



**BHARAT HEAVY
ELECTRICALS LIMITED**
PIPING CENTRE, CHENNAI- 17
QUALITY ASSURANCE & CONTROL DEPT.

PAINTING SCHEME FOR LP PIPING

(CW / ACW / ECW / Plant water, Air Piping, etc...,)

PROJECT NAME : - KPCL BELLARY TPS - UNIT-III (1 X 700 MW)
BHEL CUSTOMER Nos : 7149.

QPNo: 7149:QPC:12
REV.NO: 02
Dt :25.06.2012

Sl. NO	PGMA / Description	Surface Preparation & Surface Profile	Primer coat		Intermediate coat			Finish coat			Total DFT Microns (Min.)	REMARKS	
			Primer	No of coats	Paint	No of coats	Shade	Paint	No of coats	Shade			
1	2	3	4	5	6	7	8	9	10	11	12	13	
1	(a) Internal Surface of Carbon steel piping for CW & ACW system	Blast Cleaning SSPC SP-10 SA 2½ (Refer Note 1)	POLY - URETHANE COATING OF 2000 MICRONS - DRY FILM THICKNESS. (Refer Note 2)									2000 Microns (Refer Note 3)	
	(b) Holiday test (Refer Note 3)	Holiday testing by low voltage (75 Volts Min.) wet sponge Holiday detector or by High voltage (Voltage per micron of DFT is as recommended by Paint Manufacturer subjected to minimum of 5V / Micron). Holiday test Equipment to be calibrated before testing.											
2	External Surface of CW --Buried Piping / Encased in concrete (For pipe dia- 1000 mm and above) (Temporary Protection for transportation from works to site). **Further protection to be done by BHEL Erection Group as per Contract requirement.	SSPC-SP3 / Power Tool Cleaning	Red Oxide Zinc Phosphate (Alkyd base to IS 12744)	1 (30 Microns per coat)	---	---	---	---	---	---	30 Microns		
3	External Surface (over ground piping) of CW,ACW.(For all diameters)	SSPC-SP3 / Power Tool Cleaning	Red Oxide - Zinc Phosphate (Alkyd base to IS: 12744)	2 (25 Microns per coat)	---	---	---	Synthetic enamel Long oil Alkyd to IS: 2932	2 (35 microns per coat)	Smoke Grey (Shade No. 692 of IS: 5)	120 Microns		
4	External Surface of ECW, Plant water (For all diameters)	SSPC-SP3 / Power Tool Cleaning	Red Oxide - Zinc Phosphate (Alkyd base to IS: 12744)	2 (25 Microns per coat)	---	---	---	Synthetic enamel Long oil Alkyd to IS: 2932	2 (35 microns per coat)	Smoke Grey (Shade No. 692 of IS: 5)	120 Microns		
5	Galvanised and Stainless steel Piping	No painting											

Notes:

- Blast cleaning to near white metal to obtain roughness as per epoxy paint data sheet.
- Application of Poly-Urethane coating shall be done as per manufacturer's data sheet / recommendation, meeting the thickness requirements as per this document. .
- Witness by BHEL / BHEL nominated inspection agency.

		For Customer use :
PREPARED BY : VIVEKANANDA YELLU Sr.ENGR/QA	APPROVED BY : G. PANNEER SELVAM. SDGM / QA	

TRACTEBEL Engineering
GDF SVZ

Approval Category:

'A' DRAWING APPROVED AS SUBMITTED. RELEASE DISTRIBUTION PRINTS

Transmittal No: P . 001794/TE-IN/BHEL/PC/004

Date: 14.08.2012

Name of person approving the drwg. / doc.
Kamalakkannan M