

ArceLorMittal South Africa Limited
Tubular Products

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MATERIAL TEST CERTIFICATE

EN10204: 2004 Type 3.1
Licensed under

API 5L
API 5CT
ISO9001:2015
PED2014/08/EU

Steelmaking Facility
ArceLorMittal South Africa Ltd
Iscor Road
Newcastle 2940
PO Box, Newcastle 2940
South Africa

ArceLorMittal

Customer (A06): 4000029612
Order No (A08): 040062829320
Certificate Reference No (A03): 040062829320
Product (B01): FULLY KILLED HOT FINISHED CARBON STEEL SEAMLESS TUBES
Specification (B02): AP15L:18 B/X42 PS11 ISO3183:19 L245/L290 ASTM A106B/C:19 A53B:22 A530:18 ASME SA106B/C//SA530:21
Product Marking (B06): ARCELORMITTAL SA API Spec 5L-0319 MONOGRAM 02-23 ISO3183 L245/L290 PS11 ASTM/ASME A/SA106B/C A/SA53B 5.563 0.375
40.027 B/X42 PS11 SMLS CAST NO: 2205216 PROD/ONO: T1042961210R TESTED 3000 psi 832.9 lbs NDE MADE IN RSA

Contract No./Customer Order (A07): SUSN 178707
Material No: 1000042313
Cast/Heat No (B07): 2205216

General Information:

Quantity (B08)	Mass (B12)	Dimensions (B09-B11)		Total Length
		Tube OD	Thickness	
45(eal)	37,480,405(lb)	5.563(")	0.375(")	1,801,215(ft)

Steel making process (C70)	Final Rolling Operation (B04) As Rolled
Basic Oxygen Furnace	Final hot rolling finished above 1580°F and cooled in still air

Chemical Composition: (C71-C92) R05-(Cr+Ni+Mo+Cu+V)

Element(%)	R22-(V+Ni+Ti)					R24-(Nb+V)															
	C	Si	Mn	S	P	Cr	Ni	Mo	Cu	V	Al	Ti	Sn	Ca	N	B	Nb	CE	R22	R24	
Minimum	0.200	-	1.30	0.030	0.030	0.40	0.40	0.150	0.400	-	-	-	-	-	-	-	-	-	-	-	0.43
Maximum	0.100	0.24	1.24	0.005	0.009	0.02	0.01	0.004	0.008	0.033	0.036	0.001	0.002	0.0020	0.0100	0.0003	0.0120	0.32	-	-	0.32
Product	0.11	0.24	1.17	0.005	0.008	0.02	0.02	0.005	0.010	0.034	0.039	0.001	0.002	0.0023	0.0132	0.0003	0.0100	0.32	0.044	0.044	0.044
Product (ADD)	0.11	0.24	1.18	0.005	0.008	0.02	0.02	0.005	0.010	0.034	0.039	0.001	0.003	0.0022	0.0156	0.0003	0.0110	0.32	0.046	0.045	0.045

Mechanical Properties:

Orientation and type of tensile test (C02): Longitudinal, Strip, 1 Inch

Orientation of impact test piece (C41):

Specification Limits	UTS (Rm) C12		Yield (0.2%) C1		%EL C13 2 inch	OTHER TESTS	
	psi	ksi	psi	ksi		Category	Results
Minimum	70 000	-	42 100	-	30.0	Flattening (D51-D99)	PASSED
Maximum	-	-	-	-	-	Hydrostatic (D02-D50)	20700 kPa (3000 psi) - 5 sec
(1) Actual	75 565	-	60 916	-	34.0		
(2) Actual	77 305	-	62 511	-	36.0		

Remarks (Z01):

Material in accordance with NACE MR0175:15/ISO15156-2:15, MR0103:15, Dimensions to ASME B36.10:15, End finish to ASME B16.25:17. Material guaranteed to conform to the yield strength requirements as per ASME, Sect II, Pt D Table Y-1, 207.1. Material conforms to the visual and dimensional requirements and is made to a suitable fine grain practice. Product is mercury free, and no weld repair was done. Residual magnetism <30Gs at time of measure. ArceLorMittal SA Tubular Products operates a QA System meeting the requirements of PED 2014/68/EU, Annex 1, Par 4.3 and AD 2000-Werkblatt W0, certified by TÜV Rheinland Industrie Service GmbH, Certificate No. 01 202 ZM/Q-02 0004. Result values reported were converted from standard SI test results.

Quality Assurance Engineer, Certification: M Makgoba

Date of Release: 2023.02.05

Certified by:

We hereby certify that the material was manufactured, tested and inspected to and fully comply with the requirements of referenced specifications. No changes, amendments or additions may be made to this document. Any changes which are effected shall invalidate this certificate.

