



Oil India Limited

(A Govt. of India Enterprise)

P.O. Duliajan – 786602, Assam , India

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Tender No. & Date : SDG 2583 P14/08 of 12.02.2014
Tender Fee : INR 4,500.00 or USD 100.00
Bid Security : Applicable
Bidding Type : SINGLE STAGE TWO BID SYSTEM
Bid Closing on : As mentioned in the Basic Data of the tender in OIL's e-portal.
Bid Opening on : As mentioned in the Basic Data of the tender in OIL's e-portal.
Performance Guarantee : Applicable

OIL INDIA LIMITED invites Global Tenders for item detailed below:

Item No. /Mat. Code	Material Description	QTY.	UOM
1.	Supply and commissioning of 40MT Truck mounted Diesel Hydraulic Crane as per Annexure: a) Detailed specification- Annexure -AA . b) Bid Rejection Criteria (BRC) and Bid Evaluation Criteria- Annexure-BB .	7	No.

Special Notes :

1.0 The tender will be governed by "General Terms & Conditions" for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders) including Amendments & Addendum to "General Terms & Conditions" for e-Procurement.

2.0 Technical Check list and Commercial Check list are furnished . Please ensure that both the check lists are properly filled up and uploaded along with Technical bid.

3.0 The item qualifies for Nil duty / Deemed Export benefits. For Deemed Export benefits, please refer Addendum to the General terms and conditions for Global tender.

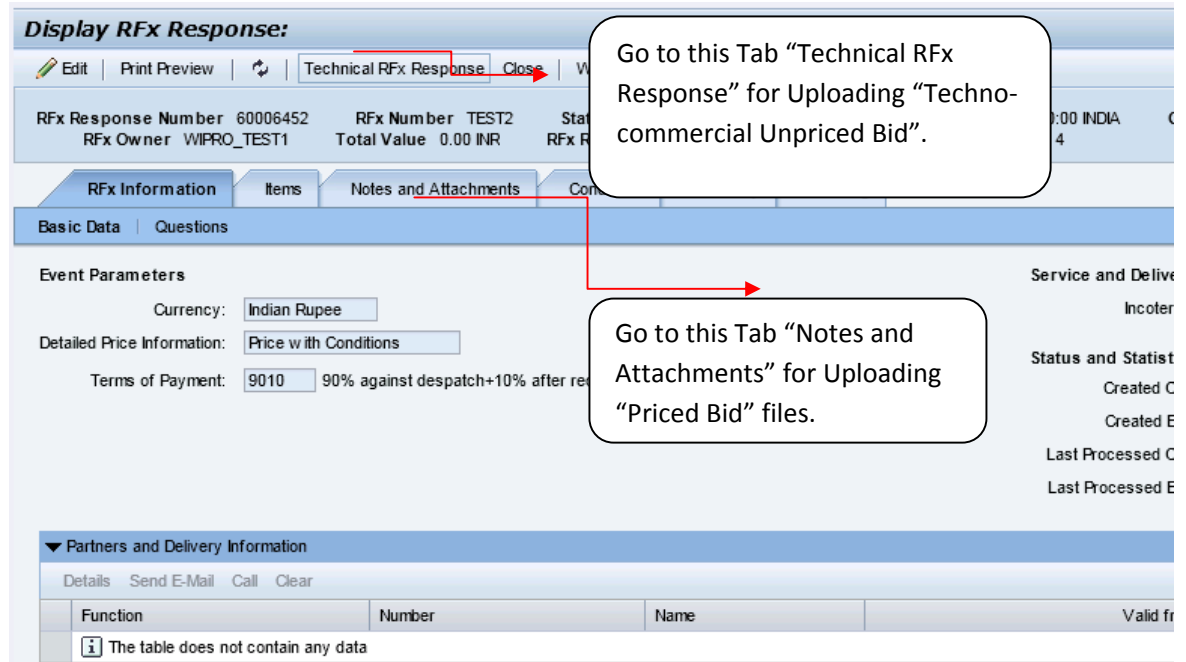
4.0 Please note that all tender forms and supporting documents are to be submitted through OIL's e-Procurement site only except following documents which are to be submitted manually in sealed envelope super scribed with tender no. and due date to The Head Materials, Materials Department, Oil India Limited, Duliajan- 786602, Assam on or before the Bid Closing Date and Time mentioned in the Tender.

- a) Original Bid Security.
- b) Detailed Catalogue and any other document which have been specified to be submitted in original.

5.0 In case of SINGLE STAGE-TWO BID SYSTEM, bidders shall prepare the "Techno-commercial Unpriced Bid" and "Priced Bid" separately and shall upload through electronic form in the OIL's e-Tender portal within the Bid Closing Date and Time stipulated in the e-Tender. The "Techno-commercial Unpriced Bid" shall contain all technical and commercial details except the prices which shall be kept blank. Details of prices as per Bid format / Commercial bid to be uploaded as attachment in the Attachment Tab "Notes and Attachments".

A screen shot in this regard is given below.

Any offer not complying with above submission procedure will be rejected as per Bid Rejection Criteria mentioned in the tender.



On "EDIT" Mode- The following screen will appear. Bidders are advised to Upload "Techno-commercial Unpriced Bid" and "Priced Bid" in the places as indicated above:

Edit RFX Response:

Submit | Read Only | Print Preview | Check | Technical RFX Response | Close | Save

RFX Response Number 60006452 RFX Number TEST2 Status Withdrawn Submission Deadline 13.04.2013 11:00:00 INDIA
 RFX Owner WIPRO_TEST1 Total Value 0.00 INR RFX Response Version Number 2 RFX Version Number 5

RFX Information Items **Notes and Attachments** Conditions

Area for uploading Techno-Commercial Unpriced Bid*

▼ Notes

Add ▲ Clear

Assigned To	Category	Text Preview

▼ Attachments

Sign Attachment Add Attachment Edit Description Versioning ▲ Delete Create Qual

Assigned To	Category	Description	File Name	Version	Processor	Checked
The table does not contain any data						

Area for uploading Priced Bid**

Note :

* The "Techno-Commercial Unpriced Bid" shall contain all techno-commercial details except the prices.

** The "Price bid" must contain the price schedule and the bidder's commercial terms and conditions. For uploading Price Bid, first click on Sign Attachment, a browser window will open, select the file from the PC and click on Sign to sign the Sign. On Signing a new file with extension .SSIG will be created. Close that window. Next click on Add Attachment, a browser window will open, select the .SSIG signed file from the PC and name the file under Description, Assigned to General Data and click on OK to save the File.

6.0 Bidders are requested to examine all instructions, forms, terms and specifications in the bid. Failure to furnish all information required as per the bid or submission of offers not substantially responsive to the bid in every respect will be at the bidders risk and may result in the rejection of its offer without seeking any clarifications.

7.0 The Integrity Pact is applicable against this tender. OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide Annexure X of the tender document. This Integrity Pact proforma has been duly signed digitally by OIL's competent signatory. The proforma has to be returned by the bidder (along with the technical bid) duly signed (digitally) by the same signatory who signed the bid, i.e., who is duly authorized to sign the

bid. Any bid not accompanied by Integrity Pact Proforma duly signed (digitally) by the bidder shall be rejected straightway. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder's authorized signatory who sign the Bid.

OIL's Independent External Monitors at present are as under:

**(I) SHRI N. GOPALASWAMI, I.A.S (Retd) ,
Former Chief Election Commissioner of India**

E-mail Id : gopalaswamin@gmail.com

**(II) SHRI RAMESH CHANDRA AGARWAL , IPS(Retd)
Former Director General of Police**

E-mail Id : rcagarwal@rediffmail.com

**Technical Specification of Truck Mounted Diesel Hydraulic Telescopic Boom Crane-
Minimum 40MT lifting capacity at 3.00 mtrs operating radius.**

1.0 SCOPE OF WORK

SUPPLY & COMMISSIONING OF 7(SEVEN) NOS. BRAND NEW TRUCK MOUNTED DIESEL HYDRAULIC TELESCOPIC BOOM CRANES HAVING LIFTING CAPACITY OF MINIMUM 40 MT AT 3(THREE) MTRS OPERATING RADIUS ON FULLY EXTENDED OUTRIGERS AND WITH 360 DEGREE CONTINUOUS FULL CAPACITY SLEW, AS PER FEATURES, SPECIFICATIONS, TERMS & CONDITIONS DETAILED BELOW AND SHOULD BE CAPABLE OF WORKING IN COLD, HOT & HUMID CLIMATE, SLUSHY AND UNDERFOOT CONDITION IN OILFIELD AREAS HAVING HEAVY RAINFALL IN DIBRUGARH & TINSUKIA DISTRICTS OF ASSAM, INDIA.

THE CRANES SHALL BE COMPLETE UNIT (EQUIPMENT) WITH ALL ACCESSORIES AND SHOULD BE CAPABLE OF WORKING IN THE FOLLOWING ATMOSPHERE. THE CLIMATE CONDITION IN OUR OPERATING AREA IS GIVEN BELOW:

- a) Ambient temperature: Minimum = 7 degree C
Maximum = 40 degree C
- b) Altitude of our operating areas: 123 Mtr. – 150 Mtr.
- c) Humidity: 85% - 100% during July-August
- d) Rainfall: 180 – 250 cm during April-October
: Less than 4 cm during November – March

1.1 **Purpose:** The cranes will be deployed for loading, offloading, handling, positioning, aligning large and heavy drilling/oilfield equipment, machinery, pipes, tubular, etc. in the Oil Fields. The offered cranes shall meet the following specification.

