

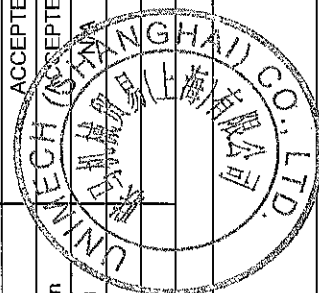
# UNIMECH (SHANGHAI) CO.,LTD

MATERIAL TEST CERTIFICATE Acc. EN10204-2004 3.1

Customer	UNIMECH ENGINEERING (M) SDN.BHD.			Order No./Invoice No.:	00013937			Project Name	N/A			
Product description				Qty	Item	Tag No	Pressure test		Acc. API 598-2016		Valve serial No	
ARITA FORGED F316 GATE VALVE, 316TRIM,FULL BORE 800# SOCKET WELD END ,SIZE: 1"				20	13	/	Back seal (Hyd)	Shell test (Hyd)	Seal test (Hyd)	Seal test (air)		
							11.4MPa	15.6MPa	15S	15S	0.6MPa	D2123001-002

Heat No.	Part Name	Material	CHEMICAL COMPOSITION										MECHANICAL PROPERTY				Impact test							
			C	Si	Mn	P	S	Cr	Ni	Mo	Cu	V	N	W	Tensile (MPa)	Yield (MPa)	E(%)	R(%)	Temp:	Hardness				
	Body	F316	0.069	0.68	1.086	0.031	0.024	18.208	9.345	/	/	0.002	/	546	235	36	71	/	V1	V2	V3			
	Bonnet	F316	0.069	0.68	1.086	0.031	0.024	18.208	9.345	/	/	0.002	/	546	235	36	71	/	/	/	/			
	Disc	F316	0.022	0.65	1.04	0.032	0.014	18.36	9.50	/	/	0.004	/	537	218	38	66	/	/	/	/			
	Stem	F316	0.059	0.932	0.820	0.030	0.021	18.157	10.381	/	/	0.004	/	534	217	45	59	/	/	/	/			
Material	Method	Temp. °C	Duration	Cooling Method	Furnace type																			
A105N	Normalized	920	3h	air	Electric																			ACCEPTED
A182 F55	Solution+Quenched	1130+255	2.5h	water	Electric																			ACCEPTED
																								ACCEPTED
																								ACCEPTED
																								ACCEPTED



Remarks:

We hereby certify that the valve listed above are manufactured and tested in accordance with the requirements of valve standard and purchase order.