

HARIHAR ALLOYS (P) LTD

UNIT-1 - SF NO:421 & 671 ,Trichy-Thuraiyur Main Road,Puliyalam,Trichy - 621006

INSPECTION CERTIFICATE

HAPL/QC//17/102/R00

AS PER EN 10204 3.1

Customer : L&T VALVES LIMITED.-KANCHEEPURAM

T.C.No : LT/20733/19 - 20

T.C.Date : 21-FEB-2020

P.Order : 10189471 DT :05-DEC-2019

Heat No : T6437

Pour Date : 29-JAN-2020

Specification : ASTM A216 Gr.WCB-18

CASTING PROCESSED BY ELECTRIC INDUCTION MELTING
FOUNDRY IDENTIFICATION : HA

CHEMICAL COMPOSITION %

ELEMENTS	C	Mn	Si	P	S	Cr	Ni	Mo	Cu	V	Al	CE	RES			
MINIMUM	-	-	-	-	-	-	-	-	-	-	-	-	-			
MAXIMUM	0.250	1.000	0.600	0.035	0.035	0.500	0.500	0.200	0.300	0.030	0.060	0.430	1.000			
ACTUAL	0.195	0.891	0.450	0.020	0.009	0.192	0.054	0.047	0.016	0.005	0.032	0.397	0.314			

HEAT TREATMENT : Normalising:Soaked at 920°C, For 3 Hours And Open air cooling

MECHANICAL PROPERTIES

Requirements	Yield Strength		Tensile Strength		% Elongation	% Reduction	Hardness	Bend Test	Impact Test at(-)			
	Kgf/mm ²	Mpa	Kgf/mm ²	Mpa	GL:50mm	In Area	HBW	At 90° D=1t				
	0.2% OFFSET	-	-	-	-	-	-	-	CVN 2mm in 45°			
Minimum	25.48	250	49.44	485	22	35	-	-				
Maximum	-	-	66.77	655	-	-	235	-	1	2	3	Avg
Actual	35.58	349	52.29	513	32.14	61.68	155	PASSED				

ITEM DESCRIPTION

SL.No.	Description	Casting Drawing No.	Part No.	Machine Drawing No	Quantity
1	3-300 GTV BONNET	007-0048R/04	0070048R-Y-A10CR1	N/A	2

Casting Serial

Remarks :

Visual Inspection as per MSS SP - 55-(2011) Type II - XII (a) satisfactory
This certificate confirms to NACE MR0175-2015/MR0103/ISO15156-(2015)
TDC 001/Rev 28, MPI Carried Out as per NDE 002/8
We confirm the castings are be free from RADIOACTIVE CONTAMINATION
Fully Killed Carbon steel and Fine Grained
Critical Dimension and Wall thickness checked and found satisfactory

MTC - REVIEWED & ACCEPTED

30129 LTV QC

We Confirm that the above material was manufactured sampled, tested and inspected in accordance with the drawings, customer order requirements and material specification, ASTM A216 Gr.WCB-18 and were found to meet the requirements.

BASKARS

LAB INCHARGE