

MTC No. JC13-0114-0010-M

MATERIAL TEST CERTIFICATE

Address: No.1,CHENGDE ROAD CANGZHOU CITY HEBEI PROVINCE CHINA
Item No.: 10

Certificate No.: JC13-0114-0010-M

Client										Purchase Order No.				Offer023								
Product		Seamless Alloy Steel Pipe								Grade				A335 P22								
SPECIFICATION		ASTM (edition 2010) A335								Size				Ø 101.6mm × 8.08mm × 5571mm								
Supply Condition		Process of manufacture		Fully killed/rimmed		Mode of manufacture		Heat No.		Lot No.		Total Quantity (PCS)		Total Length (M)		Total Net Weight (KGS)						
Normalizing+temper		ELECTRIC ARC FURNACE		Fully killed		Cold Drawn Seamless		12706883		1651		3		16.713		336						
								TOTAL				3		16.713		336						
Heat Treatment Detail		Chemical Composition (%)																				
Normalize (910~960℃) 35 min air cooling, temper(700~750℃) 80 min air cooling				C	Mn	P	S	Si	Cr	Mo	-	-	-	-	-	-	-	-	-	-	-	-
		Min		0.05	0.30	-	-	-	1.90	0.87	-	-	-	-	-	-	-	-	-	-	-	-
		Max		0.15	0.60	0.025	0.025	0.50	2.60	1.13	-	-	-	-	-	-	-	-	-	-	-	-
		Heat Analysis	12706883	0.10	0.46	0.011	0.006	0.27	2.22	0.928	0.00	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00			
		Product Analysis	12706883	0.08	0.44	0.008	0.003	0.26	2.23	0.890	0.00	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00			
Mechanical Properties																						
Testing Item		TS		YS		%E		HARDNESS		Flattening test	Flaring test	Apperance and dimensions	Bend test on Pipe	Crushing test	Flange test	Hydrostatic test						
		Mpa		Mpa		GL=50mm		-														
Min		415		205		30		-														
Max		-		-		-		-														
12706883	1651	505 / 513		304 / 320		31.0 / 32.0		/		Acceptable	Not Applicable	Acceptable	Not Applicable	Not Applicable	Not Applicable	Substituted by UT						
tensile specimens : 3/4 inch breadth longitudinal strip specimens, 2 inch gauge length								UT (ASTM E 213):				Acceptable.										
								ET (ASTM E309):				Acceptable										
Remarks:We hereby certify that the products were manufactured and tested strictly according to the applicable specifications and customer's purchase order .												INSPECTOR:										
												ISSUING DATE: 14 January 2014										

Manufacturer’s Authorized Inspection Representative
LV WEIMING

QIANCHENG STEEL PIPE CO.,LTD
WEBSITE:WWW.STEELPIPECHN.COM