



湖南申德钢铁有限公司
Hunan Standard Steel Co., Ltd
湖南省长沙市岳麓区环湖路1117号
1177 Huanhu Road, Yuelu District, Changsha, Hunan, China
www.husteel-group.com

产品质量证明书
MILL TEST CERTIFICATE

EN10204:2004: 3.1 Certificate NO.:HSCO241301-1

订货单位 PURCHASER	Sovda. Gurlushyk. Maslahat.	合同号 CONTRACT NO.	HSCO241301	PO号 P.O NO.	PUR-1034-2024-34
客户 CUSTOMER	Dragon Oil (Turkmenistan) Ltd	到站港口 PORT OF DESTINATION	N/A	PO 日期 PO DATE	Nov. 15th, 2024
产品标准 SPECIFICATION	API 5L Gr. B PSL-2/ASTM A106 GR.B	交货状态 DELIVERY CONDITION	BN	信用证号 L/C NO.	N/A
		产品名称 PRODUCT	无缝道管 SEAMLESS STEEL PIPE		

序号 NO.	炉号 HEAT NO.	批号 LOT NO.	连续批号 BATCH NO.	支数 PIECES	吨 TONS	长度 TOTAL LENGTHS	捆数 BUNDLES	长度范围 L.RANGE	规格 O.D.X W.T.
1	12412409A	97710A	97710A	7	0.18	42	1	6M	DN25 SCH160 33.4 *6.35MM
2	25200187	13218	13218	2	0.09	12	1	6M	DN 40 SCH160 48.26 *7.14MM
合计TOTAL				9	0.26				
备注 REMARKS									
注释 NOTES 交货条件: R, N or BN, Q, M or BM DELIVERY CONDITION: R: AS ROLLED; N or BN: NORMALIZING ROLLED, NORMAIZING FORMED, OR NORMALIZED AND TEMPERED; Q: QUENCHED AND TEMPERED; M or BM: THERMOMECHANICAL ROLLED OR THERMOMECHANICAL FORMED; M: THEMRMOMECHANICAL ROLLED.									

化学成分 CHEMICAL COMPOSITION		*10 ⁻³	C	Si	Mn	P	S	Ni	Cr	Mo	Cu	Al	V	Ti	Bi	Pb	Sb	As	Sn	Nb	B	Pb	CEV	C031	C035	C037	C039	C044	C052	C055
序号 NO.	炉号 HEAT NO.	X	2	2	2	3	3	3	3	3	3	3	3	3	4	4	4	4	4	3	3	4	2	2	2	2	2	2	2	
		MAX	24	40	120	25	15							4									43							
		MIN																												
1	12412409A	H	21	24	56	12	3	8	30	2	8	12	2	3						1	1		26							
	12412409A	P	20	20	48	10	6	8	58	1	12	10	12	1						1	1		30							
2	25200187	H	21	26	58	10	2	8	36	2	8	16	3	2								26								
	25200187	P	19	24	49	10	4	13	61	1	12	13	12	1						1	1		30							
注释 NOTES		H:HEAT ANALYSIS, P: PRODUCT ANALYSIS C030=C+Mn/6+(Cr+Mo+V)/5+(Cu+Ni)/15, C031=C+Si/30+Mn/20+Cu/20+Ni/60+Cr/20+Mo/15+V/10+5*B, C035=Cr+Mo, C037=Nb+V, C039=V+Nb+Ti, C044=Mn/C, C052=Cr+Cu+Mo+Ni+C, C055=Ni+Cu																												

拉伸实验 TENSILE TEST														
序号 No.	炉号 HEAT NO.	批号 LOT NO.	试样号 SPECIMEN	*1	*2	*3	试样类型 TYPE	屈服Y.S. Rp0.2MPa	屈服Y.S. Rp0.5MPa	抗拉T.S. MPa	伸长率 EL.%	屈强比 R.A.%	Y/T	
1	12412409A	97710A	0215-6	P	B	23	Tube,33.4mmX6.35mm		309	453	46	0.68		
2	25200187	13218	0215-7	P	B	23	L,strip,bo=12.5mm, Lo=50.8mm		341	475	30	0.72		
注释 NOTES		1* 实验类型 TEST TYPE(P: 产品实验PRODUCT TEST, S: 样品实验SAMPLE TEST);2* 取样位置LOCATION(B:管体 PIPE BODY, U: 墩粗端UPSETING END);3* 实验温度TEMPERATURE °C L 纵向取样方向 L: LONGITUDINAL, T 横向取样方向 T: TRANSVERSAL												
页码 PAGE 1/2				日期 DATE 2025/02/21				制证 PREPARED BY				Suzy Liu		





