



## MATERIAL TEST CERTIFICATE (EN: 10204/3.1)

CUSTOMER : AL ZERWA TRADING	SIZE : 1/2"	VALVE TYPE : BALL VALVE	
CERTIFICATE NO : 11619RTUY 048	PRESSURE : 300#	PROJECT : 11619RTUY	
DATE OF CERTIFICATION : 23rd Nov 2019	ENDS : Flanged	VALVE ID : AMS 1910 048	
	QUANTITY : 50pcs		

HYDRO TEST DATA		SHELL TEST*		H.P CLOSURE*,**		L.P(AIR) TEST**		BACK SEAT*		TEST STD		VISUAL INSPECTION				SPECIAL TESTS								
PRESSURE(Mpa)		6.0		4.4		0.6		/		API 598		MSS SP25/55				Anti-static :   passed								
DURATION(Min)		15S		15S		15S		/				ACCEPTED				Cavity Relief :   passed								
DESIGN PARAMETERS		FACE TO FACE		END CONNECTION		DESIGN STANDARD		FIRE SAFE DESIGN		SOUR SPEC				Painting :   passed										
STANDARDS		ASME B16.10		ASME B16.5		ASME B16.34		/		NACE MR-01-75				/		/								
RESULT		Within Tolerance		Within Tolerance		Within Tolerance		/		Complied				/		/								
PARTS		BODY ADAPTOR		BALL/PLUG/DISC		STEM/HINGE		OPERATOR		SEAT RING		SOFT SEAT		SPRING		GASKET		PACKING						
MATERIAL GRADE		CF8M		CF8M		316		SS201		PTFE		PTFE		/		PTFE		PTFE						
COATING																								
DESCRIPTION		CHEMICAL ANALYSIS														MECHANICAL ANALYSIS				IMPACT TEST				
PART	HEAT/BATCH	C	Mn	P	S	Si	Cr	Mo	Ni	Cu	V	Nb	Al	Oth	Oth	T.S.	Y.P	EL	RA	BH	J			
		≤ 0.08	≤ 1.50	≤ 0.04	≤ 0.04	≤ 1.50	18.0 21.0	2.00 3.00	9.0 12.0								≥485 Mpa	≥ 205h	≥ 30%			(-Deg C)		
BODY	29I5/29H1	0.039	1.14	0.036	0.006	0.917	18.46	2.11	9.61	0.356	/					510	217	34						
BALL		0.047	0.81	0.019	0.007	0.76	18.25	2.23	9.54															
STEM		≤ 0.08	≤ 2.00	≤0.045	≤0.030	≤1.00	16.0 18.0	2.00 3.00	10.0 14.0							≥515 Mpa								
		0.049	0.92	0.027	0.013	0.65	16.54	2.16	10.31							526								

Notes: "Hydrostatic medium is water.,\*\* Seat test is conducted on both sides for bi-directional valves.

We here by confirm that the valves referred in this certificate is confirmed to meet the referred data and approved for release to customer.

Check Witnessed

*Jack*

Quality Manager

