

PRE-QUALIFICATION REQUIREMENTS

Following are the pre-qualification requirements (PQR) for the vendors who are not registered with BHEL-Hardiwar for supply of Lead Diaphragm. Offer of registered vendors (i.e. registered for supply of Lead Diaphragm) shall be processed according to their registration status with BHEL at the time of opening of price-bid.

Sl No	Pre-Qualification Requirements	Vendors Confirmation Indicating page no. where documents are placed
1.	Vendor should have supplied at least 5 (five) Lead Diaphragm for 250MW / 270MW / 500MW/ 600MW or above rating steam Turbine of Thermal Power plants.	
2.	Vendor have to submit credentials (copy of purchase orders, years of supply, completion certificate and list of customers for Lead Diaphragm) with technical offer in support of above at sl. no. 01. Vendor not submitting credentials will be rejected on the basis of technical unsuitability.	
3	Vendor to confirm supply shall be as per BHEL enquiry drawing and specification. Deviation from enquiry drawing and specification is not acceptable. Compliance for acceptance of each clause of BHEL specifications and drawings has to be submitted with offer.	
4.	Testing and certification as per ordering specifications. Please confirm.	
5.	Vendors already registered with BHEL Haridwar for indent items are exempted from the condition sl no. 1&2 above.	

Notes:

1. BHEL would consider the offers and open the price bids of only those bidders, who fulfill the Pre-Qualification requirements (PQRs).



PRODUCT STANDARD
STEAM TURBINE ENGINEERING

HW 7240193
ST 11001
PAGE 1 OF 3
Based on BHEL's
experience.

LEAD DIAPHRAGM

- 1.0 SCOPE: Lead Diaphragms are used in the atmospheric relief valves of Steam Turbine.
- 2.0 DESIGNATION:
 - 2.1 In Description : Lead diaphragm of diameter ϕ 753 mm & thickness 8 mm shall be designated by: Pb DIAPHRAGM ϕ 753X0.8.
 - 2.2 In Drawing : ST 11001.001
Column.
- 3.0 MATERIAL: Lead sheet (Pb 99.99) as per HW 12599.
- 4.0 QUALITY REQUIREMENTS: As per HW 12599. Each diaphragm shall be subjected to 100% Dye penetration test to ensure freedom from crack before despatch. The supplier shall supply DP test certificate alongwith other test certificates required as per HW 12599.
- 5.0 PACKING & DESPATCH: The diaphragms shall be cut from the sheet as per sketch No.1 page No.2 or as per relevant manufacturing drg. of 200/500 MW Steam Turbine. The diaphragms should not be folded, rolled and should be handled with care so as to avoid cracks especially after the DP test before despatch.

One set consisting of ^{two} four diaphragms should be wrapped in a thick PVC sheet and packed as per sketch No.2 on page No.3. These small packets may be suitably packed to avoid damage during handling and transportation in bigger package, if required.

SIGN & DATE

SUPERSEDES INVENTORY No.

COPYRIGHT AND CONFIDENTIAL
The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED. It must not be used directly or indirectly in any way detrimental to the interest of the company.

PL 97-84

SIGN & DATE	AGREED.				NAME	SIGN. & DATE	
		TSK	N. CHANDAN		DRAWN	O.P. DHIMAN	<i>O.P. Dhiman</i> 9-7-83
INVENTORY NO.	Revision : 02 REAFFIRMED Date : 30.3.05	QA	N.K. HANDELMAN		WORKED	B.P. GUPTA	<i>B.P. Gupta</i> 11.7.83
		DEPT	NAME	SIGN. & DATE	CHECKED	B.P. GUPTA	
					SUPERVISED	S.S.V.	<i>S.S.V.</i>
		Distribution	Qty.	Approved	ST		
				<i>K.P. Malhotra</i>	8:20		
				ENGG. DEV. MANAGER			
				Prepared	Issued	Date	
					STE ()	12-08-1983	
					HARDWAR		



PRODUCT STANDARD
STEAM TURBINE ENGINEERING

HW 7240193
ST 11001

PAGE 02 OF 03

SIGN & DATE

SUPPLIERS INVENTORY NO.

COPYRIGHT AND CONFIDENTIAL

The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED. It must not be used directly or indirectly in any way detrimental to the interest of the company.