Brief specification		
a.	Capacity	Minimum 40 MT at 3.0 mtrs operating radius with basic boom (minimum 10.0 mtrs.) with fully extended outriggers and 360 degree slew. & Minimum 20.0 MT at 5.0 mtrs operating radius with minimum 15.0 mtrs boom length with fully extended outriggers and 360 degree slew.
b	Steering	Right hand drive on carrier unit (steering on the right side inside carrier driver cabin).

c.	Boom	Multiple section full power hydraulic telescopic booms to be provided. The Basic boom length shall not be less than 10.00 mtrs and the total maximum boom length should be not less than 30 mtrs.
d.	Axles and suspension	Sufficient number of heavy duty axles of adequate capacity with heavy duty robust suspension for working/transporting the crane in difficult drilling well sites and road conditions of Assam. India
e.	Drive	Preferably 8x4
f.	Total Weight of the crane	40.00 MT Approx.
g.	Overall length	13.00 mtrs (approx.)
h.	Overall Width	2.60 mtrs (approx).
i.	Overall Height	Not more than 3.80 mtrs
J	Ground clearance	25 cm (approx)
k.	Wheels & Tyres	Preferably 11.00 x 20 or 12.00 x20 tubed tyres. Tyres shall be available in India.
l.	Minimum Turning Circle Radius	As minimum as possible, 15 mtrs preferably
m.	Hoist rope diameter / type	19 mm/non-spinning type
n.	No. of hydraulic (rigger) Jacks	5 nos 4+1 (Front)
o.	Engine	The crane shall be provided with either 1(one) engine of adequate capacity or 2 (two) separate engines i.e. one for carrier and another for the crane operation. Engines shall be Water-cooled, Diesel Engine having adequate horse power for carrier movement and crane application and shall meet the latest emission norms as applicable in the state of Assam in India at the time of supply of cranes.

2.0 CODES AND STANDARDS

The design, materials, construction, manufacture, inspection, testing and performance of the Truck mounted diesel hydraulic telescopic crane shall comply with all currently applicable regulations and safety codes. The equipment shall also conform to the latest applicable Indian or ISO standards or other international standards as given below.

Indian Standard: **IS- 4573** (Specification for power driven Mobile Crane)
American Standard: **ASME B 30.5 – 2011**
European Standard: **EN 13000:2010 (E)**

The crane should comply with the Motor Vehicle Rules as applicable in the state of Assam in India.

Detailed Specification

3.0 SUPER STRUCTURE

3.1 Engine for Super Structure:

- 3.1.1 The crane shall be provided with either 1(one) engine of adequate capacity or separate engines can also be provided one for carrier and the other for superstructure. It should be of suitable capacity, water cooled diesel engine and must be compliant with the latest Indian Emission norms as applicable in the state of Assam in India at the time of supply of cranes. We prefer to have Ashok Leyland, Cummins, Caterpillar, Mercedes Benz engine. It is the bidder's endeavor to provide engines for which spares are readily available in India.
- 3.1.2 The bidder shall clearly mention the make, model, HP, Torque and other relevant details of the engine provided in the crane. A technical leaflet of the engine should be provided along with the bid.
- 3.1.3 In case of engine with Electronic control system, 2(two) complete set of Engine Fault Diagnostic and repair tool (both software and hardware including laptop) shall be supplied along with the cranes. Bidder shall categorically confirm in the bid that the offered tool is for the particular engines (Note: - Two complete set of above tool against 7 Nos. cranes).
- 3.1.4 The working area of the crane operator shall be comfortable and free from engine smoke.
- 3.1.5 The floor of the superstructure (deck) should be slip resistance. Metal chequered plate floor is preferred.
- 3.1.6 A tool box of adequate size should be provided on the deck of the crane to keep tools, tackles, slings etc.

3.2 Operator's Cabin

- 3.2.1 Shall be of full vision type. All weather proof operator's cabin shall be robustly built of metal. Operator should have clear vision of the surrounding and the load being handled all the time during crane operation for safe operation of the crane.
- 3.2.2 Crane super structure controls such as boom derricking (lift/lower), telescopic boom extension / retraction, hoist rope lifting/lowering, out-riggers extension/retraction etc., shall be located inside the operator's cabin and in hand reach locations.
- 3.2.3 Shall be provided with suitable safety device/LMI system clearly showing the rated capacity, hook load, operating radius, boom angle, boom length, lifting

- capacity of an appropriate radius, outriggers position, over load indication, over hoist indication etc.
- 3.2.4 Shall be provided with LMI with loading condition, boom angle and its boom elevation etc. in the LCD display screen preferably.
 - 3.2.5 Shall be provided with standard dash board gauges such as engine oil temperature, oil pressure, radiator water coolant temperature etc. with necessary instruments for crane operating controls.
 - 3.2.6 Inclination indicator shall be provided to show the inclination of the crane with respect to ground surface level.
 - 3.2.7 Shall be provided with wiper motor and wiper arms, adjustable type wide angle rear view mirrors, sun visors, Horn for alerting co-workers etc.
 - 3.2.8 Shall be provided with a suitable medium size fan with protection cage in the operator cabin.
 - 3.2.9 Shall be provided with wind shield glass, clear lighting provision, and adjustable type wide angle rear view mirrors, wiper motor, Horn, Sunvisor etc.
 - 3.2.10 Shall be provided with heat resistant ceiling roof and noise resistant insulation material.
 - 3.2.11 Shall be provided with a suitable approach ladder /steps for climbing up the operator's cabin.
 - 3.2.12 Shall be provided with an adjustable comfortable seat (with belt) as per modern design for enabling the operator to work for long hours comfortably.
 - 3.2.13 Load charts and hand signal charts should be provided inside the operator's cabin which can be easily visible for the operator.
 - 3.2.14 All controls for crane operation viz Joysticks /Control levers, foot controls, for engine throttle, swing brake etc. shall be provided in the operator's cabin.
 - 3.2.15 The floor of the cabin shall be slip resistance.

3.3 HYDRAULIC SYSTEM

- 3.3.1 All the crane operation like hoisting, boom derricking, boom extension, slewing, outriggers extension / retraction shall preferably work on individual circuits.
- 3.3.2 Hydraulic system shall be configured such that it ensures smooth and safe operation of all crane functions. All hydraulic circuits of hoist motor operations, boom extension/retraction cylinder(s) and boom derricking cylinder(s) should be equipped with counterbalance valves for controlled raising/lowering or extension/retraction and to prevent accidental load drop. The details are to be indicated in the bid by the bidder.
- 3.3.3 The crane hydraulic controls shall be operated by "Joy" stick or individual control lever for all functions of crane operation and should be located inside the

operator's cabin. The details of "Joy" stick control / Independent control levers" should be provided

- 3.3.4 The hydraulic system shall be provided with suitable hydraulic pump of adequate capacity with sufficient quantity of hydraulic oil to operate hoisting, derricking and telescoping independently, and simultaneously.
- 3.3.5 Suitable hydraulic pump shall be provided for slew system.
- 3.3.6 The hydraulic drive system shall be provided with safety relief valves to protect the system.
- 3.3.7 Sufficient capacity hydraulic oil reservoir with level indicator shall be provided. The capacity of the reservoir should be indicated in the offer.
- 3.3.8 Sufficient quantity and suitable capacity oil coolers shall be provided to keep the hydraulic oil in appropriate temperature. The details are to be indicated in the bid.
- 3.3.9 Adequate number suitable capacity Full flow filters with by-pass protection shall be fitted at appropriate location and these filters should be easily accessible for removal and fitment.
- 3.3.10 The hydraulic system shall be provided with foolproof safety mechanism against hose rupture or pipe breakage to avoid sudden lowering of load or boom collapse. As mentioned above, the hydraulic system is to be equipped with counter balanced valves for controlled raising /lowering of load or extension /retraction of boom.
- 3.3.11 The hydraulic system components such as hydraulic pumps, motor, valves, filters, gauges etc. shall be of reputed makes, Pump & Motor-Denison/Vickers/Rexroth/Sauer Denfross/ Dynamic Technologies make, Directional Control valve & other valves-Rexroth/Denison/Vickers/Parker/Bucher make. The make, model and ratings of all the important component of the hydraulic system shall be mentioned in the bid.
- 3.3.12 The minimum/maximum system operating pressure is to be indicated in the bid with all relevant details.

3.4 BOOM DERRICKING (BOOM LIFTING / LOWERING)

- 3.4.1 Shall be provided with heavy duty double acting derrick cylinder(s) capable of lifting rated capacities of the crane at different operating radii and height.
- 3.4.2 Shall be provided with fail safe mechanism for stopping the derrick cylinder from falling in case of failure/rupture of hydraulic hose/pipes.
- 3.4.3 The maximum boom elevation shall be about 80 degree.
- 3.4.4 Derricking cylinders should be of reputed make like Tadano/WIPRO etc. Details of make, model, capacities of Boom Derricking should be provided in the bid.

