

# TECHNICAL SPECIFICATIONS

OF

## 30T CAPACITY TRUCK MOUNTED HYDRAULIC CRANE

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## **1. TECHNICAL SPECIFICATION OF 30T CRANE**

### **CARRIER:**

6x4 wheel right hand drive purpose built heavy duty frame of torsion box construction with integral outrigger housing and fabricated from high strength steel plates and sections.

### **BOOM:**

8.8M - 29.0M four section full power boom. Telescopic sections slide on adjustable and replaceable low friction wear pads. Maximum Tip height 31.2M.

### **BOOM ELEVATION:**

One double acting hydraulic cylinder with integral holding valve. Maximum boom angle is 76° and Minimum -3°.

### **LOAD MOMENT AND ANTI TWO BLOCK SYSTEM:**

Standard load moment and anti-two block system with audio-visual warning and control lever lockout. These systems provide electronic display of boom angle, length, radius, relative load moment, maximum permissible load and load indication and warning of impending two-block conditions.

### **CABIN:**

1. Superstructure Operator's cab: Totally enclosed steel construction, full vision type. Control levers for craning functions. All windows fitted with toughened safety glass. Lockable sliding door, cab interior light, electrical windshield wiper. Electric horn, circulating air fan.
2. Carrier Operator's Cab: Steel construction, full width cab with electric fan, interior light. Opening windows fitted with toughened glass. Two lockable doors, electric windscreen wiper to front of windscreen. Upholstered and adjustable driver's seat. Automotive controls include steering wheel, pedals for clutch, brake and accelerator.

### **SWING:**

Planetary reduction unit. Spring applied hydraulically released multi disc brake. Mechanical slew lock one position operated from cab. Free slew facility provided.

**HOIST:**

Power up and down, equal speed, planetary reduction with automatic spring applied multi-disc brake. 137M length of 16mm dia. Non-rotating wire ropes.

**HYDRAULIC SYSTEM:**

Precision four way double acting pilot operated control valves permit simultaneous control of multiple crane functions. Remote mounted with thermostatically controlled electric motor driven fan.

**HOOK BLOCK:**

30 tonnes, 4 sheaves

**OUTRIGGERS:**

Hydraulically operated outrigger system, comprising four independently controlled hydraulic telescopic horizontal beams with vertical hydraulic jacks for over side and over rear operation. Plus, one vertical hydraulic jack mounted under front of carrier to permit full 360° lifting duties. All vertical jacks are fitted with positive lock valves. Easy-fit outrigger feet are provided with stowage facility on carrier.

**ENGINE:**

Heavy duty, water cooled diesel engine of adequate horse power.

**ELECTRICAL SYSTEM:**

24-V starting and lighting system includes two- combined dipping head lamps, side, rear and stop lamp. Flashing direction indicators.

**DRIVE/STEER:**

6x4 wheel right hand drive

**STERING:**

Hydraulic power assisted steering to front steering axle.

**GEAR BOX:**

Synchromesh gear with easy gear shift mechanism.



**AXLES:**

1. Front Axle: Steering Axle mounted on semi-elliptical leaf spring
2. Rear Bogie: Heavy duty fully floating type, mounted on specially designed rocker beam to allow maximum articulation on uneven ground. Air operated inter axle differential lock.

**BRAKE:**

1. Service: Air-operated on wheels by means of foot operated pedal in Driver's cab.
2. Parking: By means of air-operated spring actuator through control valve in driver's cab on rear bogie, fail safe.

**TYRES:**

Pneumatic 10.00 x 20-16 PR tyres, singles front and twins rear. Spare wheel provided.

**MISCELLANEOUS STANDARD EQUIPMENT**

Air pressure gauge, engine oil pressure gauge, ammeter, speedometer, warning light for alternator.

**NOTE:** First fill of oil and lubricants for testing, inspection and operationalisation of the crane shall be provided by the firm.

**2. QAP/ATP**

Vendor shall prepare QAP/ATP documents and submit to BAPL for approval.

**3. WARRANTY**

Vendor Shall include warranty for 02 years.

**4. TRAINING**

Training of Indian Navy nominated officers for duration of 10 working days.



**5. DELIVERABLES**

S. No.	Description	Quantity
1.	Mobile Crane 30T	03 units
2.	SPTA	03 Set
3.	Standard Tool Set	03 Set
4.	Technical/Maintenance Manual	01 Set (Hard & Soft copy)

