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

SPAN Suruhanjaya Perkhidmatan Air Negara
NO. SIJIL PENDAFTARAN : SPAN/BPI/300-10/553/A/W-4

SIRIM Cert. No.: PC005078

NSF Certified to NSF/ANSI 61

CERTIFIED ISO 9001 Cert. No.: ISO9001-0047465

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

INSPECTION DOCUMENT: EN 10204: 2004 Type 3.1

Customer: Unimech Engineering (M) Sdn Bhd

Product: Welded Austenitic Stainless Steel Fitting

Certificate No: PSA2-FT-4379

Date: 4 Jan 2022

PO No.	Invoice No.	Product Specification	Dimension & Inspection Specification	Delivery Condition
APO-2107-0102	L000012449	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
KG065-1	1" X 1/2"	SCH 10s	CON-REDUCER	300	WP304/304L-W	PASSED	-

Specification	Chemical Composition (%)										Tensile Test *1			Hardness	Inter-granular corrosion test
	C	Si	Mn	P	S	Cr	Ni	Pb			YS	TS	E		
Max											(KSI / MPa)		(%)	(HRB)	
Min	0.030	1.00	2.00	0.045	0.030	20.00	11.00	-			-	-	-	90	
Heat No.	-	-	-	-	-	18.00	8.00	-			205	515	28	-	
KG065-1	0.028	0.41	1.17	0.024	0.002	18.07	8.03	< 0.01			339	640	67	84	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

PANTECH STAINLESS & ALLOY INDUSTRIES SDN. BHD. QAQC MANAGER

Head of Quality Assurance Department