

**Specification for Reconditioning/reconstruction of 25 Ton Capacity Cranex make Goliath crane no. SP/CRJ/9563**

**1. DETAILS OF THE CRANE:**

Machine/Plant no. : SP/CRJ/9563  
Location : Open Yard, Main Store  
Machine Model : 25 Ton Goliath Crane  
Supplier : M/s- Cranex Limited  
Year of installation : 2008

**2. DESCRIPTION OF THE CRANE:**

25 T capacity Cranex make Goliath crane is installed in Open yard of main store for unloading and loading of various materials like Steel Plates, Power Transformer Tanks etc.

**Major Specifications of the crane:**

- Lifting Capacity: 25 T
- Span: 15 M
- Lift: 12 M
- Type & Class: Gantry, Class M5, Outdoor
- Bay Length: 84 M
- Power Supply: 415 V, 3 Ph., 50 Hz, A.C.
- Hoisting Speed : 7 M/Min
- Cross Travel Speed: 20 M/Min
- Long Travel Speed: 60 M/Min
- Runway, rail size: 90 LB/YD. DSL: Shrouded Type

**3. SCOPE OF WORK:**

- Complete dismantling of the crane.
- Repair, Fabrication & fitting of entire crane includes fix legs, hinge legs, connecting boxes, bridge platforms, railings, I-beam, cable trolley, maintenance ladders, trolley structure, CT assembly, operator cabin.
- Primer & Painting of entire crane.
- Overhauling of all existing components/equipment of the crane.
- New wiring of entire crane.
- Replacement (installation & commissioning) of cable reeling drum with EPR/TRS flexible cable.
- Replacement of Wire Rope.
- Installation of Control Panel (includes switchgear & drive)

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(Dy. Mgr. / WEX)

- Repairing/Overhauling of hoist motor, creep motor & CT motor and varnishing.
- Replacement of cables & electrical accessories.
- Electrification of complete crane.
- Replacement of brakes of all motors.
- Replacement of all limit switches.
- Reconditioning and Repairing of all gearboxes.
- Repairing & reconditioning of crane hook.
- Erection of the crane.
- Realignment of structural and mechanical items.
- Commissioning and load testing as per IS 3177.

#### **4. SCOPE OF SUPPLY:**

- Electrical drive panel including drive system and all switchgears.
- All limit switches (Rotary & Lever type) for LT, CT & Hoist motion.
- Electro hydraulic Thruster Brakes for LT, CT, Main hoist and Creep motion and electromagnetic thruster brakes for LT.
- Master Controller for CT, LT and Hoist motion.
- LT motor- 2 nos.
- Geared shaft for CT motor.
- Wheel Shaft of CT motion.
- Wheel Bearing block of CT motion.
- Wire rope for hoist motion.
- Electrical copper control & power cables.
- Supply of 4 core-25 sq. mm., EPR/TRS Flexible cable ( Qty: 150 Mtrs) with Motorized cable reeling drum.
- Electrical festoon trolley.
- Cable tray & electrical hardware glands, lugs, ferrules, cable tie, tie raps etc.
- Push button based radio remote control system for remote operation.
- Spares required for overhauling of motors.
- Spares required for reconditioning & repairing of gearboxes.

#### **5. General Conditions:**

- Vendor/bidder may visit our works at BHEL-Jhansi to assess the quantum of job involved and to discuss/clarify technical aspects, if any.
- Vendor/bidder to start dismantling of the crane within one week of placement of order. Further activities towards supply & work can be planned & taken up subsequently.
- Competent person duly authorized U.P. chief factory inspector for inspection & testing of such cranes should visit & certify the total job with issuance of statutory test certificate/s.
- Fabrication, Erection & Commissioning shall be done by supplier at BHEL works.
- Offer must be submitted clearly mentioning scope of work & scope of supply separately.
- All supplied items should be in conformance & to be fitted in crane.
- Supply of MS Plates & Structural Steels is in BHEL's Scope.

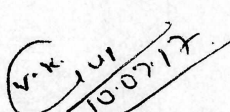
- Material handling support from BHEL store to work site shall be provided by BHEL.
- Supplier to bring all the tools & tackles required for dismantling, erection/ installation & commissioning.
- Supplier to bring suitable crane/s and machinery to carry out fabrication and erection of the crane.
- Guarantee required minimum 12 months from the date of commissioning.
- Time required for Supply, erection and commissioning work to be mentioned by vendor/bidder.
- All Switchgears & electrical components should be of standard make like Siemens, BCH, Schneider and L&T only.

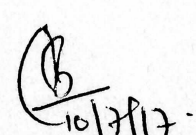
## 6. Qualification criteria

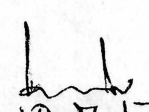
Those vendors/bidders, who have manufactured, supplied and commissioned at least ONE E.O.T, Goliath/ Gantry Crane of 25 Ton capacity or more in the past ten years and such crane is presently working satisfactorily for more than one year after commissioning (on the original date of opening of Tender), can participate. Performance certificate from the customer regarding satisfactory performance of Crane should be submitted along with technical offer.

OR

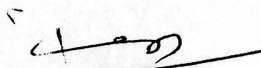
Those vendors/bidders, who have done reconditioning/rebuilding (Including structural and electrical works) of minimum one E.O.T., Goliath/Gantry crane of 25 Ton capacity or more in the past ten years and such crane is presently working satisfactorily for more than one year after commissioning (on the original date of opening of Tender), can participate.

  
Dy. Manager (WEX / P)

  
Manager (WEX / P)

  
Sr. Mgr (MC-II)

*On leave*  
DGM (MC-II & Services)

  
Sr. Manager (CRX)