3.5 BOOM TELESCOPING

- 3.5.1 Crane Boom shall be of Buckling and Torsion resistant design and made with high-tensile structural steel. One basic boom section with suitable number of telescopic sections shall be provided for extending the boom. The top boom

- section shall be mounted with multi sheave pulley block having adequate number of sheaves for lifting maximum rated load. Suitable guard shall be provided for stopping drifting of the wire rope from their sheave grooves.
- 3.5.2 Telescopic boom system shall be provided with heavy duty telescopic double acting cylinders capable of lifting rated capacity of the crane to the maximum height.
 - 3.5.3 System shall be configured such that it ensures smooth and safe operation of the crane without jerks.
 - 3.5.4 Shall be provided with fail safe mechanism from collapsing the boom in case of failure/rupture of hydraulic hose/pipes.
 - 3.5.5 Full power telescopic boom sections for proportional extension/retraction of the boom by the operator from the console.
Provision for safe lowering of telescopic boom shall be ensured in case of failure in hydraulic system.
 - 3.5.6 Make of the Telescopic boom and Number of telescopic sections shall be mentioned in the offer.
 - 3.5.7 The hydraulic control of telescopic boom system shall be operated by joy stick or individual control lever for smooth operation.

3.6 HOISTING SYSTEM

- 3.6.1 Crane hoist system shall be driven smoothly by hydraulic motor. Make and model of the hydraulic motor to be fitted shall be mentioned in the offer.
- 3.6.2 Hoisting brake shall be of spring applied, multi disc brake and applies brake automatically when the hoisting motor stops.
- 3.6.3 Hoist rope drum shall be of grooved with flanged sufficiently to take care of the layers of the rope.
- 3.6.4 Wire rope shall be of high performance, non-rotating /non-spinning type approx.19 mm or equivalent construction with adequate length. Wire rope shall be of preformed and galvanized.
- 3.6.5 The hydraulic drive system shall be preferably be of closed loop system.
- 3.6.6 The hoist system shall be designed to have not less than two or three wraps of hoisting rope on the drum when the hook is in its extreme low position. A third WRAP INDICATOR (preferably) is to be provided to warn the operator audibly when the wire rope is on the first/bottom layer and when the wire rope down to the last three wraps.
- 3.6.7 Hoisting system shall be provided with safety of anti-two blocking.
- 3.6.8 The hydraulic hoist system shall be provided with the following features.
 - Power up and Power Lowering.
 - Automatic failsafe brakes for Hoist System (Spring loaded).
 - Non rotating rope of suitable capacity and construction.
 - Audible and visible over load warning indicator for hoist system.
 - Limit switch for hoist and cable follower.

3.7 Slewing system

- 3.7.1 The Slew System provided shall have smooth controlled drive with locking system.
- 3.7.2 Slew system shall be provided with Bi-directional hydraulic slew motor mounted to a planetary reducer for 360 degree continuous smooth swing in either direction.
- 3.7.3 Hydraulic 360 degree slew system, in either direction, shall be provided with foot operated brake (from operator's cabin).
- 3.7.4 Shall be provided with suitable positive locking arrangement for locking the superstructure in suitable position for movement of the crane.

3.8 Hook & Hook Block Assembly

- 3.8.1 Multi sheave Hook Block with rope guard and rotating hook with sling catcher. Necessary means shall be provided to secure the Hook with chassis to prevent swinging while travelling
- 3.8.2 Adequate capacity standard "hook" and "hook block" shall be provided with safety latch and compatible with the wire rope
- 3.8.3 Standard accessories and Optional accessories shall be mentioned clearly in the offer with price.

3.9 Counter Weight

- 3.9.1 Removable type beautifully designed matching counter weight shall be provided for maximum ratings of the crane.
- 3.9.2 Weight of the counter weight shall be indicated in the bid.

4.0 CARRIER (TRAVELLING) SPECIFICATIONS

- 4.1 **Engine for Carrier;** Please refer Engine specification of SUPER STRUCTURE as per Para 3.0
- 4.2 **Clutch:** It should be compatible for the indented application preferably single plate dry type clutch should be provided. The bidder has to provide the details in their offer.
- 4.3 **Transmission:** Gear box shall have adequate number of forward speed and 1 (one) reverse speed for working in bad drilling location and long distance movement. The bidder shall have to provide the details of make, model etc of the gear box in their offer with technical brochure. Transmission shall preferably be of either ZF/ Tadano or other such reputed make

4.4 **Axles :**

- 4.4.1 Adequate number of heavy duty axles, suitable for crane application shall be provided in the front and rear. The total numbers of axles, number of drive axles, number of steer axles, shall be furnished by the bidder.
- 4.4.2 The bidder shall clearly mention in their bid the details of Axles offered i.e Single Axles, Tandem Axles, etc indicating their make, model and load carrying capacities.
- 4.4.3 The actual load per Axle line shall be clearly indicated in the offer. The “axle load distribution” diagram for the offered Crane shall be provided by the bidder. We prefer to have **8 x 4** drive lines.
- 4.4.4 The Axles shall be of reputed make like DANA, MERITOR, SISU, ZF, Ashok Leyland, YORK, BPW, FUWA or equivalent. The technical brochures of the axles fitted in the crane may be provided.
- 4.4.5 Also the details of propeller shaft and differential are to be indicated in the bid. The Technical Brochures for the same may be provided.

4.5 **Suspension system:** The crane shall be provided with heavy duty suspension system both in the front and rear for enabling the crane to work in underfoot drilling locations where dragging of the crane by heavy duty oilfield vehicles is quite common. The suspension provided both in the front and rear shall be of reputed make. It should be capable of withstanding Jerk loads during long distance movement in the arduous oilfield roads. The details of make, models, capacities of suspension offered both in the front and rear shall be indicated in the bid along with drawing, brochure, etc.

4.6 **Wheels and Tyres:**

- 4.6.1** Suitable size, pneumatic tyres, which are available readily in the INDIAN market, shall be provided.
- 4.6.2** We prefer to have 11.00 x 20 or 12.00 x20 tubed tyres. Single giant tyre(s) will not be accepted. The technical details of rim, make, model etc, may be provided with supporting Documents / Drawings.
- 4.6.3** Also Spare wheel (tyre, tube, flap & rim assembly) assembly should be mounted at appropriate location on the crane, which shall not interfere while handling objects.

4.7 **Brake System:**

- 4.7.1** Pneumatic brake system shall be provided with Dual circuit compressed air system.
- 4.7.2** Service brake should preferably be failsafe type on all wheels.
- 4.7.3** Pneumatic system should preferably be provided with air dryer system.

- 4.7.4** Sufficient quantity of Air reservoirs shall be provided to give a minimum of four brake applications with pressure drop from cut-out to cut-in pressure.
- 4.7.5** Brake system accessories shall be of reputed makes like WABCO or BENDIX or equivalent. The details are to be indicated in the bid preferably with diagram.
- 4.8 Maximum Travel Speed:** Not less than 50 kmph.
- 4.9 Gradeability:** Should be minimum 25%. The bidder should provide the details of the gradeability of their offered crane.
- 4.10 Ground Clearance:** Approximately 25.00 cm.
- 4.11 Steering:**
- 4.11.1** The crane shall be provided with hydraulically assisted power steering system. The steering system shall be of reputed make and major components like steering box, power cylinders, hydraulic pump, valve etc. should preferably be available in India. The details of the steering system offered in the crane shall be clearly indicated in the offer.
- 4.11.2** The hydraulic system shall be provided with safety relief valves to protect the system.
- 4.11.3** Steering system and its accessories shall be of reputed make like ZF or RANE or equivalent reputed make.
- 4.12 Driver's Cabin in the carrier:**
- 4.12.1** Shall be full width cab of steel structure with laminated windscreen glass.
- 4.12.2** It should have adequate seating capacity for co-workers.
- 4.12.3** The driver's seat shall be of adjustable type. The driver/co-workers seat shall be comfortable and should have cushioned head-rest. Driver seat belt is to be provided.
- 4.12.4** Only right hand driving is acceptable. Steering wheel should be on the right side of the crane when the driver is inside driver cabin.
- 4.12.5** The dash board shall be provided with all standard dash board gauges such as radiator water coolant temperature gauge, engine lube oil pressure, air reservoir pressure gauge, Speedo-meter cum Odometer, hour meter, fuel

level gauge, battery charging indicator, low-pressure indication for engine oil, air pressure in the air reservoir etc.

4.12.6 All the drive controls of the crane shall be provided in the driver's hand reach distance and shall be accessible easily. All the foot controls viz accelerator, brake, clutch etc., should be conveniently located in the driver's cabin.

4.12.7 Shall be provided with a medium size fan with protection cage in-front of the driver.

4.12.8 Shall be provided with wind shield glass, clear lighting provision and adjustable type wide angle rear view mirrors on both sides of the cabin, Wiper motor, Horn, Sunvisor etc.

4.12.9 Shall be provided with heat resistant ceiling roof.

Shall be provided with a tow hook at the front of the crane for tying / locking of hook block when crane is not in use or while in travelling

4.13 Electrical system:

4.13.1 Shall be provided with 24V DC Electrical system with adequate capacity automobile maintenance free batteries, lighting system (search light)for night operations, standard electrical accessories such as front head light assembly, tail light assembly, parking light assembly, side indicators, hazard warning light assembly, wiper motor, wind shield washer etc.,

4.13.2 Test lamps shall be provided near the engine operated by one switch at the driver's cabin and another switch at the side of the test lamps at appropriate locations.

