

LME: 012: C

LOCOMOTIVE ENGINEERING DEPTT.

PURCHASE SPECIFICATION

LME/PUR/335

ISSUE DT: 26.09.17

REV. NO: 01

REV. DT: 12.04.18

SHEET 1 OF 3

**PURCHASE SPECIFICATION FOR SWAGING FACILITY
TO SWAGE DOUBLE FERRULES FITTINGS ON TUBES
FOR WAG-9H ELECTRIC LOCOMOTIVE**

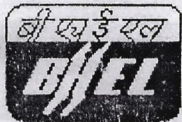
Enclosures:

Rev	Date	Prepared	Rev	Date	Prepared	Rev.	Date	Prepared
1	12.04.18	Approved			Approved			Approved
Specification updated.								
Rev	Date	Prepared	Rev	Date	Prepared	Rev	Date	Prepared
		Approved			Approved			Approved
Distribution : Loco Prodn. (001) Loco PPC (002) Loco QC (003) Tech. (004) CQX (005)								

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1. Introduction

This specification covers the requirements for swaging facility needed in assembly shop for swaging double ferrule fittings on stainless steel tubes & copper tubes, used for brake piping in WAG-9H locomotive.

2. General Requirement

This swaging facility should be capable of swaging ferrules of double ferrule fittings on below mentioned stainless steel tubes and copper tubes used in air brake piping of WAG-9H locomotive.

SL NO.	MATERIAL	OUTER DIA (OD)	WALL THICKNESS (WT)	MATERIAL SPEC
1	STAINLESS STEEL TUBE	1-1/2" OD (Fractional size)	3.404 mm	ASTM A 269, GR-304
2	STAINLESS STEEL TUBE	1" OD (Fractional size)	2.108 mm	ASTM A 269, GR-304
3	STAINLESS STEEL TUBE	1/2" OD (Fractional size)	0.889 mm	ASTM A 269, GR-304
4	STAINLESS STEEL TUBE	22 mm OD (Metric size)	1.5 mm	ASTM A 269, GR-304
5	STAINLESS STEEL TUBE	15 mm OD (Metric size)	1.5 mm	ASTM A 269, GR-304
6	COPPER TUBE	1-1/2" OD (Fractional size)	1.651 mm	IS 2501-1995, HALF HARD (HB)
7	COPPER TUBE	1" OD (Fractional size)	1.651 mm	IS 2501-1995, HALF HARD (HB)
8	COPPER TUBE	1/2" OD (Fractional size)	1.245 mm	IS 2501-1995, HALF HARD (HB)

3. Scope of supply

Scope of supply should cover swaging facility for swaging double ferrule SS fittings & Brass fittings on above mentioned SS tubes & copper tubes respectively, which includes following items:

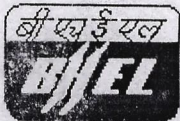
1. Swaging machine.
2. Dies.
3. Gap gauges.

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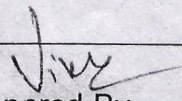
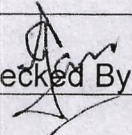
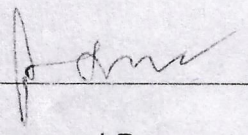
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4. Chamfer block
5. Pliers
6. Safety goggles.
7. Carrying case.
8. Support Base.
9. Manuals
10. Tube Deburring Tool
11. Any other item required for swaging of ferrules of double ferrule fittings on above mentioned stainless steel tubes and copper tubes, at BHEL Jhansi.

 Prepared By	 Checked By	 Approved By
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