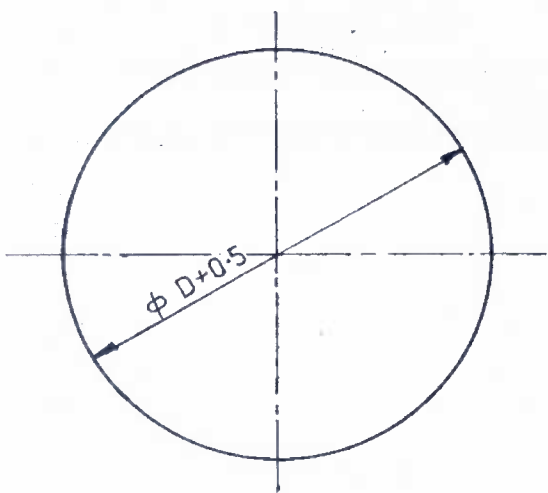
SIGN & DATE

INVENTORY NO.

P-549d

6.0 DETAILS OF DIAPHRAGM.

SL.NO.	MW STEAM TURBINE	DIAMETER ϕ D mm	THICKNESS t mm	WT./PC. KG	SIZE CODE NO.
001	200/210	753	0.8	3.5	001
002	500	1003	1.2	10.6	002
003					



SKETCH NO. 1

REV. 02

FORM

HW 7240193
ST 11001

PAGE 03 OF 03



PRODUCT STANDARD
STEAM TURBINE ENGINEERING

SIGN & DATE

SUPERSEDES
INVENTORY No.

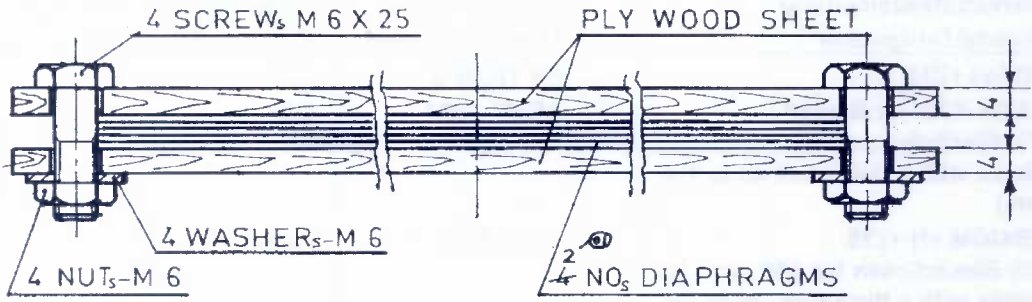
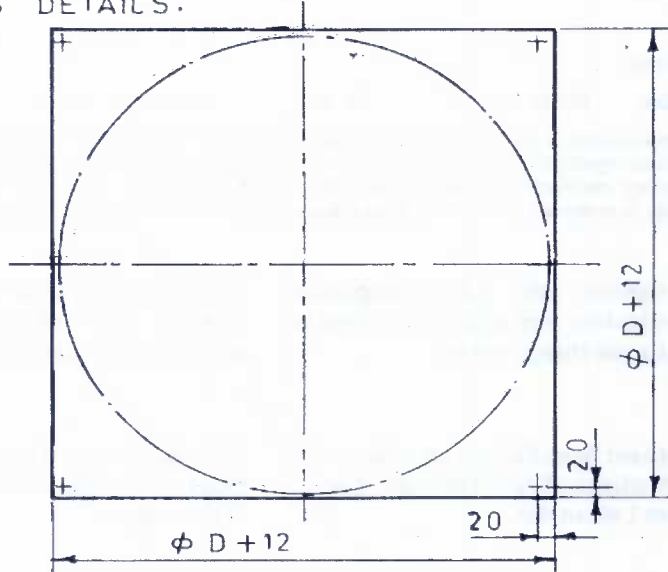
COPYRIGHT AND CONFIDENTIAL

The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED, it must not be used directly or indirectly in any way detrimental to the interest of the company.

SIGN & DATE

INVENTORY NO.

7. PACKING DETAILS.



WRAPPED IN THICK PVC SHEET

$\phi D =$ DIAMETER OF DIAPHRAGM

SKETCH NO. 2

- 8. This standard has been prepared based on Pb 99.94.
- 9. Cross referred standards:
HW 12599.

	NAME	SIGN. & DATE
DRAWN	O. P. DHIMAN	<i>O.P. Dhiman</i> 15-6-83
WORKED	B. P. GUPTA	} <i>B.P. Gupta</i>
CHECKED	B. P. GUPTA	
SUPERVISED	S. S. V.	<i>S.S.V.</i>

REV.02