4.13.3 Rotating type emergency beacon light shall be provided outside the cabin at appropriate location.

4.13.4 Necessary and adequate lights (search lights) in sufficient quantity should be provided in the super structure / Operator cabin to enable the crew to work in the night in case of emergency.

4.13.5 The crane shall be provided with necessary marker lights at appropriate places including boom to indicate its presence while travelling in the night.

4.13.6 Batteries shall be kept in a separate box and (a) have a cover on the terminals that is not connected to ground (b) be protected against inadvertent movements.

4.13.7 A Heavy duty battery isolation switch shall be provided to the crane to shut-off the system.

4.14 **Outriggers & Jack** -4(four) Nos. hydraulically operated outriggers with horizontal (riggers) jacks and one additional hydraulically operated front rigger (jack) for full capacity load lifting through 360 degree slew. Independent as well as simultaneous control for outrigger adjustments shall be provided. Outriggers shall be of reputed make and be provided with fail safe mechanism to avoid failure of hydraulic jacks in case of breakage/failure of hydraulic lines. Rigger Feet (floats) shall be attached to the jacks. However, size of rigger feet shall be such that it does not foul /create problem to traffic during travelling.

4.15 **Tow hooks**

4.15.1 Front Tow Hook: The crane shall be provided with suitable capacity tow hook at front side for towing the crane by another means in case of crane drive failure.

4.15.2 Rear Tow Hook: The crane shall be provided with suitable capacity tow hook at rear side for towing the crane by another means in case of crane drive failure.

4.15.3 The tow hooks shall be of reputed make.

4.16 **Dimensions:** The following dimensions of the offered crane have to be indicated in the bid in a sketch.

Wheel base:

Wheel Track:

Over all length:

Over all width:

Over all height:

Tail swing radius of swing table:

Angle of approach:

Angle of departure:

4.17 **Colour of Crane:** All colour shades available shall be indicated in the bids. Suitable rust preventive coatings for undercarriage should be provided.

4.18 Load chart: Number of different duties if applicable, means of selection of different duties if applicable, means of control, type of actuator, operating speed, line pull, size and length of hoist rope, etc. as applicable are to be clearly indicated in the bid.

4.19 Right Hand Drive unit (Steering on Right Hand side inside the driver's cabin) is only acceptable.

Left Hand Drive unit is not acceptable.

Normal road driving should be through carrier cab not through super cab.

4.20 Miscellaneous:

- i. Audio alarm for reversing of the vehicle.
- ii. One complete set of spare wheel for each crane.
- iii. Suitable mounting arrangements for Spare Wheel, Rigger Feet (if applicable, during travelling), lockable Battery Box.
- iv. Locking provision for outrigger beams in fully retracted position.
- v. Provision for storing crowbars, slings, wooden blocks, etc.
- vi. Inter Axle Lock provision for rear tandem axles, as applicable.
- vii. Use of Rubber Hydraulic Hoses (i.e. flexible hoses) shall be as minimum as possible, instead metallic pipes are to be incorporated.
- viii. Suitable search lights / reflectors on boom for night operation.
- ix. Weight of the crane should be as minimum as possible.
- x. Anchoring of hoist rope at both ends shall preferably through Eye Loop.
- xi. Sight Glass/Level Indicator and Temperature Meter in hydraulic tank.
- xii. Steps/ladders and grab rails for crane floor.
- xiii. Lockable fuel tank of adequate capacity.

5.00 SAFETY DEVICES / REQUIREMENTS & SAFE LOAD INDICATOR (SLI)

- a. ELECTRONIC Safe Load Indicator (SLI). It shall continuously display all essential data, information and instructions enabling the crane to be operated within the designed parameters. It shall all the time provide information viz. boom length, boom angle, radius, rated load, load being lifted, etc. On reaching overload /unsafe condition, it shall cut-off the unsafe operations, as well as gives warnings through audible alarm. **Make and Model of the system (SLI) shall be clearly indicated in the bid.**
- b. All controls to operate in failsafe mode.
- c. Positive locking hydraulic cylinders, automatically applied failsafe hoist brake.
- d. Anti-Two –block system for hoist operations to arrest over-hoisting.
- e. Suitable over-lowering protection device for hoist operation.
- f. Hand signals and duty charts in operator's cabin.

- g. Pin type Slew Lock (Cab Lock) as per standard to arrest automatic slewing of the super structure during travelling.
- h. Level indicators.
- i. Means to secure the Hook to prevent it from swinging while travelling.
- j. Electric horn in operator's cabin.
- k. Engine kill switch / emergency shutdown device in operator's cabin.
- l. Lights & reflectors on boom, floodlights for night operations.
- m. Hazard light flashers at front and rear of the carrier.
- n. Audio alarm at reversing of the vehicle.
- o. Fire extinguisher (at suitable location).
- p. Spark Arrestor.
- q. Exhaust blanket.

6.0 OTHERS -

- a. The crane and its components shall be new and of recent manufacture and design.
- b. Brand New crane manufactured not prior to 6(six) months from the date of issuance of firm order.
- c. All calibrations in the crane shall be in metric system.
- d. All display & software used in the crane must be in English language only.
- e. Any item not included in the specifications but necessary for efficient & effective operation of the crane shall be indicated in the bid.
- f. All critical components of SLI in suitable enclosures/boxes to the extent possible.
- g. All electrical wiring of the SLI with suitable conduits.
- h. Colour coding / number coding of electrical wirings including that of SLI system for easy identification. Same has to be confirmed in the bid.
- i. Coding of hydraulic / pneumatic hoses & pipes for easy identification to the extent possible.
- j. Suitable support/clamping for hydraulic & pneumatic hoses/pipes, electrical wirings etc.

7.0 NAMEPLATE

A nameplate bearing following information (engraved/embossed) shall be provided at a suitable place on each crane.

1. Crane Serial No.
2. Make Model
3. Year of manufacture
4. Maximum Lifting Capacity (Safe Working Load).
5. Rating in %

8.0 SPARE PARTS

- A.** All spares in specified quantity as detailed in **Annexure- A1** enclosed herewith shall be supplied along with the units. Specific description, Part Nos., Make etc. & unit price of every spares shall clearly be indicated in the bid for bid evaluation.
- B.** A list of 2 years maintenance spares **with price** shall also be submitted for future reference, not for bid evaluation.

8.1 Commitment for spares

The bidder must submit a written undertaking along with the bid that they will be in a position to supply all necessary spares for a minimum period of 10 years from the date of successful commissioning of the cranes.

9.0 MANUALS & CATALOGUES

- A.** Following manuals & catalogues covering all details on the complete crane including its SLI system shall be supplied **against each crane**:
 - a.** 1(one) set of Spare Parts Catalogue covering all components of the crane.
 - b.** 1(one) set of Workshop & Service Manual.
 - c.** 1(one) set of Operator's Manual.
 - d.** 1(one) set of hydraulic schematics.
 - e.** 1(one) set of pneumatic schematics.
 - f.** 1(one) set of electrical & electronic schematics.
- B.** Following manuals & catalogues shall be supplied:
 - a.** 2(two) set of operational & maintenance manuals for engine fault diagnostic tool.
 - b.** 2(two) set of manuals for operation & maintenance of brake.

ALL MANUALS & CATALOGUES UNDER 'A' & 'B' ABOVE SHALL BE IN ENGLISH LANGUAGE AND BE SUPPLIED IN BOOK (PRINT) FORMAT. IN ADDITION, SAME SHALL ALSO BE SUPPLIED IN CD FORMAT.

10.0 TOOLS

A. STANDARD TOOL KIT

1(one) set of standard tool kit for maintenance and repair of the crane shall be supplied against each crane. List of tools that shall be supplied shall be submitted with the bid. The tool kits shall include amongst others 30 MT hydraulic jack, heavy duty grease gun, oil can, wheel wrench & handle, etc.

B. SPECIAL TOOL KIT

2(Two) set of special tool kit comprising all essential tools required for maintenance & trouble shooting of hydraulics & its control system.

11.0 INSPECTION, TESTING AND ACCEPTANCE

Notwithstanding any clause/s mentioned elsewhere in this tender document, supplier shall facilitate pre-despatch inspection/testing of the cranes in one lot for 2(two) OIL's engineers at their works in a period of about 10(ten) working days. However, to & fro passage & living expenses of the engineers will be born by OIL. The supplier shall provide testing facility with actual loads. Demonstration of tests shall be the responsibility of the supplier at their cost. Driver/crane operator required during inspection is to be arranged by the supplier. Pre-despatch inspection charges if any , to be quoted separately.

Supplier shall communicate the proposed inspection schedule to OIL, with confirmed date of inspection at least 8 (eight) weeks in advance.

