SUGGESTED SPECIFICATIONS
LIFTMOORE MODEL 1640X & 1640XP CRANE

CAPACITY: Moment Rating 16,000 Ft.-Lbs. with capacities as follows:

*4000 Lbs. at 4 Ft.	1333 Lbs. at 12 Ft.
*2666 Lbs. at 6 Ft.	1142 Lbs. at 14 Ft.
2000 Lbs. at 8 Ft.	1000 Lbs. at 16 Ft.
1600 Lbs. at 10 Ft.	800 Lbs. at 20 Ft.

*Use traveling block, double line, for loads above 2000 Lbs.

HOIST WINCH: The hoist winch has a two stage planetary gear drive for best possible efficiency. The winch is powered by a low speed, high torque hydraulic motor. The single line capacity of the winch is 3000 Lbs. The winch load is controlled by a dynamic braking system on the motor and by a load applied mechanical brake located in the winch drum. Ratio between winch drum and wire rope meets ANSI B30.5 requirements. First layer hoisting performance of the winch at 5 GPM is as follows:

Load(Lbs.)	Hook Speed(Ft./Min.)	Pressure Drop Across Motor – PSI
1000 Lbs.	31	500
2000 Lbs.	31	850
4000 Lbs.	15.5	875

WIRE ROPE AND SHEAVES: The crane is supplied with 70 Ft. of ¼ In. galvanized aircraft cable. Minimum breaking strength of the rope is 7000 Lbs. The wire rope is outside of the boom and visible for operator's continual inspection. A traveling block for easy two part hookup is included. All sheaves meet ANSI requirements.

HYDRAULIC SYSTEM: All crane functions are hydraulically powered by an engine driven hydraulic pump. PTO, pump, reservoir and hoses are not supplied with the crane. Flow and pressure requirements are 6 GPM at 2500 PSI. All directional control and flow controls valves are incorporated in a single manifold. The pressure compensated flow control system dumps excess flow at the function operating pressure.

Proportional hydraulic control is available as an option (model 1640XP). This control system gives the operator of the crane variable speed control of each crane function. All control is through the remote pendant control.

ROTATION SYSTEM: The hydraulic powered rotation is driven by a low speed, high torque hydraulic motor and drives through a 54:1 ratio self locking worm gear. The worm gear is an Aluminum Bronze Alloy and the worm is hardened steel. The crane rotates 370 degrees on two 4.00 In. ID tapered roller bearings. An electrical switch stops the rotation each direction.

LIFTMOORE
TRUCK CRANES

HOUSTON, TEXAS
FAX: (800) 824-5559 (USA & Canada)
FAX: (713) 688-6324
PHONE: (713) 688-5533
www.liftmoore.com

BOOM ELEVATION: The boom is capable of moving from –5 degrees to +75 Degrees. It is elevated by a 3.5 In. bore double acting cylinder. The cylinder has an integral counterbalance valve with relief set at 2000 PSI. The counterbalance valve has three important functions. This valve holds the cylinder in the event of hose failure, it controls the rate of boom descent and acts as a relief when an overload is induced on the boom.

BOOM EXTENSION:

1640X and 1640XP: The boom extends under power from 8 Ft. to 12 Ft. by a 2.5 In. bore hydraulic cylinder. The cylinder is mounted inside the boom for protection and has a counterbalance valve integrally mounted with relief set at 2000 PSI. The counterbalance valve will hold the cylinder in the event of hose failure and also controls the rate of cylinder retraction. The boom also has a manual telescoping section that can be extended from 12 Ft. to 16 Ft. with one intermediate position at 14 Ft. The power extendable section moves on Nylatron slide pads.
Optional : 20 Ft boom with hydraulic powered extension from 10 Ft. to 16 ft and a manual telescoping section out to 20 Ft which incorporates an intermediate position at 18 FT.

PENDANT CONTROL: A 20 Ft. remote pendant control is supplied with each crane. For safest possible use, the pendant control is removable from the crane and each function is controlled by a momentary contact toggle switch.

LOAD SENSOR: A load limiting sensor is installed in the elevation cylinder. This sensor will shut down hoist up, boom out, and boom down when an overload is detected. The sensor will reset after the load is lowered.

ANTI TWO-BLOCK: An anti-two block system is included on all 1640 model cranes. The anti two-block prevents extending the boom against the traveling block with the resulting possible cable breakage.

MOUNTING: Four 0.75 In. x 3.0 In. long grade 8 Hex Head Cap Screws and Lock Nuts are supplied for mounting. Hole pattern is 12 In. square. Mounting plate is 15 In. square.

ACCESSORIES: An outrigger is necessary to keep the truck as level as possible as well as reducing the load on the crane's rotation mechanism and the truck's suspension components. Jackstands are also available for stability of the truck. Liftmoore can supply all of these options.

CHASSIS: Minimum recommended vehicle GVWR for model 1640 cranes is 14,500 Lbs.

LIFTMOORE
TRUCK CRANES

HOUSTON, TEXAS
FAX: (800) 824-5559 (USA & Canada)
FAX: (713) 688-6324
PHONE: (713) 688-5533
www.liftmoore.com