

**New Transport Arrangement for Transporting Rotors to  
Balancing Tunnel**


**BROAD TECHNICAL SPECIFICATIONS**

**1. Purpose :-**


A complete self-propelled & independent transportation trolley arrangement with set of Bearing Pedestals with their Sub-base for mounting of rotors, is required to facilitate to & fro transportation of bladed rotors to existing over speed balancing tunnel (OSBT) for high speed balancing of rotor (Ref. Arrangement as per Annexure-I)

**2. Arrangement details :-**

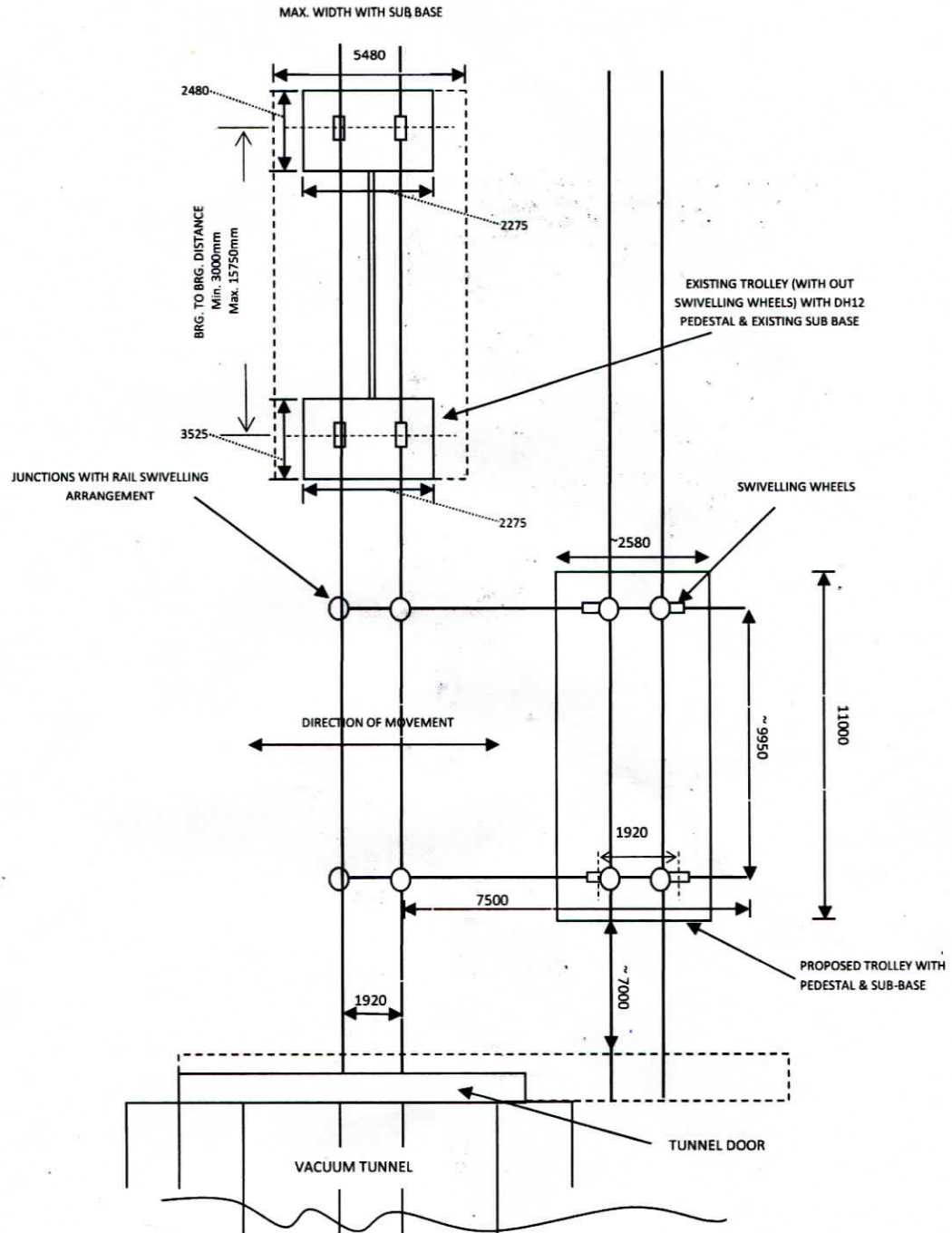
- 2.1 The new transport trolley for feeding Steam Turbine rotors to OSBT for balancing will travel on existing main rail track & capable of being stationed on rail track at 90 deg. to the main track to carryout parallel preparatory activity for getting next rotor ready for balancing.
- 2.2 Equipment supplied must be self-complete & must be suitable for transporting rotors to existing mounting bed in OSBT.
- 2.3 Installation & commissioning of the arrangement will have to be demonstrated & proved at our works under load. BHEL will provide other infrastructural support.
- 2.4 Supplier to furnish complete technical details of the equipment offered including layout & area requirement to enable evaluation for suitability of equipment for our application.
- 2.5 Civil works & laying of additional rail track at 90 deg. will be in BHEL scope. Supplier to indicate requirement of foundation for laying the rail track. However, supplier may separately indicate if the job can be done on turnkey basis.
- 2.6 Recommended essential spares item-wise (Elect. Mechanical/Hydraulic) must be indicated separately.
- 2.7 **Scope of supply to include :-**
  - a. 1 set (2 Nos.) of bearing pedestals same as existing (Ref. drg. & photograph enclosed at Annexure-II) suitable for specified operation at 4500 rpm.
  - b. 1 Set (2 Nos.) of sub-bases suitable for bearing pedestal at 'a'.