The inspection, testing & acceptance process of each individual crane shall include the following minimum steps/tasks –

- a. Physical verification of all the items, components, specifications, etc. as
- b. per the purchase order.
- b. Identification of hydraulic layout as per hydraulic schematics.
- c. Operational & functional testing of different facilities/provisions.
- d. Load testing with different configurations w.r.t. various duties/load charts.
- e. Testing of effectiveness of LMI to work within SWL limits.
- f. Physical weighing for axle loading verification, as necessary.
- g. Inspection of the Parts Catalogue, Maintenance & Service Manuals, Schematics, etc. and other documents for their compliance to NIT requirements, as applicable.
- h. Verification of all test certificates for crane unit and other assemblies & sub-assemblies.
- i. Any other points as felt necessary / comes up during inspection.
- j. Supplier shall take note of any minor modification/s for operational requirement as well as in hose layout suggested by the inspection team & comply with the same with no extra cost.
- k. The minutes of the inspection process would be prepared at the end of the inspection & jointly signed by both the parties at site.
- l. Supplier shall confirm in writing compliance of all the points raised in the minutes of inspection as well as any other subsequent addition/ deletion following

deliberation with the inspection team after arrival at Duliajan.

- m. Supplier shall effect despatch of the units to OIL, Duliajan (INDIA) only on receipt of OIL's acceptance/despatch advice after completion Pre-despatch inspection and successful completion of all additional jobs /modification or such other jobs as pointed out during Pre-despatch inspection.

12.0 DELIVERY

Notwithstanding any clause/s on delivery mentioned elsewhere in this tender document, bidders are required to quote their best delivery for OIL's acceptance.

13.0 COMMISSIONING

The cranes shall be commissioned by the supplier at Duliajan (India). Supplier shall depute experienced personnel in operation and maintenance of cranes to OIL at Duliajan for commissioning of the cranes. Commissioning charges, if any, including to & fro and all applicable expenses shall be indicated in the bid.

Commissioning shall be completed within 2 (two) months from receipt of the cranes at site at Duliajan. The supplier will be held responsible for delay in completion of any such commissioning and in case of default; the Liquidated Damage clause shall be made applicable.

Commissioning spares, if any, shall be arranged by the supplier.

Commissioning personnel shall impart basic training on operation & maintenance of the cranes to OIL's personnel during commissioning on free of charge basis.

14.0 GUARANTEE / WARRANTY

Notwithstanding any Guarantee/Warranty clause/s mentioned elsewhere in this tender document, each individual crane shall be under onsite guarantee/warranty by the supplier for a minimum period of 1(One) year from the date of successful commissioning of each individual unit at site at Duliajan (India).

OIL reserves the right to inspect, test and if necessary, reject any part/parts after arrival of the units at site, only if the said rejection is attributed to be the responsibility of the supplier. It shall, in no way be limited or waived by the reason that the units have been inspected, tested and passed by OIL prior to despatch as per para. 11.0 above.

In order to keep the unit fully operational, any item/sub-item failed during the warranty period is to be arranged including their customs clearance, etc. and replaced/repared the same at site by the supplier or their authorized dealer/agent at their own cost within 1(one) month from the date of failure and warranty for such items shall be extended accordingly.

15.0 GENERAL INSTRUCTIONS & DOCUMENTATION:

- A. Make & Model of the cranes being offered are to be clearly indicated in the bid.**
- B. Bidder's response should clearly be defined; all specific details/specifications are to be provided clearly in the bid. Response like - 'As per tender Specifications/Technical Leaflet. 'Noted', 'Accepted' or in any similar fashion is not encouraged. Submission of technical leaflet/brochure alone is not acceptable.**
- C. Deviation/s from tender requirements shall be clearly indicated in the bid under separate heading.**
- D. Checklist –As per prescribed format provide vide Annexure- A2 of Part A enclosed herewith shall be submitted along with the bid.**
- E. Bidder should submit familiarisation CD/s on their offered cranes, along with bid.**
- F. Amongst others, the following documents/literatures must be submitted along with the bid for bid evaluation [refer Part B of Checklist under Annexure- A2] –**
- a. Original printed technical leaflet/brochure of the cranes offered containing detailed information of Load Charts, number of parts (falls), means of control, type of actuator, operating speed, line pull, size and length of hoist rope, dimensions, etc. amongst other details.
 - b. Technical leaflets/brochures on (i) Engine/s, Transmission/Gearbox, Suspensions, Axles, Steering, Brake, wheels etc, (ii) Hydraulic system including pump, motor, control and other valves etc, (iii) Derricking system, (iv) Telescopic system, (v) Hoisting system, (vi) Out rigger system, (vii) Safety system and (viii) other technical details.
 - c. Technical information/leaflet/brochure on the Safe Load Indicator system.
 - d. List of tools to be supplied under Standard Tool Kit.
 - e. List of items that shall be supplied under engine fault diagnostic tool.
 - f. 2(two) separate list of **tools to be supplied under** Special Tool Kit with price (for reference only; not for bid evaluation).
 - g. 2-years maintenance spares list with unit price (for reference only; not for bid evaluation).
 - h. Any other documents/literatures/drawings mentioned elsewhere in this tender
- G. Following shall be submitted along with each crane:**
- a. Certificate of origin.
 - b. Warranty / guarantee certificate.
 - c. Maximum Safe Working Load certificate.
 - d. Test certificates for Hoist rope, Hook & Pulleys, etc. as applicable.
 - e. Emission norms compliant certificate of engine(s).
 - f. Sale Letters in Form 21 & 22(A) [sample copy provided at para. 18.0], etc. as

required under Motor Vehicle Act, India for onward registration of the crane in the name of OIL.

- g. All manuals & catalogues in English language (books & CDs), schematics, tools, etc. as detailed elsewhere in this tender.
- h. Any other documents/literatures/drawings mentioned elsewhere in this tender.

16.0 TRAINING

Supplier shall provide training to OIL's engineer at their works as under –

A. Maintenance engineer's training

Supplier shall provide maintenance & troubleshooting training to 2(two) engineers of OIL covering following topics amongst others –

- a. Hydraulics – schematics, pumps, motors, valves, actuators, etc.
- b. Crane controls.
- c. Safety controls – SLI, motion cut, etc.
- d. Engine, transmission and transfer case.
- e. ABS, as applicable.
- f. Crane pneumatics.
- g. Crane electrical systems

B. Operation engineer's training

Supplier shall provide necessary training to 2(two) engineers of OIL on following topics amongst others -

- a. Operational aspects – controls, fault code & symptoms.
- b. Safety systems
- c. Components familiarization.
- d. Working principle

Modalities, duration, training charges, if any, shall clearly be indicated in the bid. Expenses towards to & fro passage, accommodation, etc. for OIL's engineers shall be borne by OIL. The training may be started maximum 3(three) months prior to due date of delivery.

In addition to above, commissioning personnel shall impart basic training on operation & maintenance of the cranes to OIL's personnel during commissioning free of charge.

17.0 IMPORTANT POINTS TO NOTE

- 17.1 a. It shall be bidder's endeavour to offer the following items as per makes indicated against each item** (other reputed makes are also however acceptable in case of operational or design requirements justify so) –

Engine -Caterpillar/Cummins/Ashok Leyland/Mercedes Benz

Hydraulic Pump/Motor-

Rexroth/Denison/Vickers/Sauer/Denfross/ Dynamatic

Technologies

Directional & other valves-

Rexroth/Denison/Vickers/Parker/Bucher

Transmission - ZF/Tadano

Transfer Case (if any) - Fabco/Dana Spicer/Tadano

Brake System - Wabco/Bendix

- b. All offered specifications, features, etc must clearly be indicated in the bid (in addition to the Checklist) maintaining the same sequence as in this NIT; submission of Technical Leaflet alone is not sufficient. Similarly, bidder's response to technical details, documents, etc. as stipulated should clearly be defined. Response like - 'As per NIT Specifications/ Technical Leaflet', 'Noted', 'Accepted' or in any similar fashion will not be accepted.
- c. The cranes will be used in the state of Assam in India and will follow Indian Motor Vehicle Rules as applicable in the state of Assam in India.
- d. Deviation/s from NIT requirements should be clearly indicated in the bid under separate heading.

17.2 **Payment Term :**

Payment shall be released as follows :

- i) 80 % value shall be released on supply against proof of despatch/shipment of the cranes .
- ii) Remaining 20 % along with installation & commissioning charges shall be paid after successful commissioning and acceptance by OIL at site.

OIL may consider making 100 % payment of the cranes towards supply against proof of dispatch/shipment provided bidders agree to pay interest @ 1% above prevailing Bank Rate (CC rate) of State Bank of India for 20 % of the value of cranes and also submit Bank Guarantee for the equivalent amount plus interest valid till successful commissioning of rig package at site. This is in addition to the 10 % of the order value towards Performance Security as per the tender requirement.

18.0 SAMPLE COPY OF FORM 21 & 22A [Reference para. 15.0-G.f. above]

A. *Following is a sample copy similar to FORM 21 of Indian Motor Vehicle Act only. The certificate to be issued by supplier shall contain following minimum information -*

SALE CERTIFICATE

Certified that (brand name of the vehicle)
has been delivered by us to on (date).

Name of the buyer.....

