

MILL TEST CERTIFICATE

PANTECH STAINLESS & ALLOY INDUSTRIES SDN. BHD. (733428W)

(A MEMBER OF PANTECH GROUP HOLDINGS BERHAD, LISTED ON MAIN MARKET OF BURSA MALAYSIA)

PTD 204334, JALAN PLATINUM UTAMA,

KAWASAN PERINDUSTRIAN PASIR GUDANG, ZON 12B, 81700 PASIR GUDANG

JOHOR DARUL TAKZIM, MALAYSIA

Tel: +607-2518888 Fax: +607-2519999 Website: www.pantechssalloy.com

http:// www.pantech-group.com



INSPECTION DOCUMENT: EN 10204: 2004 Type 3.1

MATERIAL MANUFACTURER APPROVAL ACCORDING TO PED 2014/68/EU, ANNEX 1, PARA 4.3. PED CERTIFICATE NO.: 0343/PED/MUM/1110006/1

Customer: Unimech Engineering (M) Sdn Bhd
Product: Welded Austenitic Stainless Steel Fitting

Certificate No: PSA2-FT-4396
Date: 8 Feb 2022

PO No.	Invoice No.	Product Specification	Dimension & Inspection Specification			Delivery Condition
APO-2112-0157	L000012598	ASTM A403/A403M - 20 / ASME SA 403/SA403M - 21	ASME B16.9 - 18 / ASTM A960/A960M - 20 / ASME SA 960/SA960M - 21/ ASME SECTION II PART A - 2021			Solution Treated, Pickled-Passivated
Heat No.	Product & Size		Quantity (pcs)	Material Grade	Visual / Dimension / PMI Examination	Remarks
KG098-1	1"	SCH 10s 90° LR ELBOW	993	WP304/304L-W	PASSED	-
KG065-1	1" X 1/2"	SCH 10s CON-REDUCER	400	WP304/304L-W	PASSED	-
CFA158-04-112CR	1" X 3/4"	SCH 40s CON-REDUCER	20	WP304/304L-W	PASSED	-
KG064-1	1 1/2" X 1"	SCH 10s CON-REDUCER	100	WP304/304L-W	PASSED	-
JG201-1	2" X 1 1/2"	SCH 40s CON-REDUCER	50	WP304/304L-W	PASSED	-
KS125-1	2 1/2" X 2"	SCH 10s CON-REDUCER	100	WP304/304L-W	PASSED	-
KG226-1	4" X 3"	SCH 10s CON-REDUCER	50	WP304/304L-W	PASSED	-
				WP304/304L-W	0	0

Specification	Chemical Composition (%)									Tensile Test *1			Hardness (HRB)	Inter-granular corrosion test
	C	Si	Mn	P	S	Cr	Ni	Pb	YS (KSI / MPa)	TS (KSI / MPa)	E (%)			
	Max	0.030	1.00	2.00	0.045	0.030	20.00	11.00	-	-	-	90		
Heat No.	-	-	-	-	-	18.00	8.00	-		205	515	28	-	
KG098-1	0.029	0.40	1.17	0.032	0.001	18.24	8.02	< 0.01		332	640	65	81	PASSED
KG065-1	0.028	0.41	1.17	0.024	0.002	18.07	8.03	< 0.01		339	640	67	84	PASSED
CFA158-04-112CR	0.025	0.53	1.02	0.037	0.002	18.30	8.14	< 0.01		372	702	56	88	PASSED
KG064-1	0.019	0.41	1.12	0.027	0.002	18.12	8.03	< 0.01		373	673	46	83	PASSED
JG201-1	0.023	0.44	1.13	0.028	0.002	18.05	8.02	< 0.01		348	655	46	79	PASSED
KS125-1	0.024	0.52	1.00	0.028	0.001	18.14	8.02	< 0.01		392	689	48	84	PASSED
KG226-1	0.026	0.38	1.15	0.031	0.001	18.16	8.03	< 0.01		363	673	54	88	PASSED

WE HEREBY CERTIFY THAT THE PRODUCT DESCRIBED HEREIN HAS BEEN MANUFACTURED, SAMPLED, TESTED & INSPECTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE ABOVE SPECIFICATION & PURCHASE ORDER;

AND WAS FOUND SATISFIED TO THE REQUIREMENTS. MATERIAL IS FREE FROM MERCURY & RADIOACTIVE CONTAMINATION.

TENSILE REQUIREMENT: CONFORMS TO ASTM A370-12a STANDARD, SPECIMEN GAUGE WIDTH 19.2MM. FOR 3" ABOVE & 3" BELOW DONE SIMULATION TEST FROM PIPE. LONGITUDINAL DIRECTION, GAUGE LENGTH 2" (50mm)

NOTE: MADE IN MALAYSIA STEEL MAKING PROCESS : AOD / VOD

PIPE RAW MATERIAL - WELDED BY ELECTRIC FUSION WELDING PROCESS WITH NO FILLER METAL

INTERGRANULAR CORROSION TEST ACCORDING TO ASTM A262-10 PRACTICE E

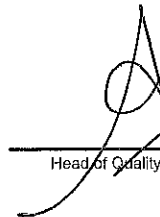
HARDNESS ACCORDING TO NACE-MR0175-2015 / ISO 15156 -2015 & NACE-MR0103-2015

HEAT TREATMENT: SOLUTION TREATED AT MINIMUM 1050°C, RAPIDLY COOLED WITH WATER

CHEMICAL COMPOSITION CAPTURED FROM RAW MATERIAL'S HEAT ANALYSIS

*1: YS: YIELD STRENGTH TS: TENSILE STRENGTH E: ELONGATION

MATERIAL CONFORMS TO THE SPECIFICATION / STANDARD SHOWN


 OAGC
 MANAGER
 HASSANUDDIN
 Head of Quality Assurance Department