  
24/10/14  
( S. SARKAR )

- c. 1 no of electrical driven trolley including it driving unit (Load cap. of trolley 120T).
  - d. Hydraulic lifting unit, built in the trolley at 'c', for lifting & placing of two bearing pedestals along into sub-base & rotor on the base of OSBT.
  - e. Set of rail and mechanism for shifting from 90 deg. track to existing track.
  - f. E&C by vendor at Hardwar, training of personnel, supply of O&M manuals.
  - g. Spares for 2 year trouble free service.
  - h. First set of filling oil or any other item if required, will be in vendors' scope of supply.
  - i. 3 sets of O&M manuals furnishing complete details to be furnished along with supply.
- 2.8 Warranty for 2 years from date of commissioning is to be offered.
- 2.9 The new arrangement is proposed to be installed at floor level.
- 2.10 System offered must be compatible with our existing system & arrangement of balancing tunnel. Vendor to confirm.
- 2.11 Equipment will be inspected by BHEL for compliance of requirement at vendor's works before dispatch.
3. Supplier may visit our works for complete understanding of proposed trolley arrangement & space available for installing the new transportation arrangement.
4. Vendor to recommend any additional item to ensure self-complete, independent transportation arrangement for augmentation of capacity for transporting of rotors to our existing balancing tunnel.

  
22/10/14  
(S. SARWAN)