Address

The details of the vehicles are as under -:

1. Class of vehicle
2. Maker's name & address
3. Chassis No.
4. Engine No.
5. Horse power or cubic capacity
6. Fuel used
7. Number of cylinders
8. Month and year of manufacture
9. Seating capacity (including)
10. Maximum axle weight, number and description of tyres:
 - (a) Front axle
 - (b) Rear axle/axles
 - (c) Any other axle
11. Colour (s) of the body
12. Gross vehicle weight
13. Make & Model of crane
14. Maximum SWL

Date:

Signature of the manufacturer/ dealer

B. *Following is a sample copy similar to FORM 22(A) of Indian Motor Vehicle Act only. The certificate to be issued by supplier shall contain following minimum information.*

**CERTIFICATE OF COMPLIANCE WITH POLLUTION
STANDARDS / SAFETY STANDARDS OF COMPONENTS
AND ROAD WORTHINESS**

Certified that (brand name of the vehicle) bearing Chassis number and Engine number complies with the (name of Emission Standard – Euro III/BS III etc.) Emission standard as well as other Safety & Road Worthiness Standards as per provisions of the (name of Motor Vehicles Act of country of origin).

It is also certified that body of the above vehicle has been fabricated by us and the same complies with the provisions of the (name of Motor Vehicles Act of country of origin).

Signatures of Manufacturer

SPARE PARTS LIST

(Reference Clause No. 8.0 of Annexure-A of Technical Specification)

Spares in specified quantity as detailed below shall be supplied along with 7(seven) nos. of Minimum 40 MT cranes.

SPECIFIC DESCRIPTION, PART NOS., MAKE ETC. & UNIT PRICE OF EACH & EVERY SPARES SHALL CLEARLY BE INDICATED IN THE BID FOR BID EVALUATION.

a. ENGINE

1.	Fuel Filter Element	-	10 Nos.
2.	Water Separator Element	-	10 Nos.
3.	Engine Oil Filter Element	-	10 Sets
4.	Corrosion Filter Element	-	10 Nos.
5.	Air Filter Element	-	10 Sets
6.	Fan Belt	-	05 Sets
7.	Alternator Belt	-	05 Sets
8.	Compressor Belt	-	05 Sets
9.	Water Pump	-	02 Nos.
10.	Water Pump Repair Kit	-	05 Sets
11.	Water Hoses	-	05 Sets
12.	Engine Mounting	-	01 Set

In case of single Serpent Belt (Belt covering water pump, compressor and alternator) -7 sets

In case of separate engine for crane operation, relevant spares comprising above items shall be supplied for the same in addition to the carrier engine.

In case of smart engine suitable spares as applicable shall be supplied

b. TRANSFER CASE (if any) & POWER TAKE OFF (PTO)

1.	Oil Filter Element, if any	-	04 Sets
2.	Mounting	-	02 Sets
3.	PTO actuator Seal Kit	-	04 Nos.

c. FRONT AXLE -

1.	Wheel Stud with Nuts	-	20 Nos
		-	02 Sets
2.	Differential Filter Element (if any)		

d. REAR AXLE -

- | | | | |
|----|---|---|---------|
| 1. | Wheel Stud with Nuts | - | 20 Nos |
| 2. | Differential Filter Element
(if any) | - | 02 Sets |

e. DRIVELINE (Propeller Shaft) -

- | | | | |
|----|------------------------------|---|---------|
| 1. | UJ Cross (Spider & Bearings) | - | 01 Set* |
|----|------------------------------|---|---------|

(*set comprising of different UJ crosses for drivelines between transmission & transfer case, front differential & transfer case, and rear differential & transfer case as well as UJ crosses for the driveline between the two rear axles as applicable)

f. STEERING -

- | | | | |
|----|------------------------------|---|----------|
| 1. | Steering Oil Filter Element | - | 05 Sets |
| 2. | Front Axle Steering Cylinder | - | 03 Sets |
| 3. | Tie Rod End | - | 02 Sets* |

(* set comprising of all tie-rod ends for one complete crane unit)

g. BRAKE & PNEUMATICS -

- | | | | |
|----|----------------------------------|---|---------|
| 1. | Foot Brake Valve Repair Kit | - | 05 Sets |
| 2. | Front Brake Servo | - | 04 Nos. |
| 3. | Rear Brake Servo | - | 04 Nos. |
| 4. | Repair Kit for Front Brake Servo | - | 04 |
| 5. | Repair Kit for Rear Brake Servo | - | 08 |
| 6. | Air Dryer Filter Element | - | 08 Nos. |
| 7. | Relay Valve Repair Kit | - | 05 Set |

(* set comprising items for one brake servo)

h. ELECTRICAL -

- | | | | |
|----|-------------------|---|---------|
| 1. | Engine Starter | - | 01 No. |
| 2. | Alternator | - | 01 No. |
| 3. | Headlamp Assembly | - | 04 Nos. |

i. HYDRAULICS -

- | | | | |
|----|-------------------|---|---------|
| 1. | Hydraulic Pump | - | 01 Set* |
| 2. | Hydraulic Filters | - | 05 Sets |
| 3. | Strainer, if any | - | 02 Nos. |

(* 1 No. each of all types of pumps fitted in a crane)

j. MISCELLANEOUS

- | | | | |
|----|-----------------------------------|---|---------|
| 1. | Operator's Cabin Mounting | - | 02 Sets |
| 2. | Boom Length Cable (of SLI system) | - | 03 Nos. |

NOTE -

- i. In case of any difference in spares for left & right side components viz. left & right wheel studs, tie-rod ends, head lamps, etc., the specified quantities will be divided into 2(two) equal parts.*
- ii. Bidder shall also quote separately for any additional spares with similar details as felt necessary but not covered in this list for future reference/procurement - not for bid evaluation.*

CHECKLIST

[Reference Clause No. 15.0 (D) of Technical Specification]

TO BE SUBMITTED ALONGWITH THE BID**Part A TECHNICAL**

Sl. No.	PARAMETERS/REQUIREMENTS	BIDDER'S OFFER (To give details or Yes / No, as applicable)	REMARKS,IF ANY
1	Make & Model of crane		
2	Maximum Capacity at 3.0 mtr radius with basic boom & fully extended outriggers and 360° slew .		
3	Capacity at 5.0 m radius with 15.0 m boom & fully extended outriggers and 360° slew.		
4	Minimum (Basic) boom length		
5	Maximum boom length		
6	Maximum height of reach(without fly jib)		
7	Maximum operating radius		
8	Rating not above 85%		
9.	Drive Preferably 8X4		
10	Drive Right hand drive (steering on right side inside cabin)		
11.	Weight of the crane		
12	Overall Length		
13	Overall Width		
14	Overall Height		
15	Ground Clearance		
16	Minimum Turning Circle Radius		
17	Engine1 Superstructure/ Carrier	a Make	
		b Model	
		c Max. Output Power	
		d Max. Output Torque	
		e Naturally Aspirated / Turbo Charged	
		f Emission norms	
	Engine 2	a Make	

	(if any)	b Model		
		c Max. Output Power		
		d Max. Output Torque		
		e Naturally Aspirated / Turbo Charged		
		f Emission norms		
18.	Outriggers	a Make		
		b Model		
		c Number of outriggers		
		d Front jack provided		
		e Lateral span		
		f Longitudinal Span		
		g Number of extension positions – Full, intermediate, etc.		
		h Number of corresponding duties		
		i Independent as well as simultaneous operation		
		j Fail safe locking arrangement		
19.	Boom	a Make		
		b Model		
		c Full Power or not?		
		d Full hydraulic actuator or with rope/chain mechanism.		
		e Basic Length		
		f Maximum Length		
		g No. of sections		
		h Boom section type		
		i Boom extension time		
		j Boom retraction time		
		k Failsafe locking arrangement		
		l Maximum Boom Tip Height		
		m. Maximum boom elevation		
20.	Hoist	a Make of Hoist Motor		
		b Model of Hoist Motor		
		c Single hoist		
		d Power lowering & hoisting		

		e Automatically applied failsafe brake		
		f Standard number of Falls for maximum load lifting arrangement		
		g Hoist cable diameter		
		h Hoist cable length		
		i Hoist Speed		
21.	Slew	a 360 degree continuous full capacity slew in either direction		
		b Free Slew arrangement		
		c Pin type slew lock (cab lock)		
		d Slew braking type		
		e Slew Speed		
		f Make of Slew motor		
		g Model of slew motor		
22.	Derrick	a Max angle		
		b Min angle		
		c Derricking speed raising		
		d Derricking speed lowering		
		e No. of derrick cylinder(s)		
23.	Hook Block	a Sling catcher		
		b Means for securing hook block		
24.	Hydraulic system & controls	a Make of Hydraulic pump		
		b Model of Hydraulic pump		
		c Make of Hydraulic valves		
		d Open loop/Close loop		
		e Number of simultaneous operations		
		f Crane control – Pilot or Direct.		
25.	Counter Weight	a Weight		
		b Fixed or removable type.		
26.	Front Axles	a No. of Front Axle		
		b Make of Front Axle		
		c Model of Front Axle		
		d Capacity of Front Axle		
27.	Rear Axle	a No. of Rear Axle		
		b Make of Rear Axle		
		c Model of Rear Axle		
		d Capacity of Rear Axle		
28.	Suspension Front	Type		
		Make		
		Model		

		Capacity		
29	Suspension Rear	Type		
		Make		
		Model		
		Capacity		
30.	Transmission	a Make		
		b Model		
		c Automatic or manual		
		d No of forward gears		
		e Make of PTO		
		f Model of PTO		
31(i)	Brake system –Make			
31(ii)	Brake system – Multi-circuit or not.			
31(iii)	Brake system- Air dryer provided or not			
31(iv)	Brake system -Air compressor Make			
32.	Travel Speed			
33.	Wheel & Tyre Size			
34.	Spare Wheel			
35	Make of SLI system			
36	Model of SLI system			
37.	Over Hoisting protection			
38.	Over Lowering protection			
39.	Engine kill switch / emergency shutdown device in operator's cabin			
40.	Supply of spare parts (reference para. 08.0 of Annexure-A)			

Part B DOCUMENTATION (Reference Para. 15.0 (F) of Technical Specification)

Sl. No.	DESCRIPTIONS	DOCUMENT ENCLOSED - YES OR NO	REMARKS, IF ANY
1.	Technical leaflet of crane		
2.	Leaflet containing Load Charts for different duties, Working		
3.	Technical leaflets/brochures on Engine/s.		
4.	Technical leaflets/brochures on Transmission &		
5	Technical leaflets/brochures on Front and Rear Axle		
6.	Technical leaflets/brochures on Front and Rear		

7	Technical leaflets/brochures on Hydraulic Pump.		
8.	List of tools to be supplied under Standard Tool Kit.		
9.	List of tools to be supplied under Special Tool Kit		
10.	List of items that shall be supplied under engine fault diagnostic tool.		
11.	List of items that shall be supplied under ABS fault diagnostic tool.		
12.	2-years maintenance spares list with price (for future reference only; not for bid evaluation)		
13.	Any other documents, literatures, drawings, etc.		

