



TD-106-1 Rev No. 5	Form No.		PRODUCT STANDARD PULVERISERS HYDERABAD		Product STD NO.	BA 50110
					Rev No	03
					Page	1 of 4
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.		<u>FOUR / TWO BODIED PISTON PUMP</u>				
		1. DESCRIPTION : Positive displacement piston pump.				
		2. APPLICATION : The piston pump is used for hydro dynamically lifting the trunnions and lubricating the Knee Joints of Tube mill. These mills are used in thermal power stations to pulverize the coal.				
		3. LUBRICANT USED : OIL ISO VG 460 viscosity at 40 degrees C is 460 cst. Viscosity t 25 degrees is 1500 cst. Input Pressure 1.5 Bar.				
		4. OPERATING TEMPERATURE: : Normal operating temperature is 40 degree C. Maxi operating temperature is 60 degrees C. Pump to start at 25 degrees C				
		5. MATERIALS & PROCESS : Pump design, selection of Materials & process shall be as per the manufacturer Standard practice.				
		6. SEALING : The shaft sealing shall ensure no leakage.				
		7. BEARINGS : Anti friction bearings to be used..				
		8. PUMP SHAFT KEY DIMENSION : As per GA Drawing				
		9. ENVIROMNMENT : Pump is open to dirty and humid atmosphere				
		10. TESTS : The pump shall be tested for the flow and pressure at vendors works and test report should accompany the pumps In case of constraints in using specified Oil, VG 100 (with 100cst at 40 deg C) Oil may used for testing				
Revisions: Refer to record of revisions:		Prepared: G.KISTAIAH	Approved: J.G.K	Date: 05.02.03		

TD-106-1 Rev No. 5 Form No.		PRODUCT STANDARD PULVERISERS HYDERABAD	Product STD no.	BA 50110
			Rev No.	03
			Page	2 of 4

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.

11. TEST CERTIFICATES : 1. The following test certificates should be furnished in triplicate along with the consignment.


- a) Pump Speed vsFlow
- b) Compliance certificate

12. INFORMATION TO BE SUBMITTED BY THE SUPPLIER ALONG WITH THE OFFER:

- a) Pump dimensional drawing with flange, inlet port, outlet port and shaft with key details.
- b) Pump catalogues .
- c) Spares part list for 3 years of operation

13. TECHNICAL DATA OTHER THAN SPECIFIED ABOVE:

Sl No	PARAMETER	2 BODIED RADIAL PISTON PUMP	4 BODIED RADIAL PISTON PUMP
01	Capacity	4.7 LPM/Body at 965 rpm, 30 bar pressure and 40 degrees C temp.(2x4.7 LPM)	9.5 LPM/Body at 965 rpm, 40 bar pressure and 40 degrees C ttemp.(4 x 9.5 LPM)
02	Operating pressure	12 to 40 bar in normal. 80 bar occasionally.	17 to 60 bar in normal. 100 bar occasionally.
03	Mounting	Horizontal	Horizontal
04	Oil temperature	40 degree C to 65 degree C	40 degree C to 65 degree C
05	Inlet port size	45 ID HOSE	45 ID HOSE
06	Out let port size	1/2" NPT (F)	1/2" NPT (F)
07	No. of inlets	One	One
08	No. of outlets	Two	Four
09	Relief valve Pr.	120 bar	120 bar
10	Design pressure	250 bar	250 bar
11	Test pressure	375 bar	375 bar
12	Rotation when viewed from drive end	Clockwise	Clockwise
13	Vent line	M6	M6
14	Mating motor capacity	3.7 KW	11 KW
15	Nature of Duty	Continuous	Continuous
16	Type of Pump	Radial piston type	Radial piston type

TD-106-1 Rev No. 5 Form No.		PRODUCT STANDARD PULVERISERS HYDERABAD	Product STD no.	BA 50110
			Rev No.	03
			Page	3 of 4

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.

14. **GUARANTEE:** Pump shall be guaranteed for it's performance and should be in operation without any problem.12 months from the date of commissioning 18 months from the date of despatch which ever is earlier./as per purchase order

15 **ERECTION AND O&M MANUALS:** 2 Copies - each of O&M + One Soft copy of manuals to be supplied before despatch.

16 **PAINTING:** Apply French blue – QD paint on outer surfaces.

17. **PACKING:** Pump shall be packed in a wooden case with proper support to protect machined surfaces of flanges.

18 **VARIENT TABLE:**

VARIEN T NO.	ITEM DESCRIPTION	MATL. CODE
01.	4 - BODIED PISTON PUMP 9.5 LPM/Body	BA9750110013
02.	2 - BODIED PISTON PUMP 4.7 LPM /Body	BA9750110021

** ** ** *