**SCHEMATIC DRAWING FOR THE PROPOSED ARRANGEMENT FOR  
TRANSPORTATION OF ROTORS TO OSBT**



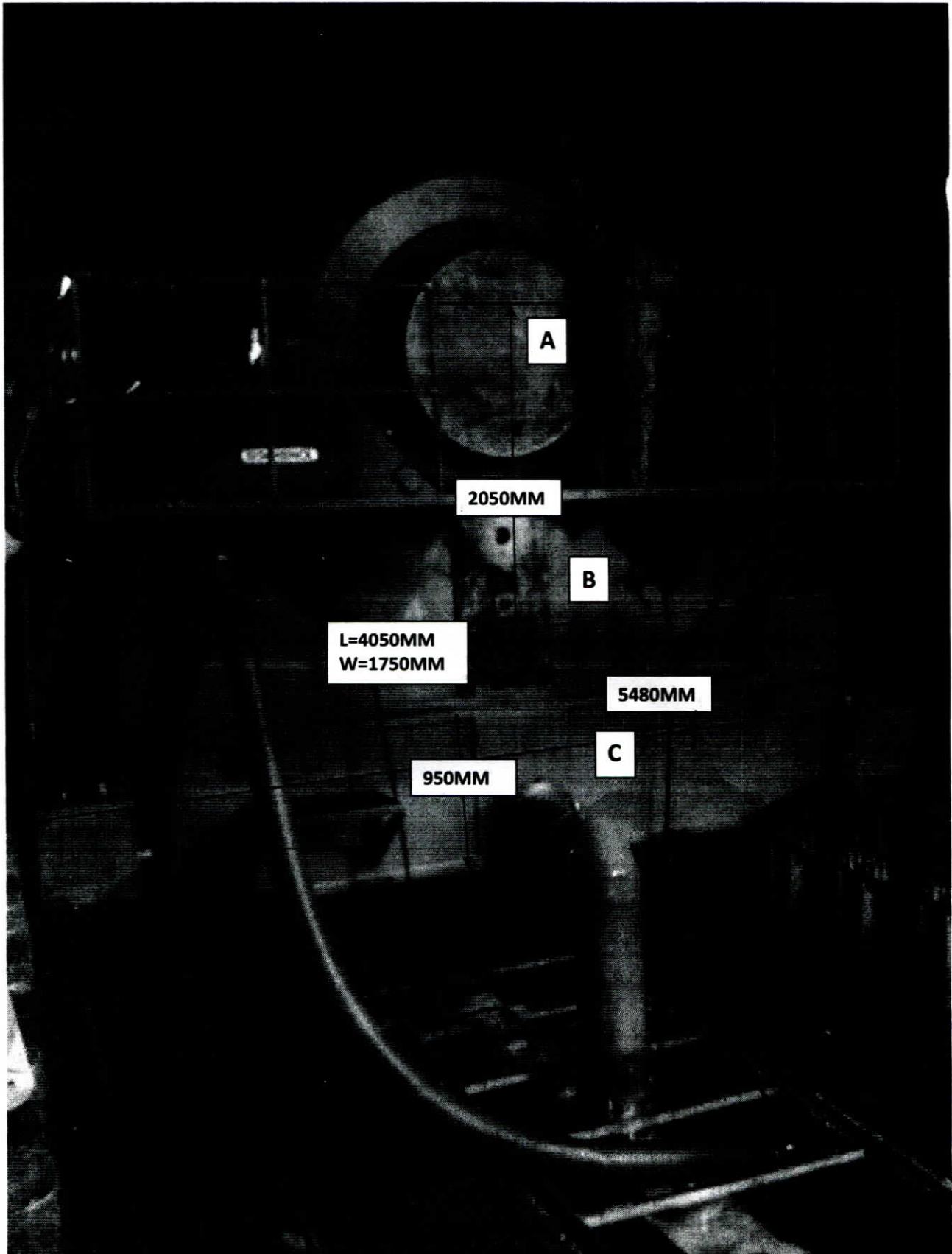
LENGTH OF OSBT

19000MM

(ALL DIMENSIONS ARE IN MM. SKETCH NOT TO SCALE)