ANNEXURE-BB

BID REJECTION CRITERIA (BRC) & BID EVALUATION CRITERIA (BEC)

(I) BID REJECTION CRITERIA (BRC)

Bids must conform to the specifications, requirements, terms & conditions given in the tender. While bids will be evaluated based on its conformity to these specifications, requirements, terms & condition as well as commercial aspects, the following requirements shall have to be particularly met by bid, without which same will be considered as non- responsive and summarily be rejected -

A. Technical

1. The offer shall be for Brand New Truck mounted diesel-hydraulic telescopic boom crane. Technical leaflet /Brochure must be enclosed in original.
2. Bidder must be a crane manufacturer (OEM) or their authorised dealer/distributor. Bid directly from agent (other than dealer or distributor) is not acceptable.
3. OEM (i.e. crane manufacturer as above) must be continuously in crane manufacturing business for last 10 (ten) years preceding Bid Closing Date. Documentary evidence (copies of order executed) to be enclosed.
4. The model of crane offered must be under production / available in the market for minimum last 1(one) year as on Bid Closing Date. In support , bidder must submit copies of executed orders as well as a list of parties with detail addresses to whom of particular model of cranes were supplied during last 5(five) years as on Bid Closing Date.
5. Bids with qualifying conditions like “the product is under development and would be supplied at the time of etc.” will be summarily rejected.
6. Bids must confirm supply of workshop manual/parts catalogue and all software in English language only.
7. Offer must be for full quantity of cranes i.e. 7(seven) Nos. minimum 40 MT capacity Brand New Truck mounted diesel-hydraulic telescopic boom cranes.
8. Capacities of the crane at different outreach (on fully extended outriggers and front jacks & 360° slew) -

Outreach	Capacity of the crane
At 3.0 mtrs operating radius (with minimum 10.0 mtrs basic boom length)	Minimum 40.0MT
At 5.0 mtrs operating radius (with minimum 15.0 mtrs boom length)	Minimum 20.0MT

9. Rating- -Not above 85%.
10. Boom length -Not less than 10.0 m (Basic boom).
Not less than 30.0 m (Full Extended boom).
11. Boom type & Telescopic Boom Operation - Hydraulically operated telescopic Full Power boom. Boom should be without any Fly Jib. Lattice Boom crane is not acceptable.
12. Slew - 360° continuous full capacity slew on 5 riggers jacks including the front jack.
13. SLI System - Electronic type.
14. Right Hand Drive unit (Steering on Right Hand side inside the carrier driver's cabin);
Left Hand Drive unit is not acceptable.
Road driving through carrier cab; not through super cab.
Full-width carrier cabin.
15. Offer should be complete with supply, commissioning and training.
16. Onsite warranty/guarantee by the bidder for complete 7(seven) units for a minimum period of 1(one) year from the date of successful commissioning of each unit at site at Duliajan shall be provided.

(B) COMMERCIAL :

- 1.0 Bids are invited under Single Stage Two Bid System. Bidders shall quote accordingly under Single Stage Two Bid System. Please note that no price details should be furnished in the Technical (i.e. Unpriced) bid. The "Unpriced Bid" shall contain all techno-commercial details except the prices which shall be kept blank. The "Priced Bid" must contain the price schedule and the bidder's commercial terms

and conditions. Bidder not complying with above submission procedure will be rejected.

- 2.0 Bid security of US \$ 46,800.00 or Rs.21,00,000.00 shall be furnished as a part of the TECHNICAL BID. Any bid not accompanied by a proper bid security in ORIGINAL will be rejected without any further consideration. For exemption for submission of Bid Security, please refer Clause No. 9.8 (Section A) of General Terms and Conditions for Global Tender. The Bid Security shall be valid till 22/04/2015.
- 3.0 Bidders must confirm that Goods, materials or plant(s) to be supplied shall be new of recent make and of the best quality and workmanship and shall be guaranteed for a period of twelve months from the date of commissioning of the complete package at site against any defects arising from faulty materials, workmanship or design. Defective goods/materials or parts rejected by OIL shall be replaced immediately by the supplier at the supplier's expenses at no extra cost to OIL.
- 4.0 Successful bidder will be required to furnish a Performance Bank Guarantee @10% of the order value. The Performance Bank Guarantee must be valid for one year from the date of successful commissioning of the complete package at site. Bidder must confirm the same in their Technical Bid. Offers not complying with this clause will be rejected.
- 5.0 The prices offered will have to be firm through delivery and not subject to variation on any account. A bid submitted with an adjustable price will be treated as non-responsive and rejected.
- 6.0 Validity of the bid shall be minimum 180 days. Bids with lesser validity will be rejected.
- 7.0 Bids received after the bid closing date and time will be rejected. Similarly, modifications to bids received after the bid closing date & time will not be considered.

- 8.0 Bidders shall quote directly and not through Agents in India. Offers made by Indian Agents on behalf of their foreign principals will be rejected. Similarly offers from unsolicited bidders will be rejected.
- 9.0 Bids containing incorrect statement will be rejected.
- 10.0 Offers received without Integrity Pact duly signed by the authorised signatory of the bidder will be rejected.
- 11.0 No offers should be sent by Telex, Cable, E-mail or Fax. Such offers will not be accepted.
- 12.0 Bidders are required to submit the summary of the prices in their commercial bids as per bid format (Summary), given below :

(i) Commercial Bid Format (Summary) for Foreign Bidders :

- (A) Total material cost of Cranes (other than Sl. No. B below)**
(B) Cost of Spares (refer Annexure-A1 of Specification)
(C) Grand Total Material Cost (A + B)
(D) Packing & FOB Charges
(E) Total FOB Port of Shipment value, (C+ D) above
(F) Ocean Freight Charges upto Kolkata, India
(G) Insurance Charges
(H) Total CIF Kolkata value, (E + F + G)
(I) Pre-shipment Inspection charges, if any .
(J) Training charges , if any.
(K) Installation & Commissioning charges
(L) Total Value, (H + I + J + K) above
(M) Total value in words :
(N) Gross Weight :
(O) Gross Volume :

(iii) Commercial Bid Format (SUMMARY) for Indigenous Bidders :

- (A) Total material cost of Cranes (other than Sl. No. B below)**
(B) Cost of Spares (refer Annexure-A1 of Specification)
(C) Grand Total Material Cost (A + B)
(D) Packing and Forwarding Charges
(E) Total Ex-works value, (C + D) above
(F) Excise Duty including Cess, (Please indicate applicable rate of Duty & Cess)
(G) Sales Tax, (Please indicate applicable rate of Tax)
(H) Total FOR Despatching station price, (E + F + G) above

- (I) Road Transportation charges to Duliajan**
- (J) Insurance Charges**
- (K) Total FOR Duliajan value, (H + I + J) above**
- (L) Pre-shipment Inspection charges, if any .**
- (M) Training Charges , if any.**
- (N) Installation & Commissioning charges**
- (O) Total Value, (K + L + M + N) above**
- (P) Total value in words :**
- (Q) Gross Weight :**
- (R) Gross Volume :**

NOTES :

1. The pump covered under this tender will be used by OIL in the PEL/ML areas issued/renewed after 01/04/99, applicable Customs Duty for import of goods shall be ZERO. Indigenous bidders shall be eligible for Deemed Export and should quote Deemed Export prices. Excise Duty under Deemed Export exempted.
2. Installation/Commissioning charges must be quoted separately on lumpsum basis which shall be considered for evaluation of the offers. These charges should include amongst others to and fro fares, boarding/lodging, local transport at Duliajan and other expenses of supplier's commissioning personnel during their stay at Duliajan, Assam(India). All Income, Service, Corporate Taxes etc. towards the services provided under installation / commissioning shall be borne by the supplier and will be deducted at source at the time of releasing the payment. Bidder should also confirm about providing all these services in the Technical Bid.
3. Successful bidder shall offer the cranes for Pre-despatch/shipment Inspection by OIL's executives. Pre-despatch/Shipments Inspection charges, if any, must be quoted separately on lumpsum basis which shall be considered for evaluation of the offers. The to and fro fares, boarding/lodging and other enroute expenses of OIL's personnel shall be borne by OIL.

