

## LAKSHMI VACUUM HEAT TREATERS PVT. LTD.

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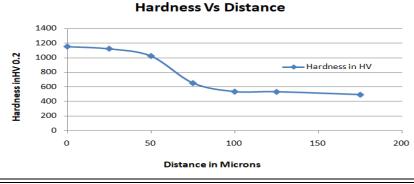
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TEST	CERTIFICAT	110

Test Certificate No:	01453/2022-23			Tc Date:	11-Jan-23
Customer Name:	M/s JINDAL ALUMINIUM LIMITED SP-2/333, RIICO INDUSTRIAL AREA, BHIWADI, DISTRICT ALWAR-301019 (RAJ.)			Cycle No:	A.23.06
Delivery Challan No:	BWJW00226202212	Challan Date:	30-Dec-22	Job Card No.:	01453

**PART DETAILS** 

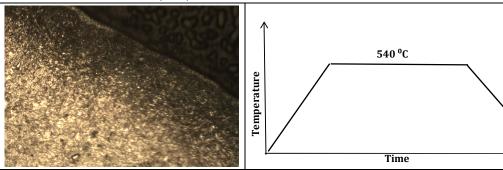
Sr. No.	Part Description	Part No.	Qty(No's)	Steel Grade	Process Type
1	MANDREL+DIE PLATE	~	14 SET	H-13	NITRIDING



DISTANCE IN	HARDNESS IN		
MICRON	HV0.2		
0	1150		
25	1120		
50	1020		
75	649		
100	532		
125	529		
175	490		
CORE (Avg)	490		
CUT OFF	540		

# Case Microstructure (200X)

## **CYCLE DETAILS**



Sr. No.	REQUIREMENTS	ACTUAL
1	SURFACE HARDNESS	1134 ~ 1161 HV0.2
2	NITRIDING CASE DEPTH	93 ~ 98 Microns

## PARTS INSPECTION:

VISUAL	BEFORE	OK	DDE CLEANING	DONE
	AETED	OK	PRE CLEANING	

- For better results the jobs recieved for Nitriding should be Polished & free from casting left over, Bend, Paint, Oil, Grease, rust &
- $^{\circ}$  Test piece is HDS grade and is not from the physical die part. Hardness and case depth checked on a sample piece only.
- Stress relieving carried out before Nitriding process (Temperature @540°C).

RESULT: \* Results found satisfactory.







LVH/QA/F/02P Rev.date: 07.11.2019 Rev.No: 02