



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: 22-23/ Purchase Order No 291169	INVOICE NO: (J2223-026)	DATE: 13-05-2022
Component 4" -300# LJ FLG.		Forging specification ASME SA 105-2019 ASTM A105-2021
Item Code		Steel Supplier PGIPL
Machining STD ANSI B16.5- 2013 ASME B16.5- 2020	Quantity 25Nos.	Mill Heat No. A2/35

TEST RESULTS

CHEMICAL COMPOSITION		MECHANICAL PROPERTIES	
Element %	Specified	PROPERTIES	OBTAINED

Element %	Specified	JAPL LAB	Actual	PROPERTIES	OBTAINED	Specified carbon as per Purchase Order
	Composition		MILL T.C.			0.25max.
Carbon	0.35max	0.19	0.21	Yield Strength (mpa)	335.32	Serrated face as per MSS-SP-6 With in limits of 125-250AARH
Manganese	0.60-1.35	1.12	1.17	Tensile Strength (mpa)	528.68	CARBON EQUIVALENT (CE) CE = C + $\frac{Mn}{6}$ + $\frac{Cr+Mo+V}{5}$ + $\frac{Ni+Cu}{15}$
Silicon	0.10-0.35	0.20	0.26	%Elongation in 50mm / 4D	31.12	MARKING AS PER MSS-SP-25-2013
Sulphur	0.040max	0.010	0.006	Hardness HBW	161-169	4-300 LJ SA/A105 1844 B16.5 JAPL INDIA
Phosphorous	0.035max	0.015	0.021	% Reduction of Area	63.75	
Chromium	0.30max	0.074	0.09	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		
Nickel	0.40max	0.020	0.02			
Copper	0.40max	0.015	0.01			
Molybdenum	0.12max	0.014	0.01			
Vanadium	0.08max	0.004	0.005			
Carbon Equivalent (CE)	0.47max	0.397	0.428			

Checked by: _____ Metallurgist
Certified by: _____
Quality Control Manager