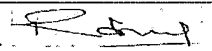
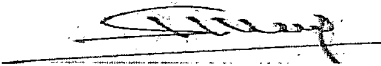
 JAPL FORGINGS & FLANGES		JAI AUTO PVT. LIMITED VILLAGE KADDON. G.T ROAD DORAHA LUDHIANA (P.B.)INDIA E-Mail:info@jaiauto.in				Works Test Certificate EN 10204/3.1 B		
JAPL/LAB NO: 21-22/		INVOICE NO.: (J2122-178)			DATE: 26-10-2021			
Purchase Order No	291167	Customer		Forging specification	ASME SA 105-17 ASTM A105-17			
Component	2" -1500# RTJ WN XXH FLG.			Steel Supplier	DEVBHOOMI STEEL.			
Item Code				Mill Heat No.	S-20212187			
Machining STD	ANSI B16.5- 2013 ASME B16.5- 2013		Quantity	10Nos.				
TEST RESULTS				JAPL. HEAT NO: 1526				
CHEMICAL COMPOSTION				MECHANICAL PROPERTIES				
Element %	Specified Composition	Actual		PROPERTIES	SPECIFIED	OBTAINED	Specified carbon as per Purchase Order 0.25max. Serrated face as per MSS-SP-6 With in limits of 125-250AARH H.T:-Normalized at temp.920c. CARBON EQUIVALENT (CE) $CE = C + \frac{Mn}{6} + \frac{Cr}{5} + \frac{Mo}{15} + \frac{Ni}{15} + \frac{Cu}{15}$ MARKING AS PER MSS-SP-25-2013 2 -1500 RTJ XXH SA/A105 N1526 B16.5 JAPL INDIA	
		JAPL LAB	MILL T.C.					
Carbon	0.35max	0.195	0.21	Yield Strength (mpa)	250.00min.	357.19		
Manganese	0.60-1.35	1.03	1.06					
Silicon	0.10-0.35	0.28	0.30					
Sulphur	0.040max	0.014	0.025	Tensile Strength (mpa)	485.00min.	575.42		
Phosphorous	0.035max	0.027	0.030					
Chromium	0.30max	0.12	0.10	%Elongation in 50mm / 4D	22.00min.	31.25		
Nickel	0.40max	0.028	0.023	Hardness HBW	187max.	156-159		
Copper	0.40max	0.092	0.072					
Molybdenum	0.12max	0.020	---	% Reduction of Area	30.00min.	66.87		
Vanadium	0.08max	0.006	---	Remarks:- We hereby certify that the product satisfies the requirement of ASTM A 105 and material described here in has been tested in accordance with the applicable specifications referred above and meets the requirements as per EN10204/3.1B & NACE MRO-175 & ISO 15156. Product does not come in contact with mercury and lead during the manufacturing process. No weld repair was performed and all-products are free of weld repair				
Carbon Equivalent (CE)	0.47max	0.403	0.412					
				Checked by: 		Metallurgist		
				Certified by: 		Quality Control Manager		