

# **2X660MW MAITREE STPP**

## **TECHNICAL SPECIFICATION**

### **FOR**

### **TRANSPORTATION OF THERMAL INSULATION - BONDED MINERAL (ROCK) WOOL MATTRESSES PE-TS-421-169-M040**



**BHARAT HEAVY ELECTRICALS LIMITED, POWER SECTOR  
PROJECT ENGINEERING MANAGEMENT  
NOIDA, INDIA**

### 1.0.0 GENERAL

- 1.1.0 This specification covers the transportation of material from M/s Dhanbad Rockwool Insulation Pvt. Ltd. to Maitree project site including Export custom clearance at Indian Port/border & Import Custom clearance at Bangladesh port/border with all the handling, loading & unloading activities involved, collection of BHEL invoices for Port clearance in transporter scope.

### 2.0.0 MATERIAL DESCRIPTION

- 2.1.0 Material to be transported is Thermal Insulation Rockwool Mattress (refer BOQ description and quantity)
- 2.2.0 Approximate dimension of each bag: 1520mm X 1150mm X 240mm
- 2.3.0 Total no. of bags (approximate): 15800
- 2.4.0 Approximate weight of each bag: 48Kg (separate weight for each type of bag is mentioned in attached BOQ)
- 2.5.0 Total Volume: 6096 Cubic Meter (approx.)
- 2.6.0 Total Weight: 732MT (approx.)
- 2.7.0 Thermal Insulation Rockwool Mattress is wrapped in 0.2 mm thick Polythene all around and further packed in HDPE Bags and sealed / properly stitched to prevent moisture absorption during transit and storage.

### 3.0.0 PICKUP & DELIVERY LOCATION

- 3.1.0 **Material Pick up location:** DHANBAD ROCKWOOL INSULATION PVT LTD, VILLAGE: BHELATAND, PO: JANGALPUR, PS: GOVINDPUR, NH2, DHANBAD, JHARKHAND-828109
- 3.2.0 **Material Delivery location:** 2X660 MW MAITREE STPP PROJECT SITE, PO – KALEKKHARBER, UNION – RAJNAGAR, UPAJILA - RAMPAL, DISTRICT – BAGERHAT-9343, BANGLADESH.

### 4.0.0 SCOPE OF WORK


- 4.1.0 Transportation of material from M/s Dhanbad Rockwool Insulation Pvt. Ltd. to Maitree project site including Export custom clearance at Indian Port/border & Import Custom clearance at Bangladesh port/border with all the handling, loading & unloading activities involved, collection of BHEL invoices for Port clearance in transporter scope. Documentation (BHEL part) required for custom clearance activities will be provided by BHEL and transporter will collect them from BHEL-IO Dhaka office, Bangladesh for further activities. Any incidental charges like detention, port handling charges etc shall be in transporter's account and no charges shall be reimbursed at actual.
- 4.2.0 Loading at pick up point and unloading at delivery point shall not be in transporter's scope.

**5.0.0 MODE OF TRANSPORT**

- 5.1.0 Mode of transport is not restricted and can be through any mode (Rail, Road, Sea or Multimodal). However, Mode of transportation is to be mentioned clearly in the offer.
- 5.2.0 In case of transportation via road, Type of truck (Size of truck, open/ closed/ containerised, Single/multi axle) to be clearly mentioned along with the offer. In case of open truck, arrangement of water protection is to be mentioned clearly.
- 5.3.0 In case of transportation via sea route, material should be stacked in container. Details of container has to be clearly mentioned in the offer.
- 5.4.0 In case of transportation via rail route, material should be stacked in rake. Details of rake has to be clearly mentioned in the offer.
- 5.5.0 Photographs of the material are also attached herewith for your reference. It may also be noted that material will get damaged if come in contact with water so there should be proper arrangement for protection of material from water due to rain during transportation.

**6.0.0 MATERIAL HANDLING**

- 6.1.0 Careful handling is required to avoid breakage and distortion or tearing off of the bags or cover. Slings and ropes should not be used without adequate packing to prevent damage to insulating materials.
- 6.2.0 Special care is to be taken to prevent water ingress as the material will get damaged if it comes in direct contact with water.
- 6.3.0 Each bag has to be transported as it is and cannot be further divided.
- 6.4.0 In case of trans-shipments, proper care to be taken to avoid any damage to the material. Ensure that material is not coming in touch with any protruding object, hard body and uneven surface in the vehicle etc. which may lead to breakage of the material. Avoid over hanging/Over loading of the material particularly in the vehicle.
- 6.5.0 Do not tie the material excessively with the rope after loading is completed as it may lead to the breakage/distortion of material.
- 6.6.0 Un-load the packets from vehicle by holding the packets, packets should not be dragged.
- 6.7.0 Do not create an impact (striking one bundle with other bundle or with any hard surface) or do not throw the packets while handling/ unloading the material.
- 6.8.0 Bags should be stacked in horizontal position only.

	<b>TITLE:</b> <b>TRANSPORTATION OF THERMAL INSULATION R- MATTRESSES 2X660MW MAITREE BANGLADESH STPP</b> <b>DATA SHEET- A</b>	SPECIFICATION NO. PE-TS-421-169-M040
		REV. NO.: 00

### B.O.M. (VOLUME) of material to be lifted

S. No.	MATERIAL	SPECIFICATION	DENSITY	Thickness	APPROX. VOLUME TO BE LIFTED** (CUBIC M.)	Approx no. of bags
1	Bonded mineral (Rock) wool mattresses with one side GS wire netting of 13 mm x 0.56 mm size stitched with 0.4 mm GS wire	PE-TS-421-169-M040	120 Kg/cub.m	25 mm 40 mm 50 mm 60 mm 75 mm	76.875 462 725.25 684 3654	221 1323 2076 1631 9291
2	Bonded mineral (Rock) wool mattresses with one side SS wire netting of 13 mm x 0.56 mm size stitched with 0.4 mm SS wire	PE-TS-421-169-M040	120 Kg/cub.m	75 mm	493.875	1257

\*\* This material will be available in packed HDPE bags at M/s Dhanbad works address as mentioned in technical specification.

**Packing Photography**

Supplier Name: M/s DHANBAD ROCKWOOL INSULATION PRIVATE LIMITED

Purchase Unit: BHEL PEM, NOIDA

**Photography**

	
<b>Description: Marking Insp</b>	<b>Description: Paper Tag marking between net &amp; Plastic Cover</b>
	
<b>Description: Silca Gel</b>	<b>Description: Plastic Cover with 4 Nos Silica Gel</b>
	
<b>Description: Packing Opening</b>	<b>Description: Lot Inspection</b>
	
<b>Description: Items are stacked</b>	<b>Description: Silica Gel</b>