

DECK INDIA ENGINEERING PVT. LTD.

HEAT TREATMENT JOBWORK, EQUIPMENTS, FIXTURES & TESTING

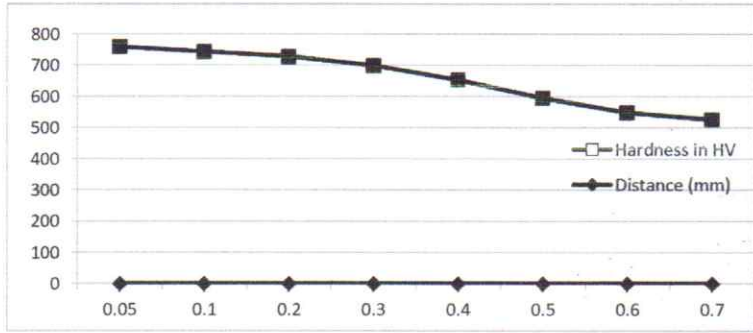
Works :- Sr. No. 671, Kudalwadi, (Chikhali) Behind Telco Pimpri , Pune 412 114

Heat treatment/ Metallurgical Inspection Report

Supplier Name & Location:	Deck India Engineering Pvt Ltd	Report No.	34485
Customer Name & Location:	SAI INDUSTRIES	Inspection Date:	10.01.2023
Part Name & No:	BALL RACE ENA101	Material:	SCM435H
Furnace name:	SQF	HT batch No.	F22/01/29
Inward No	4054	Customer . Ch No	651
Type of HT (CHT/CN/IHT/HT):	CHT	HT batch qty:	6992 NOS

HV tester calibration-	Std. block value: 720 HV1	Actual value:718	Error: -(-2 HV1)
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Test Load: 1 kg	
CD cut off : 630 HV	
Distance (mm)	Hardness in HV
0.05	752
0.1	738
0.2	719
0.3	692
0.4	679
0.5	642
0.6	627
0.7	574
0.8	559
Observations:	0.59 mm@630 HV1



3. Microstructure analysis:

Case microstructure -500X	Core microstructure -500X	GBO-500X

Observations: Case- Fine Tempered martensite , Core-Low carbon martensite, GBO-9micron

HRA tester calibration-	Std. block value: --61.0 HRC	Actual value:--61.0HRC	Error: --(0)
Job Nos.	1	2	
Hardness	62	63	

5. Results:

Parameter	Specification	Observation	Remarks
Case depth	0.5-0.6 mm@630 Hv1	0.59 MM	OK
Case Microstructure	Fine Tempered martensite	Fine Tempered martensite	OK
RA in case	<5 %	<3%	OK
GBO	< 10 μm	9 Micron	OK
Carbides	Not allowed	nil	OK
Core microstructure	Low carbon martensite	Low carbon martensite	OK
Surface Hardness	60-64 HRC	61-63 HRC	OK
Core Hardness:	45-55 HRC	50-52 HRC	OK
MPI test	No crack allowed	Nil	OK

6. Final Remarks: ✓ Lot is accepted / Conditionally accepted/ Lot is rejected

Inspected by: *[Signature]* Approved by: *[Signature]*

Format No : QF/QA/03

