

# DECK INDIA ENGINEERING PVT. LTD.

HEAT TREATMENT JOBWORK, EQUIPMENTS, FIXTURES & TESTING

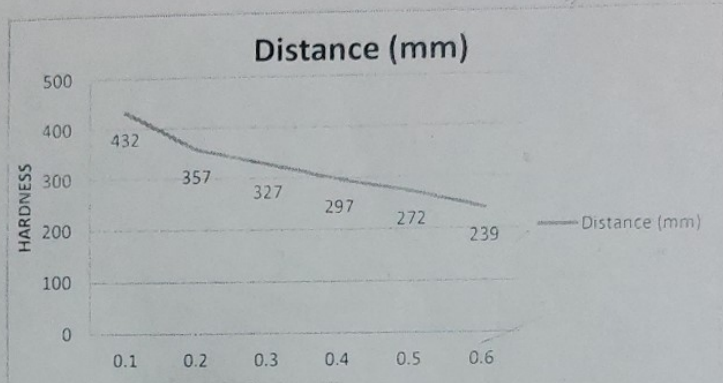
Works :- Sr. No. 671, Kudalwadi, ( Chikhali ) Behind Telco Pimpri, Pune 411 062

## Heat treatment/ Metallurgical Inspection Report

Supplier Name & Location:	Deck India Engineering Pvt Ltd	Report No.	53193
Customer Name & Location:	SAI INDUSTRIES	Inspection Date:	12/10/2023
Part Name & No:	CLUTCH SHAFT	Material:	EN8
Furnace name:	F11	HT batch No.	F11/10/28
Type of HT (LN):	LIQUID NITRIDING	HT batch qty:	600 NOS

<b>1. Case depth measurement:</b>			
HV tester calibration-	Std. block value: --720 Hv	Actual value:--717Hv	Error: --(-3 Hv)

Test Load: 100 g	
CD cut off : (CORE HARDNESS +50 )	
Distance (mm)	Hardness in HV
0.1	432
0.2	357
0.3	327
0.4	243
0.5	227
0.6	223
Observations:	0.40 mm@242 HV1



<b>2. Microstructure analysis:</b>					
<b>3. Surface Hardness Analysis:</b>					

HRA tester calibration-	Std. block value: --720 HV1				
Job Nos.	1	2	3	4	5
Hardness	722	717	724	720	719



Parameter	Specification	Observation	Remarks
Case depth	0.20MM MIN @CORE+50HV.1	0.40 mm@242 HV1	OK
Surface Hardness	575 HV.1	714-724 HV.1	OK
White layer	20 MICRON MIN	21/22 MICRON	OK
Core Hardness:	260 HV Max	222-237 HV.1	OK

**4. Final Remarks:** ✓ Lot is accepted / Conditionally accepted/ Lot is rejected

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

Format No : QF/QA/03

