

	PURCHASE SPECIFICATION SLOTTED ANGLE STORAGE RACKS	Spec. No	EP:PVM:EQS:14
		Rev. No	00
		Page 1 of 5	

**TECHNICAL SPECIFICATION
FOR
SLOTTED ANGLE STORAGE RACKS**

**ELECTROPORCELAINS DIVISION,
BHARAT HEAVY ELECTRICALS LTD.,
IISc POST, BANGALORE, INDIA 560012**

REVISION (00)	DETAILS:	PREPARED	DATE 30.11.2015
		APPROVED	

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 CBU - EPD	PURCHASE SPECIFICATION SLOTTED ANGLE STORAGE RACKS	Spec. No	EP:PVM:EQS:14
		Rev. No	00
		Page 2 of 5	

Indent Specifications For Storage Racks	
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SCOPE	Vendors Confirmation
<p>The scope shall include design, manufacture, supply, installation and 1 year of warranty for Storage Racks as per BHEL Specification/Drawing No :SK-MN-121/15 provided with this specification</p>	
<p>ITEM DESCRIPTION: The item specified is an open type self-standing storage rack specifically meant for storage of PV Module materials. The vendor shall design the storage rack based on the BHEL drawing no. SK-MN-121/15 using their standard components e.g. vertical members, horizontal members, tray etc. as far as possible. Design should be such that the structure shall stand firm without any imbalance, bending, toppling or wobbling under loaded or unloaded condition and during the process of loading and unloading of items. Adequate safety margins for the load shall be provided in the design for long life.</p> <p>The construction shall be of clip-on or welded type or a judicious combination of both. Bolt and nut can be used only for locking purposes but not for fastening the main load bearing structure. As far as possible standard proven structural members like channels and angles with slots for flexibility, developed by the vendor for such application, shall be used for the construction. Prime quality steel (cold rolled/hot rolled sheets) shall be used for fabricating the components of storage rack. All fasteners supplied shall be electro-galvanized.</p> <p>All the components of the storage rack shall be pre-treated using suitable metal surface treatment process corrosion resistance and powder coated. The verticals shall be of Oxford Blue colour and the horizontals shall be of Deep Orange colour.</p>	

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		Rev. No	00
		Page 3 of 5	

<p>QUANTITY : 1 SET (one)</p> <p>TECHNICAL DATA:</p> <p>Pallet Size: 1200mm (L) x 1200mm (D) Main Module: 6 nos Add On Module: 45 nos Overall size of each Rack: 2500mm (l/l) L x 3400mm H x 1200mm D No. of levels: Ground + 2 levels No. of Pallets in Ground: 2 Pallets No. of Pallets in First level: 2 Pallets Total no of pallets: 204 Pallets Load per level: 2000Kg Total load per rack: 4000kg Loading / Unloading : Manual</p> <p>Type : Modular (Bolt less) – Clip on type Description :</p> <ol style="list-style-type: none"> 1. Uprights of 14g MS Sheet 2. Horizontal Load beams of 14g Rolled profile 3. Load beams with 3mm Clip on clamp at either ends 4. Deck panel of 16g profile bend to take specified load 5. Bottom plate of 6mm thick with grouting provision 6. Locking pin for horizontal load bars 7. Completely powder coated with columns - Blue colour, Horizontal – Orange colour and Deck panel - Galvanised <p>Note:</p> <ol style="list-style-type: none"> (1) Vendor shall confirm adequacy of the items offered for the above item. (2) Any deviation from the above spec. shall be clearly brought out by the Vendor in their offer. (3) Vendor's point wise compliance shall be filled up in the space provided for all the clauses. 	
<p>INSTALLATION</p> <p>The vendor shall furnish detailed drawing of the system for approval before taking up manufacturing. The vendor shall install the storage systems at the designated locations in the premises of BHEL-EPD, Bangalore. The vendor shall supply the system in ready to assemble condition and use his trained manpower to assemble and install the system.</p>	

