

# 1 Purpose

To establish procedures of inspection and testing of support castings at Suppliers' end.

# 2 Scope

Covers inspection and testing of the following castings :

Table-1

Sl No.	Part No.	Description	Scope of Supply
1	175TF31078	SUPPORT L H	Normalised 183 - 243 BHN
2	175TF31094	SUPPORT R H	

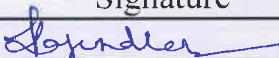
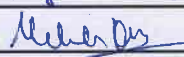
# 3 Responsibility

(1)The section head of Castings/Forgings Materials group to ensure that the quality plan is sent to all suppliers along with the purchase order.

(2)The suppliers shall ensure that quality plan is followed for testing and inspection of the Castings.

# 4 Procedure

The supplier should carry out inspection and testing of Castings as per Table -2

	Name	Signature	Date
Prepared by	RAJENDRA BABU K		29.5.19
Approved by	MAHESH KULKARNI		29.5.19

 <b>beml</b> EM DIVISION	<b>QUALITY PLAN</b>		DOC NO	323-QP-CF-066
	QUALITY PLAN FOR SUPPORT		ISSUE NO	1
	CASTINGS - SUPPLIERS		PAGE NO	2 OF 2

**Table -2**

SLNO	TEST	PERIODICITY OF TESTS									
1	Visual inspection	The Castings shall be free from foundry defects such as: shrinkage, porosity and blow holes, hot tear and cracks, hard spots, sand fusion etc. and other surface abnormalities, shall be checked on 100% of castings. No weld repair is permitted on OD 113 mm .									
2	Dimensions	For one number sample casting and audit check, dimensions shall be checked by layout method and lines drawn should be visible with punch marks. Dimensional check sheet should contain all dimension with baloon number in drawing with weight details. Untoleranced dimensions shall be as per IS4897-1994. Audit check to be done for every 20th number of casting for dimensional repeatability check as per above check list. Critical profile and Radius should be ensured by using templates on all castings.									
3	Composition	Composition shall be checked on the sample taken from each test bar and report to be sent.									
4	Mechanical Properties	One no. test bar per heat to be checked for mechanical properties. Report to be sent along with each consignment									
5	Heat treatment	Casting shall be supplied in normalised condition (hardness : 183 - 243 BHN) Hardness report along with temperature charts shall be sent along with each supply.									
6	NDT	MPI/DP : 100% areas of all the castings shall be checked for surface cracks by MPI / DP.									
		UT: Shall be carried out across bore area.									
		RT : shall be done at sample stage to prove methoding and ensure defect free casting. Acceptance Level II ASTM E 446.									
7	Idenification / Traceability	The castings shall be marked with vendor code, part no. & sl.no., heat no. & BEML logo.									
8	Supply Condition	Sample castings identified with white paint to be submitted for approval prior to the bulk supply & regular supplies to be as per PR1029C.									
		<table><tr><th>Name</th><th>Signature</th><th>Date</th></tr><tr><td>Prepared by</td><td>RAJENDRA BABU K</td><td>29.5.19</td></tr><tr><td>Approved by</td><td>MAHESH KULKARNI</td><td>29.5.19</td></tr></table>	Name	Signature	Date	Prepared by	RAJENDRA BABU K	29.5.19	Approved by	MAHESH KULKARNI	29.5.19
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