*(S. SARHAN)*





A-ROTOR

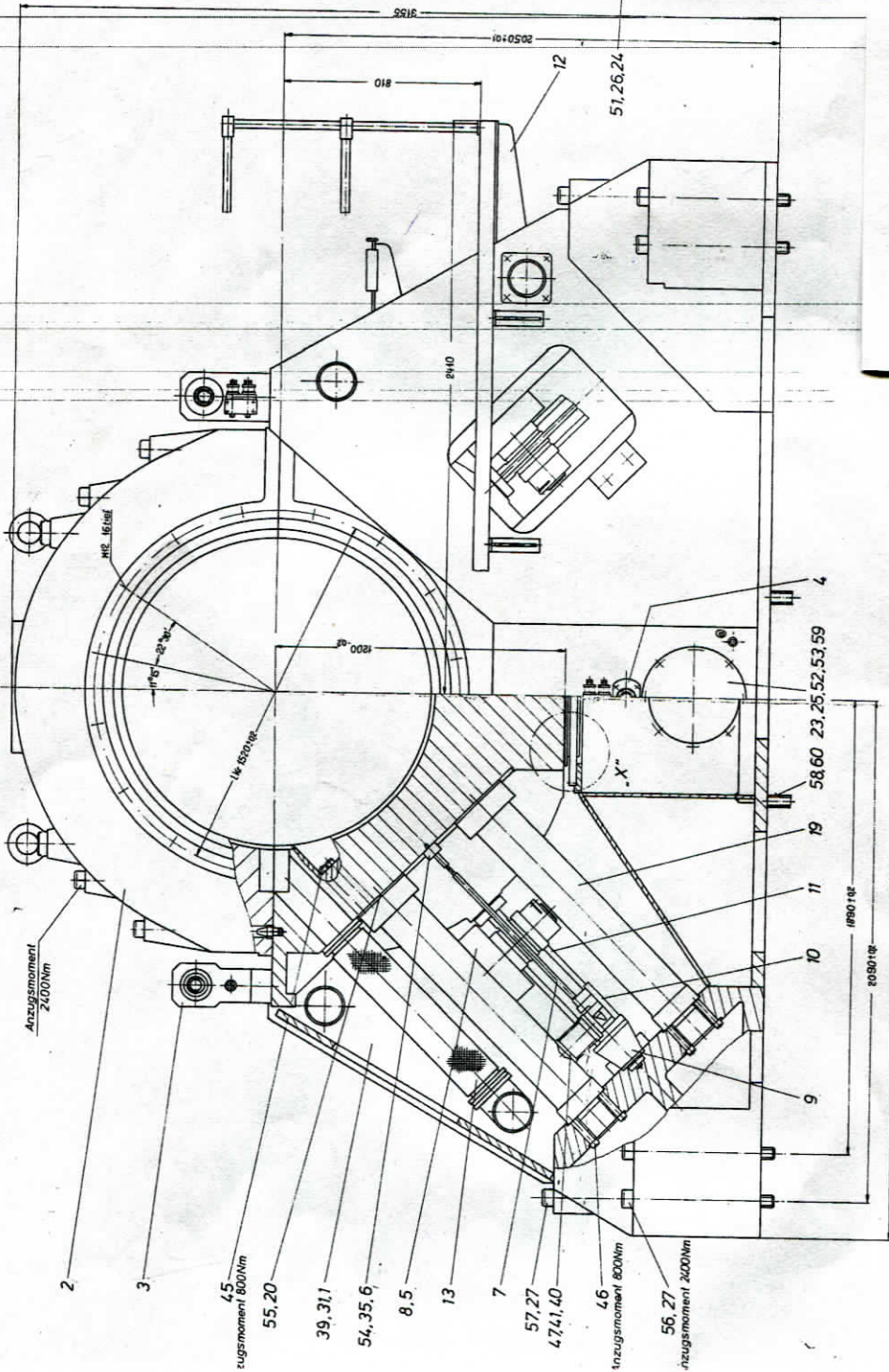
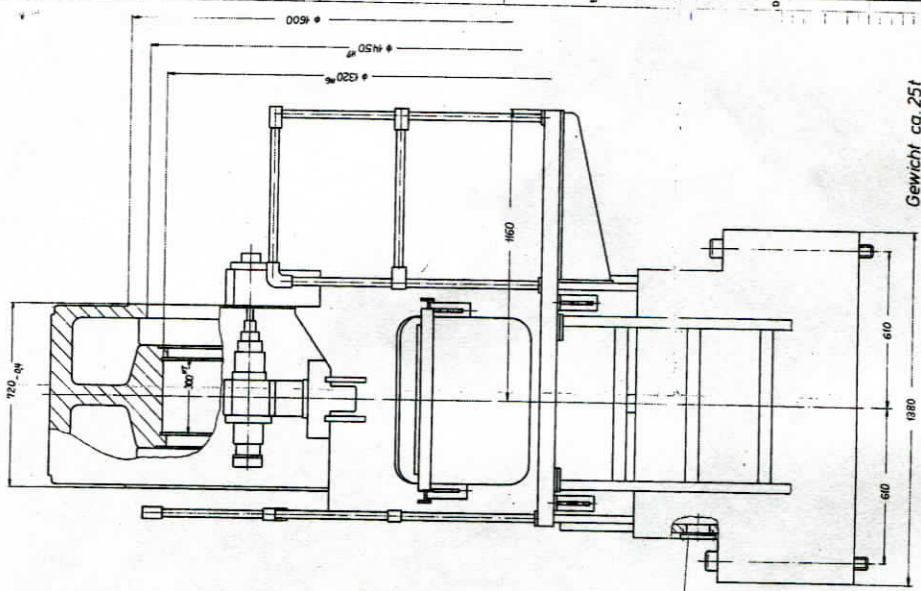
B-PEDESTAL DH12