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FM-11-8.6-40-1

EN10204:2004: 3.1

Certificate NO.:NO.:HSCO241301-1

冲击实验 IMPACT TEST (ASTM A370)

序号 No.	炉号 HEAT NO.	批号 LOT NO.	试样号 SPECIMEN	*1	*2	*3	试样类型 TYPE	0°C 冲击功ABSORB ENERGY(J)					剪切断面率 SHEAR AREA(%)				侧膨胀值LE(mm)			
								1	2	3	AVG	ACC	1	2	3	AVG	1	2	3	AVG
1	12412409A	97710A	0215-6	P	B	0°C	T 5mmX 10mmX55mm	56	47	80	61		50	45	41	45				
2	25200187	13218	0215-7	P	B	0°C	T 5mmX 10mmX55mm	100	106	104	103		48	42	45	45				
注释 NOTES 1* 实验类型 TEST TYPE(P: 产品实验PRODUCT TEST, S: 样品实验SAMPLE TEST);2* 取样位置LOCATION(B: 管体 PIPE BODY, U: 墩粗端UPSETTING END);3* 实验温度TEMPERATURE °C																				

无损检测 NON-DESTRUCTIVE TEST

位置LOC.	项目ITEM	标准STANDARD	类型TYPE	级别/标样LEVEL/REFERENCE				级别 LEVEL	覆盖率 CVR	频次FREQ	结果RESULT
				L-ID	L-OD	T-ID	T-OD				
管体BODY	缺陷检验 DEFECT	ISO 10893-3	EMI	F2:N,5%	F2:N,5%	F2:N,5%	F2:N,5%		100%	100%	PASSED
管体BODY	缺陷检验 DEFECT	ISO 10893-10	UT	U2/C:N,5%	U2/C:N,5%	U2/C:N,5%	U2/C:N,5%		100%	100%	PASSED
管端 END	缺陷检验 DEFECT	ISO 10893-10	UT	U2/C:N,5%	U2/C:N,5%	U2/C:N,5%	U2/C:N,5%		100%	100%	PASSED
坡口 BEVEL	缺陷检验 DEFECT	ISO 10893-8	MT						100%	100%	PASSED
全长 FULL LENGTH	壁厚WALL THICKNESS	ISO 10893-12	UT						100%	100%	PASSED

工艺检验PROCESS INSPECTION OR TEST

项目 ITEM	检验描述 INSPECTION DESCRIPTION	结果RESULT	备注 REMARKS
表面质量 VISUAL	VISUAL INSPECTION	合格 PASSED	
几何尺寸 DIMENSIONS	SIZE & TOLLERANCE	合格 PASSED	
压扁实验 FLATTENING	FIRST FLATTENING, SECOND FLATTENING	合格 PASSED	
水压实验 HYDROSTATIC	17MPA/17MPA TIME: 6.00S-10.00s	合格 PASSED	

坡口检验 BEVEL	PLAIN ENDS	合格 PASSED	
防腐 COATING	BARE WITHOUT ANY COATING	合格 PASSED	
喷标 MARKING	AS PER STANDARD AND CLIENT'S INSTRUCTION	合格 PASSED	
包装 PACKING	IN BUNDELS, END PROTECTED WITH PLASTIC CAPS	合格 PASSED	签章SEAL FOR CERTIFICATION
声明 DECLARE	兹证明本表所列产品依据标准规定制造和检验, 并符合标准规范和订货技术要求。 WE HEREBY STATE THAT ALL PIPES ARE MANUFACTURED AND INSPECTED ACCORING TO ABOVE STANDARDS.		