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		Rev. No	00
		Page 4 of 5	

WARRANTY FOR 1 YEAR Warranty for a period of one (1) year from the date of installation for storage rack shall be included in the scope of supply.	
PRE-DISPATCH INSPECTION Vendor shall inform in advance for carrying out Pre-Dispatch Inspection by BHEL personnel at vendor's works. Vendor shall provide call letter for Pre-Dispatch Inspection.	
PRE-QUALIFICATION CRITERIA CHECK-LIST <ol style="list-style-type: none"> 1. BIDDER SHOULD BE ORIGINAL EQUIPMENT MANUFACTURER (OEM) OF THE QUOTED ITEM. BIDDER TO SUBMIT COMPANY CREDENTIALS TO PROVE AS OEM. REGISTRATION CERTIFICATE AS A MANUFACTURER OR ANY OTHER DOCUMENT TO ESTABLISH THE BIDDER AS MANUFACTURER 2. BIDDER SHOULD HAVE MANUFACTURED, SUPPLIED AND SUCCESSFULLY COMMISSIONED MINIMUM OF 3 NUMBERS STORAGE RACKS IN THE LAST 2 YEARS. BIDDER TO SUBMIT COPY OF PURCHASE ORDERS. 	

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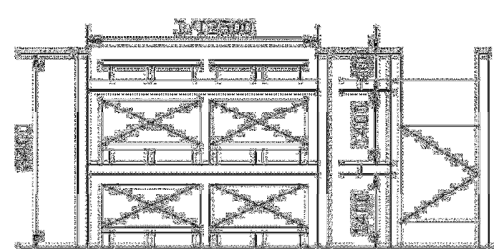
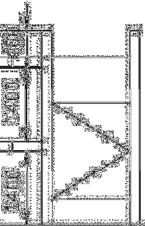
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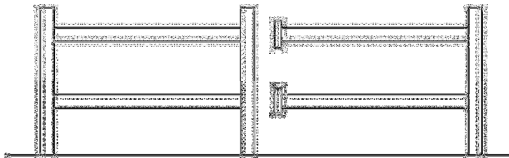

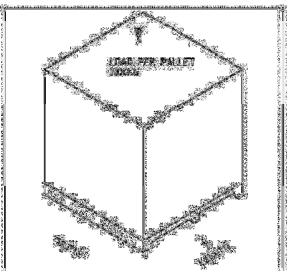
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Spec. No	EP:PVM:EQS:14
Rev. No	00
Page 5 of 5	

FIRST ANGLE PROJECTION ALL DIMENSIONS ARE IN mm

FRONT ELEVATION SIDE ELEVATION

FRONT MODULE SIDE VIEW MODULE

TECHNICAL SPECIFICATION OF HEAVY DUTY/STORAGE RACKS WITH DETAILS

TYPE OF RACK: HEAVY DUTY/STORAGE RACK FOR STORAGE

RAIL SIZE: 1" SQUARE TUBULAR STEEL

POST SIZE: 1" SQUARE TUBULAR STEEL

PALET SIZE: 1000 X 1000 mm

LOADING: 1000 kg

LOAD TYPE: 1000 kg

MANUFACTURER: BHEL

LOAD TYPE: 1000 kg

	SERIAL NO.	QUANTITY	MATERIAL	REVISION	DATE	BY
BILL OF MATERIAL						
	BHARAT HEAVY ELECTRICALS LTD. ELECTROPORCELAINS DIVISION BANGALORE - 560 012.			NAME	SIGN	DATE
REF		SCALE	WEIGHT (kg)	SET FOR ASSEMBLY	TECH. NO.	NO. OF ITEMS
CODE			Drawing			
TITLE STORAGE RACK PV MODULE				DRAWING NO. EP-PV-10074		REV.
				SHEET No.	NO. OF SHEETS 5/10-10074	
				REVISION		