BHARAT HEAVY ELECTRICALS LIMITED

RAMACHANDRAPURAM: HYDERABAD: 502032

PULVERISERS ENGINEERING

DEVELOPMENT CONSULTANTS PRIVATE LIMITED

Reviewed only for general conformance with contract drawings and specifications.
Contractor to be responsible for any errors and for fulfillment of detailed requirements of contract documents.

ACTION : 6	DATE : 10.09.15
DISTRIBUTED BY : TKD/AS/AD	

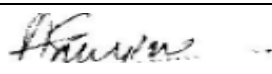
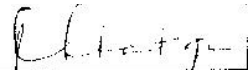
1	Distributed	4	Approved except as noted. Resubmission required.
2	Approved	5	Disapproved. See accompanying letter.
3	Approved except as noted. Forward final drawing.	6 ✓	For information and record only.

SEE COVERING LETTER

Letter Ref. No. Date :

HP 1103 BOWL MILLS (DYNAMIC CLASSIFIER) – 8 NOS. / BOILER

PAINTING SCHEDULE FOR BOWL MILLS

PREPARED BY	RAJESH RANJAN		CUSTOMER: **GUJARAT STATE ELECTRICITY CORPORATION LTD.** GSECL
REVIEWED BY	AMAN SURIN		CONSULTANT: **DEVELOPMENT CONSULTANTS PRIVATE LIMITED**
APPROVED BY	SATISH GHATGE		PROJECT : **1x800 MW SUPER CRITICAL THERMAL POWER PROJECT, UNIT No #8, WANAKBORI , GUJARAT**
DOCUMENT NO: **BA-PS-WANAKBORI-00** REV. NO: 02 DATED: 14.07..2015			Record of Revisions: Rev 00: Initial Submission Rev 01: Reply sheet enclosed for customer comments Ref.: K9213R/M/1116, Date: 24.06.2015 Rev 02: Reply sheet enclosed for customer comments Ref.: K9213R/M/1181 Dated. 13.07.2015

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SECTION 1: SCOPE

This painting specification schedule covers all parts and assemblies of HP 1103 Pulverisers (Dynamic Classifier) manufactured by BHEL and its sub-vendors including Sister Units for Wanakbori SCTPP, Unit#8 1x800 MW contract of M/s GSECL.

SECTION 2: ALL INTERIOR SURFACES OF THE MILL

Interior surfaces:

Those surfaces inside the pulverizer exposed to the mill airflow and coal. Also included are those surfaces inside the pulverizer and not exposed to mill airflow and coal such as the inside of the Spring Housing.

A) **Surface preparation**: Commercial Blast SSPC-SP 10 (Swedish Std SA 2.5)

B) **Primer**: Self curing inorganic zinc silicate primer (solids by volume 60% min) Minimum DFT 75 microns. Shop applied immediately after blast cleaning by airless spray technique.

Note: *No primer application is envisaged on the inside of the Planetary Gearbox and the Journal Housing*.

SECTION 3: EXTERIOR SURFACES OF THE MILL WITH SURFACE TEMPERATURE GREATER THAN 95°C AND INSULATED

Exterior surfaces:

Those surfaces visible by someone outside the fully assembled pulverizer.

Components with Surfaces Greater Than 95 °C:

Mill Side Housing Assembly (Externally Insulated).

A) **Primer**: High temperature primer & Aluminium Silicone paint (additional). Total DFT 65-85 microns.

SECTION 4: EXTERIOR SURFACES OF THE MILL WITH SURFACE TEMPERATURES LESS THAN 95 °C

Exterior surfaces:

Those surfaces visible by someone outside the fully assembled pulverizer.

Components with Surfaces Less Than 95 C:

All mill components, except the Mill Side Housing Assembly and Bowl and Bowl Hub Assembly.

A. **Primer**: Self curing inorganic zinc silicate primer (solids by volume 60% min) Minimum DFT 75 microns. Shop applied immediately after blast cleaning by airless spray technique.

B) **Intermediate Coat**: Polyamide cured pigmented titanium dioxide (TiO2) or Micaceous iron oxide (MIO) epoxy based paint. (solids by volume 60% min) Minimum DFT 75 microns. Paint applied by airless spray technique.

C) **Finish Coat (Shop)**: Polyamide cured color pigment epoxy based paint. (solids by volume 60% min) Minimum DFT 75 microns.

D) **Finish –Finish Coat (After Erection)**: of 50 micron DFT (minimum) of Polyurethane based colour pigmented paint (solids by volume minimum 40%).

SECTION 5: GENERAL NOTES

A. Grease and Oil Removal: Special care shall be taken to remove grease and oil by means of suitable solvents.

B. Brush Off Blast Swedish Std Sa 2.5 preparation: Brush Off Blast (SSPC-SP10): All oil, grease, dirt, mill scale, rust, corrosion products, oxides, paint or other foreign matter have been completely removed from the surface by abrasive blasting, except for very light shadows, very light streaks or slight discolorations caused by rust stain, mill scale oxides or slight, tight residues of paint or coating. At least 95% of each square inch of surface area shall be free of all visible residues and the remainder shall be limited to light discolorations mentioned above. Work to the Sa 2.5 requirements.

C. All exposed metallic surfaces subjected to corrosion shall be protected by shop application of suitable rust preventive coatings.

D. Bought-out & other miscellaneous items shall be as per Manufacturer/BHEL standard painting. This painting scheme shall be applicable for Mills components as mentioned.

SECTION 6: PAINT SCHEDULE

Sl No	Surface Location	Surface Preparation	Primer		Intermediate		Finish Coat			Total DFT
			Paint	No. of Coats	Paint	No. of Coats	Paint	No. of Coats	Shade	µm min
01	Interior Surfaces of Mill (All surfaces, including surfaces above 95°C and surfaces below 95°C.) Ref Section-2.	Commercial blast Swedish Std SA 2.5	Inorganic Zinc Silicate	2 coats 75 µm min DFT total	NA	-	NA	-	-	75 µm min.
02	Exterior Surfaces of Mill above 95°C (Mill Side Assembly) Exterior Surface of the Mill Side Assembly is insulated.	Commercial blast Swedish Std SA 2.5	Inorganic Zinc Silicate (High temperature primer)	1-2 coats 40 µm-50 µm DFT Total	Aluminum Silicone (High temperature paint)	2 coats 25-35 µm DFT Total	NA		Gray RAL 9002	65-85 µm DFT

03	Exterior Surfaces of Mill below 95 °C (All surfaces except the Mill Side Assembly) Includes: Separator Body Assembly, Journal Opening Cover, Spring Assembly, Separator Top, Classifier Rotor, Drive Assy, Discharge Valve Components, Outlet Pipes, Seal Air Piping, Planetary Gearbox, Pulveriser Top Platform, Lube Oil System	Commercial blast Swedish Std SA 2.5	Inorganic Zinc Silicate	2 coats 75 µm min DFT total	Polyamide cured pigmented titanium dioxide (TiO2) or Micaceous iron oxide (MIO) epoxy based paint	1-2 coats 75 µm min DFT total	Finish (Shop) Polyamide cured color pigment epoxy based paint ---------- Finish (after erection) Polyurethane based color Pigment paint (solids by volume 40% min)	1-2 coats 75 µm min DFT Total ------ 1 coat 50 µm min DFT	Grey RAL 9002	225 µm DFT min. ---------- 275 µm DFT min. (total after erection paint)