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日期 DATE 2025/02/21

制证 PREPARED BY Dona liu





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		产品名称 PRODUCT	无缝钢管 SEAMLESS STEEL PIPE		

序号 NO.	炉号 HEAT NO.	批号 LOT NO.	连续批号 BATCH NO.	支数 PIECES	吨 TONS	长度 TOTAL LENGTHS	捆数 BUNDLES	长度范围 L.RANGE	规格 O.D.X W.T.
3	24B13504	S241220311	S241220311	190	8.53	1140	5	6M	DN50 SCH80 60.32 * 5.54MM
4	24B14053	S241229214	S241229214	289	19.58	1734	12	6M	DN 80 SCH40 88.9 * 5.49 MM
5	24B13672	L241223207	L241223207	4	0.39	24	1	6M	DN100 SCH40 114.3 *6.02 MM
6	24A13322	L241214304	L241214304	16	2.71	96	2	6M	DN150 SCH40 168.28 *7.11 MM
7	24B14239	L241231307	L241231307	71	14.19	426	1	6M	DN200 SCH20 219.08*6.35 MM
合计TOTAL				570	45.40				

备注 REMARKS	
注释 NOTES	交货条件: R, N or BN, Q, M or BM DELIVERY CONDITION: R: AS ROLLED; N or BN: NORMALIZING ROLLED, NORMAIZING FORMED, OR NORMALIZED AND TEMPERED; Q: QUENCHED AND TEMPERED; M or BM: THERMOMECHANICAL ROLLED OR THERMOMECHANICAL FORMED; M: THERMOMECHANICAL ROLLED.

化学成分 CHEMICAL COMPOSITION																															
序号 NO.	炉号 HEAT NO.	*10 ⁻³	C	Si	Mn	P	S	Ni	Cr	Mo	Cu	Al	V	Ti	Bi	Pb	Sb	As	Sn	Nb	B	Pb	CEV	C031	C035	C037	C039	C044	C052	C055	
		X	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	3	3	4	2	2	2	2	2	2	2	2
		MAX MIN	24 MIN	40	120	25	15								4									43							
3	24B13504	H	19	27	56	11	3	9	44	7	22	17	2	3						8	0		29								
	24B13504	P	20	26	54	8	2	7	49	1	14	18	10	2						1	1		30								
4	24B14053	H	18	26	53	11	4	9	36	3	13	13	2	4						1	0		28								
	24B14053	P	20	26	56	10	4	9	52	1	11	13	12	2						1	1		31								
5	24B13672	H	19	27	56	13	1	9	36	5	12	14	2	5						5	1		29								
	24B13672	P	18	25	52	8	2	8	49	1	10	14	10	2						1	1		28								
6	24A13322	H	17	27	54	10	2	12	40	2	14	20	2	7						7	0		28								
	24A13322	P	19	25	51	10	6	8	50	1	8	19	11	1						1	0		29								
7	24B14239	H	20	25	54	11	4	8	34	3	9	16	2	4						8	0		30								
	24B14239	P	20	25	52	10	1	8	48	1	10	14	11	2						1	1		30								
注释 NOTES		H:HEAT ANALYSIS, P: PRODUCT ANALYSIS C030=C+Mn/6+(Cr+Mo+V)/5+(Cu+Ni)/15, C031=C+Si/30+Mn/20+Cu/20+Ni/60+Cr/20+Mo/15+V/10+5*B, C035=Cr+Mo, C037=Nb+V, C039=V+Nb+Ti, C044=Mn/C, C052=Cr+Cu+Mo+Ni+C, C055=Ni+Cu																													



