

BHEL, Tiruchirapalli-620 014		SSTP / Tool Engineering	Technical Delivery Condition
Product : COLD SAW SEGMENT			
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Revision Record		NEW TDC	

1.0 PRODUCT:

Sl.No.	Equipment / Product	Drg. No.	Drg. Rev. No.
1.	SEGMENT	30.ST.117.01.029	AS PER LATEST ENQUIRY / PURCHASE ORDER

2.0 APPLICATION:

The segments are assembled in a circular disc and used for the end cutting of seamless steel tubes.

3.0 MATERIAL:

Grade **S6-5-2-5** of **DIN 1.3243**

Conduct Ultrasonic Test on Raw Material after proof machining in accordance with SA 388.

Acceptance Standard in accordance with AM 203.2(c), ASME Sec VIII Div.2. Test report Shall be certified by NDT Level II qualified personnel as per **SNT-TC-1A (Society for Non destructive Testing)**

Chemistry : As per drawing

Original mill test certificate shall be provided. Otherwise copy of original mill test certificate and test report from NABL accredited lab for chemical check on sample from the procured material shall be provided.

4.0 HEAT TREATMENT :

4.1 Teeth portion as shown in the drawing to be hardened to 62– 64 HRC and the remaining portion to be heat treated to have hardness of 25 – 40 HRC.

4.2

Sl.No.	Process	Detail
1.	Stress relieving	700 – 820 ° C
2.	Preheat	450 – 600 ° C
3.	Hardening	1210 - 1250 ° C
4.	Hot Quenching	550 ° C
5.	Tempering	550 - 570 ° C

5.0 DIMENSION AND TOLERANCES:

As given in the drawing.

6.0 DIMENSIONAL INSPECTION

Dimensional inspection shall be carried out by the supplier and report for the same shall be sent along with the supplies – Acceptance as per drawing.

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7.0 LIQUID PENETRANT INSPECTION

To be conducted on entire surface after finish machining as per **ASTM E165-02** and shall be certified by **NDT Level II qualified personnel as per SNT-TC-1A**

8.0 MECHANICAL TEST :

Hardness on the job shall be tested as per **DIN EN ISO 6508-1**
1 sample for each lot of 36 Nos.

- Acceptance as per Drawing

9.0 MARKING:

The marking shall be done on the job as given in the drawing.

10.0 TEST CERTIFICATE :

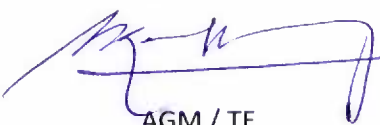
Following test certificates shall be sent with Materials.

PO No., component name, TDC NO. and drawing no. shall be mentioned where ever applicable.
Traceability data like Heat / Melt No. & job SI. No. shall be provided in all the reports.

1. Raw Material Chemistry (**Clause 3.0**)
2. Hardness (**Clause 8.0**)
3. Temperature-Time-Recorder Graph for the Heat Treatment Cycle followed
4. Ultrasonic Test Report for Raw Material (**Clause 3.0**)
5. Liquid Penetrant Test (**Clause 7.0**)
6. Dimension Report (**Clause 6.0**)

11.0 PRESERVATION & PACKING :

1. Supply with rust preventive coating which shall be dry after application and removable by common solvents.
2. Pack suitably to avoid transit & handling damages.

Prepared By	Reviewed By	Approved By
 DM / TE	 DGM / QA&C	 AGM / TE