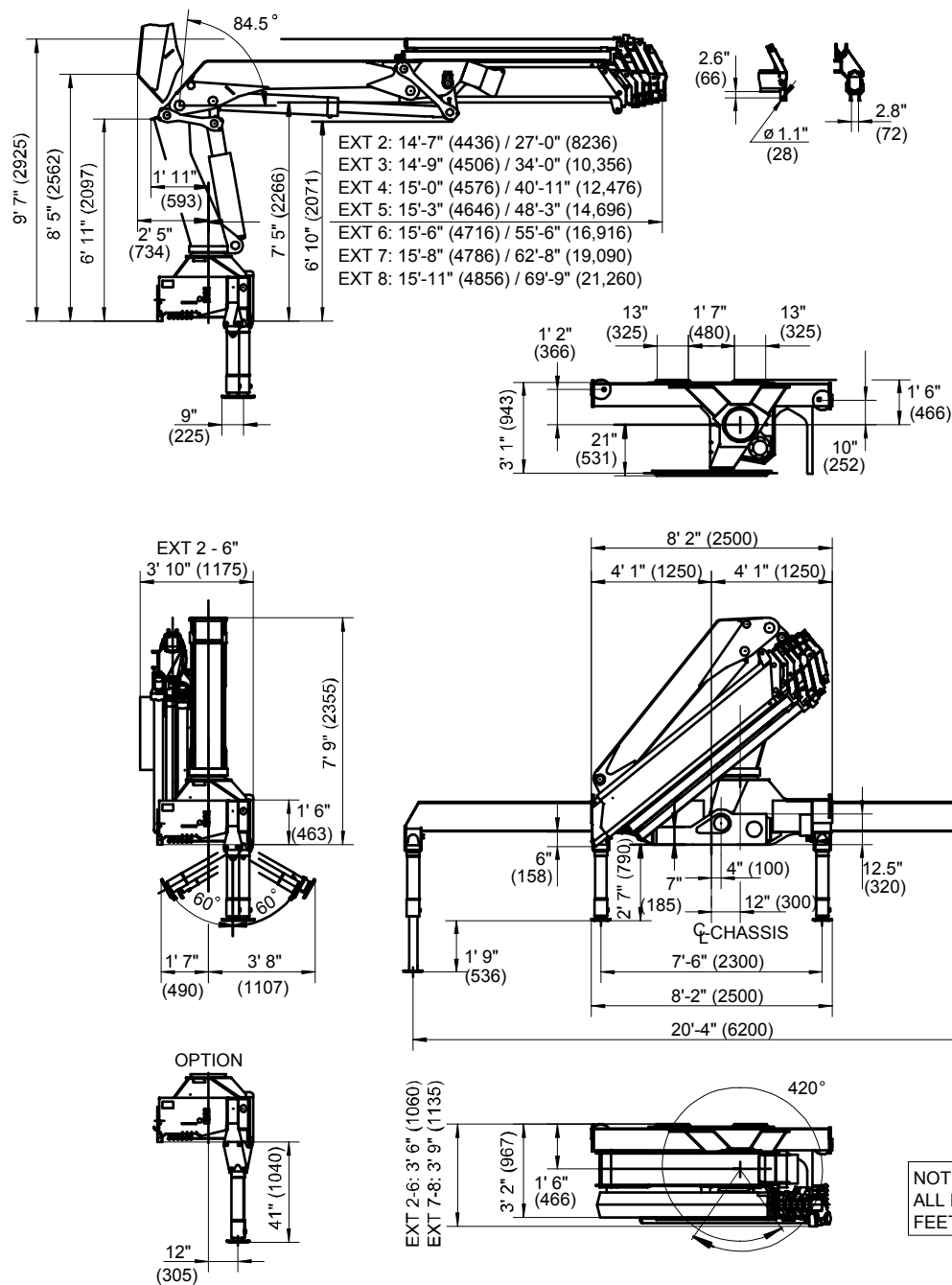


25/180K8 Capacity Chart





25/180 Dimensional Drawing





25/180 Hydraulic Diagram