拉伸实验 TENSILE TEST																				
序号 No.	炉号 HEAT NO.	批号 LOT NO.	试样号 SPECIMEN	*1	*2	*3	试样类型 TYPE	屈服Y.S. Rp0.2MPa	屈服Y.S. Rp0.5MPa	抗拉T.S. MPa	伸长率 EL.%	屈强比 R.A.%	Y/T							
3	24B13504	S241220311	0215-3	P	B	23	L,strip,bo=12.5mm, Lo=50.8mm		360	471	31	0.76								
4	24B14053	S241229214	0215-4	P	B	23	L,strip,bo=12.5mm, Lo=50.8mm		336	476	34	0.71								
5	24B13672	L241223207	0215-2	P	B	23	L,strip,bo=12.5mm, Lo=50.8mm		351	491	34	0.71								
6	24A13322	L241214304	0215-5	P	B	23	L,strip,bo=38.1mm, Lo=50.8mm		292	438	38	0.67								
7	24B14239	L241231307	0215-1	P	B	23	L,strip,bo=38.1mm, Lo=50.8mm		305	483	42	0.63								
注释 NOTES		1* 实验类型 TEST TYPE(P: 产品实验PRODUCT TEST, S: 样品实验SAMPLE TEST);2* 取样位置LOCATION(B:管体 PIPE BODY, U: 墩粗端UPSETTING END);3* 实验温度TEMPERATURE °C L 纵向取样方向 L: LONGITUDINAL, T 横向取样方向 T: TRANSVERSAL																		
页码 PAGE 1/2				日期 DATE 2025/02/21				制证 PREPARED BY Suzy Liu												
冲击实验 IMPACT TEST (ASTM A370)																				
序号 No.	炉号 HEAT NO.	批号 LOT NO.	试样号 SPECIMEN	*1	*2	*3	试样类型 TYPE	0℃ 冲击功ABSORB ENERGY(J)					剪切断面率 SHEAR AREA(%)				侧膨胀值LE(mm)			
								1	2	3	AVG	ACC	1	2	3	AVG	1	2	3	AVG
3	24B13504	S241220311	0215-3	P	B	0°C	T 3.33mmX 10mmX55mm	58	55	63	58		42	45	49	45				
4	24B14053	S241229214	0215-4	P	B	0°C	T 3.33mmX 10mmX55mm	59	54	56	56.3		48	50	52	50				
5	24B13672	L241223207	0215-2	P	B	0°C	T 3.33mmX 10mmX55mm	49	49	52	50		45	47	49	47				
6	24A13322	L241214304	0215-5	P	B	0°C	T 5mmX 10mmX55mm	58	60	60	59.3		48	52	54	51				
7	24B14239	L241231307	0215-1	P	B	0°C	T 5mmX 10mmX55mm	67	59	54	60		40	44	48	44				
注释 NOTES		1* 实验类型 TEST TYPE(P: 产品实验PRODUCT TEST, S: 样品实验SAMPLE TEST);2* 取样位置LOCATION(B:管体 PIPE BODY, U: 墩粗端UPSETTING END);3* 实验温度TEMPERATURE °C																		
无损检测 NON-DESTRUCTIVE TEST																				
位置LOC.	项目ITEM	标准STANDARD	类型TYPE	级别/标样LEVEL/REFERENCE				级别 LEVEL	覆盖率 CVR	频次FREQ	结果RESULT									
				L-ID	L-OD	T-ID	T-OD					1	2	3						
管体BODY	缺陷检验 DEFECT	ISO 10893-3	EMI	F2:N,5%	F2:N,5%	F2:N,5%	F2:N,5%		100%	100%	PASSED									
管体BODY	缺陷检验 DEFECT	ISO 10893-10	UT	U2/C:N,5%	U2/C:N,5%	U2/C:N,5%	U2/C:N,5%		100%	100%	PASSED									
管端 END	缺陷检验 DEFECT	ISO 10893-10	UT	U2/C:N,5%	U2/C:N,5%	U2/C:N,5%	U2/C:N,5%		100%	100%	PASSED									
坡口 BEVEL	缺陷检验 DEFECT	ISO 10893-8	MT						100%	100%	PASSED									
全长 FULL LENGTH	壁厚WALL THICKNESS	ISO 10893-12	UT						100%	100%	PASSED									
工艺检验PROCESS INSPECTION OR TEST																				
项目 ITEM	检验描述 INSPECTION DESCRIPTION						结果RESULT		备注 REMARKS											
表面质量 VISUAL	VISUAL INSPECTION						合格 PASSED													
几何尺寸 DIMENSIONS	SIZE & TOLLERANCE						合格 PASSED													
压扁实验 FLATTENING	FIRST FLATTENING, SECOND FLATTENING						合格 PASSED													
水压实验 HYDROSTATIC	17MPa/17MPa/17MPa/17MPa/15.5MPa/ 12.4MPa/8.5MPa ; TIME: 6.00S-10.00s						合格 PASSED													
坡口检验 BEVEL	30° (0° ±5°), 1.6±0.8mm						合格 PASSED													
防腐 COATING	BARE WITHOUT ANY COATING						合格 PASSED													
喷标 MARKING	AS PER STANDARD AND CLIENT'S INSTRUCTION						合格 PASSED													
包装 PACKING	IN BUNDLES, END PROTECTED WITH PLASTIC CAPS						合格 PASSED		签章SEAL FOR CERTIFICATION											
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