C-SUB BASE

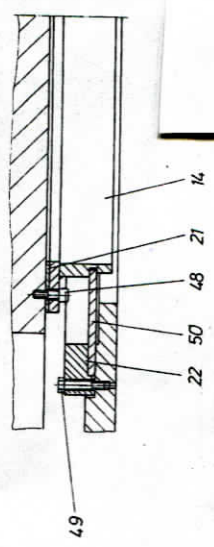
  
S. SARKAR

Indent no. 20142625

Annex me-2



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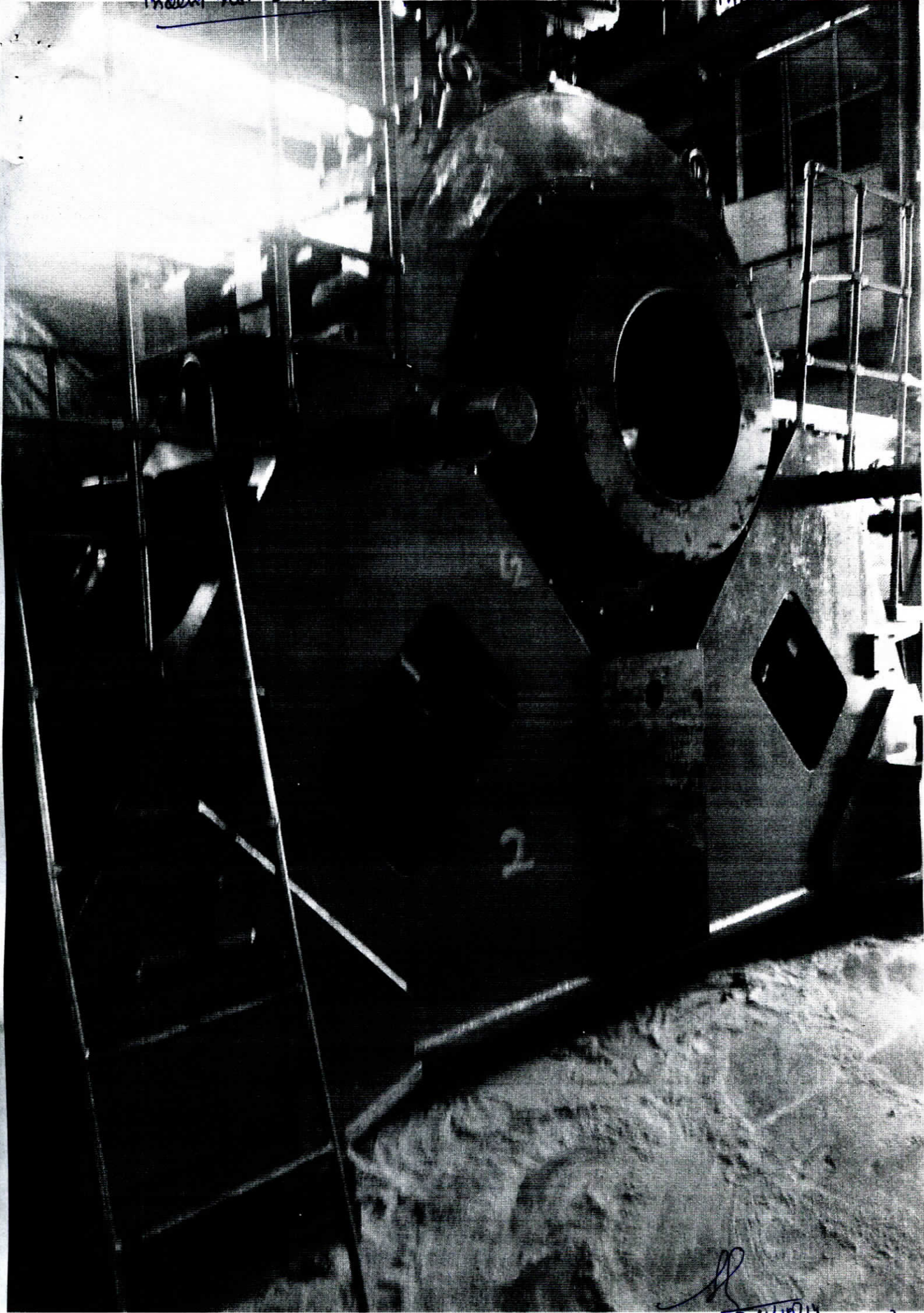


*(Signature)*  
S. JAROKAN



Indent no. 2042623

Annexure-2



*[Signature]*  
24/10/14  
(S. JARVAN)

**Pre – Qualification Requirement**

Only suppliers who have executed at least 1 project containing supply of Rail Transfer Trolley are eligible for the tender.