Bidders must categorically indicate the Installation / Commissioning and Pre-despatch/Shipment Inspection charges in their offers and must confirm about providing the same in their Technical bids.

- 13.0 Liquidated damage : Supplier's competent personnel must arrive at Duliajan within 15 days from the date of intimation by OIL and complete the installation and commissioning job thereafter within the time frame mentioned in the tender. OIL , on the other hand , shall inform the party immediately on receipt of the goods at Duliajan. Liquidated damage will be levied for any failure on the part of the supplier in completing the installation and commissioning of the units @0.5% per full week or part thereof to a maximum of 10% of the total installation/commissioning charges.

(II) BID EVALUATION CRITERIA :

The bids conforming to the specifications, terms and conditions stipulated in the enquiry and considered to be responsive after subjecting to the Bid Rejection Criteria will be considered for further evaluation as per the Bid Evaluation Criteria given below:

A. COMMERCIAL :

- 1.0 The evaluation of bids will be done as per the Commercial Bid Format (SUMMARY) detailed vide Para 12.0 of BRC.
- 2.0 If there is any discrepancy between the unit price and the total price, the unit price will prevail and the total price shall be corrected. Similarly, if there is any discrepancy between words and figure, the amounts in words shall prevail and will be adopted for evaluation.
- 3.0 For conversion of foreign currency into Indian currency, B.C. selling (Market) rate declared by State Bank of India, one day prior to the date of price bid opening shall be considered. However, if the time lag between the opening of the bids and final decision exceed 3(three) months, then B.C. Selling(Market) rate of exchange declared by SBI on the date prior to the date of final decision shall be adopted for conversion and evaluation.
- 4.0 Offers not complying with the payment terms indicated in the tender shall be loaded with one percent above the prevailing Bank rate (CC rate) of State Bank of India for duration of commissioning time indicated in the tender plus transit time (3 months) for evaluation purpose.

5.0 To ascertain the inter-se-ranking, the comparison of the responsive bids will be made as under, subject to corrections / adjustments given herein.

6.1 **When only foreign bidders are involved :**

Comparison of bids will be done on the basis of "TOTAL VALUE" which is estimated as under :

- (A) Total material cost of Cranes (other than Sl. No. B below)
- (B) Cost of Spares (refer Annexure-A1 of Specification)
- (C) Grand Total Material Cost (A + B)
- (D) Packing & FOB Charges
- (E) Total FOB Port of Shipment value, (C+ D) above
- (F) Ocean Freight Charges upto Kolkata, India
- (G) Insurance Charges @ 1% of Total FOB Value vide (E) above
- (H) Banking Charges @ 0.5% of Total FOB Value vide (E) above in case of payment through Letter of Credit (If confirmed L/C at buyer's account is required, 1.5% of Total FOB Value will be loaded)
- (I) Total CIF Kolkata Value, (E + F + G + H) above
- (J) Pre-shipment Inspection charges, if any .
- (K) Training charges , if any.
- (L) Installation & Commissioning charges
- (M) Total Value, (I + J+ K + L) above
- (N) Total value in words :

NOTE : Banking charge in the country of the foreign bidder shall be borne by the bidder.

6.2 **When only domestic bidders are involved or when more than one domestic bidders are in contention in case of mixed response :**

Comparison of bids will be done on the basis of "TOTAL VALUE" which is estimated as under :

- (A) Total material cost of Cranes (other than Sl. No. B below)
- (B) Cost of Spares (refer Annexure-A1 of Specification)
- (C) Grand Total Material Cost (A + B)
- (D) Packing and Forwarding Charges

- (E) Total Ex-works value, (C + D) above
- (F) Excise Duty including Cess, (Please indicate applicable rate of Duty & Cess)
- (G) Sales Tax, (Please indicate applicable rate of Tax)
- (H) Total FOR Despatching station price, (E + F + G) above
- (I) Road Transportation charges to Duliajan
- (J) Insurance Charges @0.5% of Total FOR Despatching Station Value (H) above
- (K) Total FOR Duliajan value, (H + I + J) above
- (L) Pre-shipment Inspection charges, if any.
- (M) Training Charges , if any.
- (N) Installation & Commissioning charges
- (O) Total Value, (K + L + M + N) above
- (P) Total value in words :

NOTE: Excise Duty in case of the indigenous bidder is EXEMPTED.

6.3 **When both foreign and domestic bidders are involved :**

The Total Value of domestic bidder (inclusive of customs duty on imported raw material and components etc, and applicable terminal excise duty on the finished products and Sales Tax) excluding inland transportation to destination and Insurance charges worked out as per Para 6.2 above and Total Value of the foreign bidder worked out as per Para 6.1 above excluding inland transportation to destination will be compared. No price preference will be allowed to indigenous bidders except that for capital goods, the domestic manufacturers would be accorded a price preference to offset CST to the extent of 4 % or actuals, whichever is less subject to 30 % local content norms as stipulated for World Bank Funded project to the satisfaction of OIL. When more than one domestic bidders fall within price preference range, inter-se-ranking will be done on Total Value basis.

Note: If the Government of India revises these evaluation criteria the same as applicable on the bid closing date will be adopted for evaluation of the offers.

- 7.0 Other terms and conditions of the enquiry shall be as per General Terms and Conditions for Global Tender. However, if any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (BEC / BRC) mentioned here contradict the Clauses

in the General Terms & Conditions of Global Tender of the tender and/or elsewhere, those mentioned in this BEC / BRC shall prevail.

COMMERCIAL CHECK LIST

THE CHECK LIST MUST BE COMPLETED AND RETURNED WITH YOUR OFFER. PLEASE ENSURE THAT ALL THESE POINTS ARE COVERED IN YOUR OFFER. THESE WILL ENSURE THAT YOUR OFFER IS PROPERLY EVALUATED. PLEASE MARK 'YES' OR 'NO' OR SPECIFY AGAINST THE FOLLOWING QUESTIONS, IN THE RIGHT HAND COLUMN.

1	Whether bid submitted under Two Bid System ?	
2	Whether ORIGINAL Bid Bond (not copy of Bid Bond) submitted as per Revised format attached ? If YES, provide details	
	(a) Amount :	
	(b) Name of issuing Bank :	
	(c) Validity of Bid Bond :	
	(d) Whether Bid Bond is valid till	
3	Whether offered firm prices ?	
4	Whether quoted offer validity of 180days from the date of closing of tenders ?	
5	Whether quoted a firm delivery period? Indicate delivery period :	
6	Whether quoted as per tender (without any deviations) ?	
7	Whether quoted any deviation ?	
8	Whether deviation separately highlighted ?	
9	Whether agreed to the Warranty clause ?	

10	Whether Price Bid submitted as per Commercial Bid Format (refer Para 12.0 of BRC)	
11	Whether the maintenance Spares for 2 years of operations quoted?	
12	Whether quoted all the items of tender ?	
13	Whether indicated the country of origin for the items quoted?	
14	Whether technical literature / catalogue enclosed?	
15	Whether confirmed to carry out installation & Commissioning at Duliajan (Assam)?	
16	Whether installation & Commissioning charges applicable?	
17	If installation & Commissioning charges applicable, whether separately quoted on lump sum basis?	
18	Whether to & fro air fares, boarding/lodging of the commissioning personnel for installation & commissioning at Duliajan, Assam (India) included in the quoted charges ?	
19	Whether confirmed that all Service, Income, Corporate tax etc. applicable under installation & Commissioning are included in the prices quoted?	
20	Whether confirmed acceptance of tender Payment Terms .	
21	For Foreign Bidders - Whether offered FOB / FCA port of despatch including sea / air worthy packing & forwarding?	
22	For Foreign Bidders – Whether port of shipment indicated. To specify:	
23	For Indian bidders – Whether indicated the place from where the goods will be dispatched. To specify :	
24	For Indian bidders – Whether road transportation charges up to Duliajan quoted ?	
25	For Indian Bidders only - Whether offered Ex-works price including packing/forwarding charges ?	

26	Whether Indian Agent applicable ?	
27	If YES, whether following details of Indian Agent provided ?	
	(a) Name & address of the agent in India – To indicate	
	(b) Amount of agency commission – To indicate	
	(c) Whether agency commission included in quoted material value?	
28	Whether weight & volume of items offered indicated ?	
29	Whether Pre-despatch/shipment inspection & testing of the cranes quoted?	
30	Whether charges towards Pre-despatch/shipment inspection & testing of the cranes applicable?	
31	(i) If Pre-despatch/shipment inspection & testing charges applicable, whether quoted separately? (ii) Whether training cost quoted separately	
32	Whether confirmed to submit PBG as asked for in tender ?	
33	Whether agreed to submit PBG within 30 days of placement of order ?	
34	For Indian Bidders only - Whether indicated import content in the offer ?	
35	For Indian Bidders only - Whether deemed export quoted?	
36	For Indian Bidders only – Whether all applicable Taxes & Duties have been quoted ?	
37	(i) Whether all BRC/BEC clauses accepted ? (ii) Whether all documents required as per BEC/BRC submitted ?	
38	Whether Integrity pact exactly as per the format given with digital signature uploaded ?	

OFFER REF	
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NAME
OF THE
BIDDER

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