



HU-STEEL GROUP
Hunan Standard Steel Co Ltd

湖南申德钢铁有限公司

ORIGINAL

Add: 30th Floor, North Tower, Jinmao Square, Yuelu District,
Changsha, Hunan, China

MILL TEST CERTIFICATE (EN10204 3.1) 产品质量证明书

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收货单位 PURCHASER	SPECIALISED PIPE AND FITTINGS AUSTRALIA PTY LTD	产品 PRODUCTS	不锈钢焊管 (压槽) WELDED STAINLESS STEEL PIPES	证明书编号 CERT NO	HSCO250033-CQ1
合同编号 CONTRACT NO	HSCO 250033 _SPFA 12734	交货状态 DELIVERY CONDITION	固溶 SOLID SOLUTION PICKLING	签发日期 DATE OF ISSUE	2025/4/9
标准 & 材质 STANDARD & GRADE	ASTM A312/A312M - 24a TP316/316L			规格标准 SPECIFICATION	ASME B36.19

炉号	规格尺寸 SPECS					支数	重量	拉伸试验 TENSILE TEST (Mpa) (BASE METAL)				冲击 CHARPY V NOTCH IMPACT TEST 0°C (L90-7.5-0)			管端处理	晶粒度	静水压	无损探伤 NDT	
HEAT NO	OD (INCH)	WT (Sch)	OD (MM)	WT (MM)	L (M)	PCS	MT	屈服YS	拉伸TS	伸长 EL%	焊缝抗拉TS Weld Seam	1	2	3	END HANDLING	GRAIN SIZE	HYDRO TEST	涡流 ET	射线 X RAY
N241113AY05	6"	10S	168.3	3.4	5.1	360	25.806	327/344	654/661	53/55	648-655	/	/	/	Vitaulic Roll Groove	Level 5	/	/	PASS
N241122AX06	6"	10S	168.3	3.4	5.1	360	25.806	332/316	636/626	56/53	628-632	/	/	/	Vitaulic Roll Groove	Level 5	/	/	PASS
A241029AB21	6"	10S	168.3	3.4	5.1	165	11.828	351/356	653/655	56/56	671/646	/	/	/	Vitaulic Roll Groove	Level 5	/	/	PASS
合计TOTAL:						885	63.440												

炉号	化学成分 CHEMICAL COMPOSITION % (BASE METAL)														压扁	弯曲	晶间腐蚀	硬度	外观检测
HEAT NO	C	Si	Mn	P	S	Cr	Ni	Mo	N	Cu					FLATTEN	BEND	Intergranular Corrosion	HRB	VISUAL & DIMENSIONAL CHECK
N241113AY05	0.017	0.42	1.04	0.040	0.001	16.560	10.05	2	0.035	/					/	PASS	PASS	82	PASS
N241122AX06	0.018	0.63	1.04	0.032	0.002	16.420	10.020	2	0.030	/					/	PASS	PASS	82	PASS
A241029AB21	0.021	0.31	1.07	0.033	0.002	16.400	10.01	2.03	0.036	/					/	PASS	PASS	81	PASS

备注 NOTE:	本产品已按照标准要求进行制造和检验, 结果符合要求, 特此证明。 WE HEREBY CERTIFY THAT THE MATERIALS HAS BEEN MANUFACTURED & TESTED IN ACCORD WITH REQUESTED STANDARD & GRADE, AND ITS RESULTS MEET THE REQUIREMENTS.	签发人	质检部门盖章
		ISSUER	QC DEPT STAMP



浙江圣洁钛业科技有限公司
Zhejiang Shengjie Titanium Tehnology Co.,Ltd.
证书编号Certificate No.: MTC-SJ250305501
客户CUSTOMER:

产品质量证明书
MILL TEST CERTIFICATE

TQR/ZSJ-3.10-07-0/A
编号N.: TS2733I95-2025

合同号Contract N.: HSCOCG250033 执行标准 Standards: ASTM A312/A312M-24a

产品型号	批号	炉号	牌号	外径,mm	壁厚,mm	长度,mm	弯曲半径,mm	数量,支	重量 kg	交货状态									
Product Model	Lot No.	Heat No.	Grade	OD.	Thick.	L.	Bend radius	Pieces N.	Weight kg	Condition of Delivery									
不锈钢焊管 WELDED STAINLESS STEEL TUBES	SJ2503055-1	N241113AY05	TP316/316L	168.3	3.400	5100	/	125	/	固溶 酸洗 Solid solution pickling									
	SJ2503055-2	N241113AY05	TP316/316L	168.3	3.400	5100	/	125	/										
	SJ2503055-3	N241113AY05	TP316/316L	168.3	3.400	5100	/	110	/										
	SJ2503055-4	N241122AX06	TP316/316L	168.3	3.400	5100	/	125	/										
化学分析Chemical Analysis (%) : ASTM E1086-22																			
炉号Heat No.	元素 Element	C	Si	Mn	P	S	Cr	Ni	Mo	N	Cu								
N241113AY05	母材Base Metal	0.017	0.42	1.040	0.040	0.001	16.560	10.050	2.00	0.035	/								
N241113AY05	母材Base Metal	0.017	0.42	1.040	0.040	0.001	16.560	10.050	2.00	0.035	/								
N241113AY05	母材Base Metal	0.017	0.42	1.040	0.040	0.001	16.560	10.050	2.00	0.035	/								
N241122AX06	母材Base Metal	0.018	0.63	1.040	0.032	0.002	16.420	10.020	2.00	0.030	/								
性能检验Performance test (1 N/mm2 = 1MPa、10 BAR = 1MPa)																			
拉伸试验 Tensile test				硬度	冲击试验Timpact test			检测项目 Test Items	执行标准及验收标准 Test And Acceptance Standard	检验结果 Test Rrsult									
批号 Lot No.	抗拉强度	屈服强度	延伸率	Hardness (ASME)	温度	冲击尺寸	平均冲击功												
	(T.S.)Rm/Mpa	(Y.S.)Rp0.2/Mpa	(EL.)A/%	HRB/HRC	Temperature	Impact of Size	KV2 24 J												
SJ2503055-1	BM654/661 W648/655	BM327/344 W321/335	BM53/55 W52/53	82(HRB)	/	/	/	卷边实验 Flanging Test	/	/									
SJ2503055-2	BM635/641 W631/645	BM331/328 W333/343	BM56/54 W55/56	83(HRB)	/	/	/	压扁实验 Flattening Test	/	/									
SJ2503055-3	BM635/638 W629/636	BM337/342 W335/339	BM56/56 W55/56	82(HRB)	/	/	/	弯曲实验 Bending Test	ASME SA370	合格pass									
SJ2503055-4	BM636/626 W628/632	BM332/316 W319/326	BM56/53 W54/55	81(HRB)	/	/	/	扩口实验 Flaring Test	/	/									
产品其他检验 Other Inspections																			
检测项目 Test Items	执行标准及验收标准 Test And Acceptance Standard			检验结果 Test Rrsult		检测项目 Test Items		执行标准及验收标准 Test And Acceptance Standard		检验结果 Test Rrsult									
表面质量 Visual Examination	ASTM A312			合格pass		水压试验 Hydrostatic Test		/		/									
尺寸 Size	ASTM A312			合格pass		水下气压试验 Underwater Air Tightness test		/		/									
晶间腐蚀 Intergranular Corrosion	ASTM A262 E			合格pass		涡流检测 Eddy Current Testing		/		/									
晶粒度试验 Grain Size	ASTM E112			5级		超声检测 Ultrasonic Testing		/		/									
						X-射线检测 X-Ray Inspection		ASME VIII UW-51		合格pass									
说明: 以上检验项目若填上了检验结果表示已做该项目的检验。Remark: The above items with inspection result are those which have been made already.																			
质量承诺 Quality guarantee																			
本公司产品均严格按照标准执行生产与检验, 检验结果合格。 The company's products are strictly in accordance with the standards of production and inspection, the inspection results are qualified,																			
试验与检验责任人Test and inspection responsibility: 范文森				日期Date: 2025.03.11		质量管理部负责人 Quality Management Department: 范文森			日期Date: 2025.03.11										

厂址: 中国浙江省海宁市尖山新区祥虹路8号
Add: No. 8 Xianghong Road, Jianshan New District, Haining City, Zhejiang Province, P. R. China

证书编号Certificate No.: MTC-SJ250305502

客户CUSTOMER:

产品质量证明书
MILL TEST CERTIFICATE

TQR/ZSJ-3.10-07-0/A

编号N.: TS2733195-2025

合同号Contract N.: HSCOCG250033

执行标准 Standards: ASTM A312/A312M-24a

产品型号	批号	炉号	牌号	外径,mm	壁厚,mm	长度,mm	弯曲半径,mm	数量,支	重量 kg	交货状态
Product Model	Lot No.	Heat No.	Grade	OD.	Thick.	L.	Bend radius	Pieces N.	Weight kg	Condition of Delivery
不锈钢焊管 WELED STAINLESS STEEL TUBES	SJ2503055-5	N241122AX06	TP316/316L	168.3	3.400	5100	/	125	/	固溶 酸洗 Solid solution pickling
	SJ2503055-6	N241122AX06	TP316/316L	168.3	3.400	5100	/	110	/	
	SJ2503055-7	A241029AB21	TP316/316L	168.3	3.400	5100	/	125	/	
	SJ2503055-8	A241029AB21	TP316/316L	168.3	3.400	5100	/	39	/	

化学分析Chemical Analysis (%): ASTM E1086-22

炉号Heat No.	元素 Element	C	Si	Mn	P	S	Cr	Ni	Mo	N	Cu	
N241122AX06	母材Base Metal	0.018	0.63	1.040	0.032	0.002	16.420	10.020	2.00	0.030	/	
N241122AX06	母材Base Metal	0.018	0.63	1.040	0.032	0.002	16.420	10.020	2.00	0.030	/	
A241029AB21	母材Base Metal	0.021	0.34	1.070	0.033	0.002	16.400	10.010	2.03	0.036	/	
A241029AB21	母材Base Metal	0.021	0.34	1.070	0.033	0.002	16.400	10.010	2.03	0.036	/	

性能检验Performance test (1 N/mm2 = 1MPa、10 BAR = 1MPa)

拉伸试验 Tensile test				硬度	冲击试验Timpact test			检测项目 Test Items	执行标准及验收标准 Test And Acceptance Standard	检验结果 Test Rrsult
批号 Lot No.	抗拉强度	屈服强度	延伸率	Hardness (ASME)	温度	冲击尺寸	平均冲击功			
	(T.S.)Rm/Mpa	(Y.S.)Rp0.2/Mpa	(EL.)A/%	HRB/HRC	Temperature	Impact of Size	KV≥ 24 J			
SJ2503055-5	BM650/639 W638/661	BM350/338 W331/359	BM55/55 W54/56	82(HRB)	/	/	/	卷边实验 Flanging Test	/	/
SJ2503055-6	BM629/648 W663/628	BM333/353 W355/327	BM54/56 W56/53	82(HRB)	/	/	/	压扁实验 Flattening Test	/	/
SJ2503055-7	BM622/636 W644/653	BM321/332 W346/354	BM53/54 W55/56	80(HRB)	/	/	/	弯曲实验 Bending Test	ASME SA370-2024	合格pass
SJ2503055-8	BM653/655 W671/646	BM351/356 W372/348	BM56/56 W58/55	81(HRB)	/	/	/	扩口实验 Flaring Test	/	/

产品其他检验 Other Inspections

检测项目 Test Items	执行标准及验收标准 Test And Acceptance Standard	检验结果 Test Rrsult	检测项目 Test Items	执行标准及验收标准 Test And Acceptance Standard	检验结果 Test Rrsult
表面质量 Visual Examination	ASTM A312	合格pass	水压试验 Hydrostatic Test	/	/
尺寸 Size	ASTM A312	合格pass	水下气压试验 Underwater Air Tightness test	/	/
晶间腐蚀 Intergranular Corrosion	ASTM A262 E	合格pass	涡流检测 Eddy Current Testing	/	/
晶粒度试验 Grain Size	ASTM E112	5级	超声检测 Ultrasonic Testing	/	/
			X-射线检测 X-Ray Inspection	ASME VIII UW-51	合格pass

说明: 以上检验项目若填上了检验结果表示已做该项目的检验。Remark: The above items with inspection result are those which have been made already.

质量承诺 Quality guarantee

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The company's products are strictly in accordance with the standards of production and inspection, the inspection results are qualified,

试验与检验责任人 Test and inspection responsibility:

日期Date: 2025.03.11

质量管理部负责人 Quality Management Department:

日期Date: 2025.03.11