

RAW MATERIAL LAB TEST REPORT																													
MILL TC SUPPLIER NAME:	ARORA IRON & STEEL ROLIING MILLS (P) LTD.					HEAT NO:	A09662					REPORT NO:	1901072																
FORGER TC SUPPLIER NAME:	SV-SHIVAM AUTO					MATERIAL GRADE:	SAE8620H					DATE:	2019-01-31																
CONDITION:	as hot rolled					STEEL CODE	-					WEIGHT:	24.535																
BLOOM SIZE:	160 , 160					SECTION SIZE MM/RCS:						SECTION SIZE DIA:	45																
RE. RATIO AS PER MILL TC:	16.1:1					RE. RATIO AS PER CALCULATOR:	16.0890554357518																						
% CHEMICAL COMPOSTION																													
PARAMETER	C%	Mn%	S%	P%	Si%	Ni%	Cr%	Mo%	V%	Al%	B%	Cu%	Ca%	Sn%															
MIN SPEC	0.17	0.60	-	-	0.15	0.35	0.35	0.15	-	-	-	--	-	-															
MAX SPEC	0.23	0.95	0.03	0.04	0.35	0.75	0.65	0.25	-	-	-	0.30	0.002	-															
MILL TC VALUE	0.185	0.81	0.023	0.016	0.21	0.435	0.49	0.16	0.003	0.020	0.0004	0.15	0.0003																
FORGER TC VALUE	0.195	0.797	0.023	0.015	0.20	0.493	0.492	0.155	0.0048	0.019	0.0025	0.151	0.0008																
THIRD PARTY VALUE																													
JOMINY HARDENABILITY BAND (IS : 3848)																													
DISTANCE (in inches)	J1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16	10/16	11/16	12/16	13/16	14/16	15/16	16/16	18/16	18/16	19/16	20/16									
DISTANCE (in mm)	1.59	3.175	4.77	6.35	7.94	9.525	11.1125	12.7	14.29	15.875	17.47	19.05	20.64	22.225	23.82	25.4	26.99	28.58	30.17	31.75									
MIN SPEC	41	37	32	27	23	21																							
MAX SPEC	48	47	44	41	37	34																							
MILL TC VALUE	43.5		37.5																										
FORGER TC VALUE																													
VECV VALUE	42		37.2																										
CALCULATED VALUE	43.3	42.1	37.1	30.9	28.5	26.2	24.2	22.6	21.2	19.9	18.9	17.9	17.2	16.5	15.9	15.4	15	14.7	14.4	14.3									
METALLOGRAPHIC CHARACTERSITICS										GAS CONTENT (PPM)																			
INCLUSION RATING IS:4163					GRAIN SIZE IS:4748					GAS					REQ					ACT									
ACT					ACT					O2					20					10.5									
Tn					Tk					N2					100					74									
A					1.5					0.5					H2					2					0.4				
B					0.5					0																			
C					0					0																			
D					1.0					0																			
PART NO.		OBSERVATION			MATERIAL GRADE			ACCEPTED/REJECTED			REMARK																		
2428		j3/16-38-42 h			SAE8620H			ACCEPTED			as per old specification & discussion with Tripathi sir.																		
2432		j3/16-38-42 h			SAE8620H			ACCEPTED			as per old specification & discussion with Tripathi sir.																		
2433		j3/16-38-42 h			SAE8620H			ACCEPTED			as per old specification & discussion with Tripathi sir.																		
2443		j3/16-38-42 h			SAE8620H			ACCEPTED			as per old specification & discussion with Tripathi sir.																		
2462		j3/16-38-42 h			SAE8620H			ACCEPTED			as per old specification &																		
CHECKED BY:	Gyaneshwar mishra				VERIFIED BY:	V.D.Tripathi				APPROVED BY:	Ravindra kale																		