



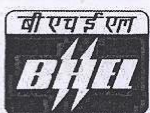
BHARAT HEAVY ELECTRICALS LIMITED
SEAMLESS STEEL TUBE PLANT
Cold Mill Production

Ref. No. SSTP:Chem:Soap:01
Rev: 00
Date: 18-01-2014
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Requirements for Luba (Soap) for cold drawing of tubes

Purpose: To form smooth and uniform coating of lubricant for smooth cold drawing of tubes

1	Appearance	White or pale yellow powder
2	PH Value of 4% solution	9.5 to 10
3	Free Acid	0.0 to 1.0 Points
4	Concentration of operating bath	4 % Min (40 GMs per Litre)
5	Temperature of bath preparation in ° C	75 to 85
6	Operating temperature of bath in °C	65 to 75
7	Solubility in water (Hot)	Must be completely soluble at 75°C to 85°C without lumps.
8	Application method	Dipping
9	Soaking Time	10 - 15 Minutes (for all Grades)
10	Soap coating test	Smooth uniform white coating of soap shall be formed on the surface of phosphate treated test piece
11	Coating Thickness in Microns	Min 18
12	Compatibility with luba supplied by other suppliers (Established suppliers at SSTP/BHEL)	Compatible
13	Keeping property (Shelf life) in months	12
14	Packing	The Soap (Luba) shall be supplied in water proof HDPE 25 Kg bags with inner lining. The following marking shall be made on bags 1. Soaping chemical for SSTP/BHEL use only 2. Supplier Name 3. Batch No. & Date 4. Quantity 5. Shelf Life 6. BHEL Specn. SSTP:CHEM:Soap
15	Material Safety Data Sheet (MSDS)	Relevant MSDS shall be furnished
16	Test Certificate	The supplier shall furnish test certificate for the above requirements along with supply.



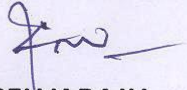
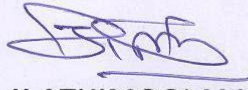
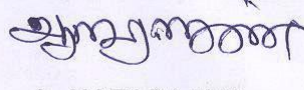
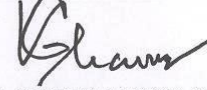
BHARAT HEAVY ELECTRICALS LIMITED
SEAMLESS STEEL TUBE PLANT
Tiruchirappalli-14

Ref. No. SSTP:Chem:Soap:01
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17.0	Product Performance Evaluation	
17.1	Sample Test at SSTP Lab (For preliminary testing before qualifying for field trials)	1. New vendors are required to supply sample quantity and these samples will be tested in BHEL/SSTP laboratory for compliance to the above requirements (SI No. 1 to 16). 2. If test results meet our requirements, the same will be informed to the vendor through Purchase for further field trial
17.2	Field trial	The vendors to supply Soap against a trial order for field trial and trial will be strictly done in accordance with our Vendor Development procedure Ref. SSTP:CMP:Trial (Latest)

Note:

1. For existing vendors who have already been qualified through samples tested at SSTP Lab and subsequent field trial, the above requirements (1 to 16) are alone applicable. However, the qualification shall be re-ascertained once in 3 years again through field trial.
2. For new vendors under development, all requirements (1 to 17) are applicable. This has to be established through samples tested at SSTP lab and subsequently product performance evaluation through field trial.

Prepared by	Reviewed by		Approved by
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