# LIFTMOORE 1640 CRANE

The Model 1640 features all hydraulic operation with a planetary winch. The efficient planetary drive winch produces wire line speeds up to 30 Ft, per Minute with only a 5 GPM flow. Single line capacity of the winch is 3000 Lbs.

#### •1640 X-16

The boom extends from 8 Ft. to 16 Ft. using a 4-Ft. power extension cylinder and a 4-Ft manual pull out section.

#### •1640X-20

The boom extends from 10 Ft. to 20 Ft. using a 6-Ft. power extension cylinder and a 4-Ft manual pull out section.

## Optional Proportional Controls

This optional control system gives the operator of the crane variable speed control of each crane function. All controls are through the remote pendant control.



**Traveling Block** w/hook & Safety Latch **Meets ANSI Standard** 

**Planetary Gear Winch** Drum meets ANSI Ratio Requirements

**Bearings** 

IFTMOORE

RUCK CRANES



FAX: (800) 824-5559 (USA & Canada)

HOUSTON, TEXAS

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1/4 X 70' GAC

LOAD CAPACITY - LBS. 16,000 FT-LBS 15° 30° 45° 60° 75°

Model 1640X-16

BOOM LENGTH - FT. 2000 2051 2319 2759 4000 4000 1600 1656 1848 2263 3200 4000 1333 1381 1540 1885 2667 4000 1143 1183 1320 1616 2286 4000 1000 1036 1154 1415 2000 3865

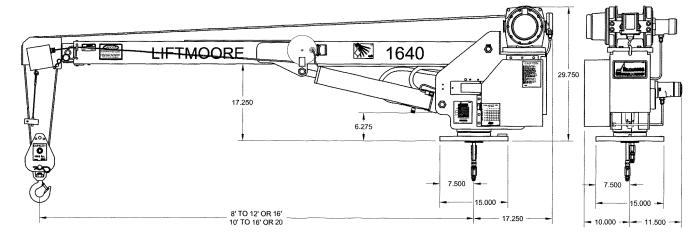
889 920 1026 1257 1778 3434 18 20

800 - 828 - 924 - 1131 - 1600 - 3091



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# **1640 SPECIFICATIONS**



#### **MOMENT RATING:**

16,000 Ft.-Lbs.

#### LIFT CAPACITIES:

| * 4000 Lbs. @ 4 ft. | 1333 Lbs. @ 12 ft. |
|---------------------|--------------------|
| 2666 Lbs. @ 6 ft.   | 1142 Lbs. @ 14 ft. |
| 2000 Lbs. @ 8 ft.   | 1000 Lbs. @ 16 ft. |
| 1600 Lbs @ 10 ft.   | 800 Lbs. @ 20 ft.  |

<sup>\*</sup> Travel block & double line hookup for loads greater than 3000 Lbs.

## **HOIST WINCH:**

The hoist winch is planetary gear driven for the most efficient operation in the industry. The winch is powered by a low speed, high torque hydraulic motor. Single line speed of the winch is 30 Ft per Minute with a 5 GPM input flow. Winch drum to wire rope ratio meet ANSI B30.5 requirements. The winch has a single line, bare drum capacity of 3000 Lbs, and incorporates a load applied mechanical brake located in the winch drum.

#### WIRE ROPE and SHEAVES:

70 Ft. of ¼ in. galvanized aircraft cable is supplied with a minimum breaking strength of 7000 lbs. The wire rope is outside of the boom and visible for operator's continual inspection. A traveling block for two-part hookup is included. All sheaves meet ANSI requirements.

#### BOOM:

The boom angle varies from -5 to +75 degrees elevated by a 3.5 In. diameter double acting cylinder. An integrally mounted counterbalance valve is included with the cylinder for positive load holding and safety. The counterbalance valve has three important functions, this valve holds the cylinder in the event of hose failure and it controls the rate of boom descent, and functions as a relief valve in the event of an induces overload.

#### 1640X-16

The boom extends under power from 8 Ft. to 12 Ft. with a 4 ft. Manual pull out to 16 Ft.

## 1640X-20

The boom extends under power from 10 Ft. to 16 Ft. with a 4 ft. manual pull out to 20 Ft.

## **HYDRAULIC SYSTEM:**

An engine driven hydraulic pump powers all crane functions. (P.T.O., pump, reservoir and hoses are not supplied) all directional control and flow control valves are incorporated in a single manifold. The pressure compensated flow control system will dump excess flow at slightly above the function operating pressure, not the relief pressure setting. Flow and pressure requirements are 6 GPM maximum flow @ 2700 PSI maximum pressure.

With the optional proportional flow control system the speed of each function can be varied between zero and full flow through a trigger switch in the pendant control. (Models 1640XP)

### **ROTATION SYSTEM:**

A 54:1 self locking worm gear powered by a low speed, high torque hydraulic motor drives the cranes rotation, The 1640 rotates on two 4.00 in. ID tapered roller bearings. Rotation is limited to 370 degrees.

#### **REMOTE PENDANT CONTROL:**

A 25-Ft. long remote pendant is provided for control of each powered function. All switches are momentary contact. The Pendant control is removable from the crane to prevent unauthorized use of the crane.

#### LOAD SENSOR:

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

#### **ANTI TWO BLOCK:**

An anti two-block is standard on this crane and prevents extending the boom against the travel block with the resulting possible cable breakage.

## MOUNTING: A minimum 14,500 Lb. GVWR recommended.

Four  $0.75^{\circ}$  x  $3.0^{\circ}$  long Grade 8 hex head cap screws and lock nuts are supplied for mounting. Hole pattern is  $12^{\circ}$  square. Mounting base is  $15^{\circ}$  square.

#### **ACCESSORIES:**

An optional outrigger is needed for stability requirements of OSHA 1910.180. The outrigger is necessary to reduce the load on the crane's rotation assembly and the truck's suspension. A boom rest is needed to support the boom while in transit. Liftmoore can supply either of these options.



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