

ArcelorMittal South Africa Limited
Tubular Products
 273 Genl. Hertzog Rd
 Peacehaven Vereeniging 1939
 PO Box 48 Vereeniging 1930
 South Africa

MATERIAL TEST CERTIFICATE

EN10204: 2004 Type 3.1
 Licensed under

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

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

ArcelorMittal

Customer (A06): 4000029920
 Order No (A08): 040062837481
 Certificate Reference No (A03): 040062837481
 Product (B01): FULLY KILLED HOT FINISHED CARBON STEEL SEAMLESS TUBES
 Specification (B02): APISI: 18 B/X42 PSL1 ISO3183:19 I245/I290 ASTM A106B/C:19 A53B:22 A530:18 ASME SA106B/C//SA530:21
 Product Marking (B06): ARCELORMITTAL SA API Spec 5L-0319 MONOGRAM 05-23 ISO3183 I245/I290 PSL1 ASTM/ASME A/SA106B/C A/SA53B 5.563 0.375
 20.014 B/X42 PSL1 SMLS CAST NO: 2302517 PROD/ONO: T024292010 TESTED 3000 psi 416.5 lbs NDE MADE IN RSA

Contract No./Customer Order (A07): SUS3 180364
 Material No: 1000042312
 Cast/Heat No (B07): 2302517

General Information:

Quantity (B08)	Mass (B12)	Dimensions (B09-B11)		Total Length
		Tube OD	Thickness	
48(ea)	19,989.549(lb)	5.563(")	0.375(")	20,014(ft)
				960.672(ft)

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

Chemical Composition: (C71-C92) R05-(Cr+Ni+Mo+Cu+V) R22-(V+Nb+Ti) R24-(Nb+V)

Element(%)	C	Si	Mn	S	P	Cr	Ni	Mo	Cu	V	Al	Ti	Sr	Ca	N	B	Nb	CE	R22	R24
Minimum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum	0.200	0.24	1.30	0.030	0.008	0.40	0.40	0.150	0.400	-	-	-	-	-	-	-	-	-	-	0.43
Heat	0.100	0.24	1.18	0.004	0.008	0.02	0.01	0.001	0.014	0.042	0.026	0.002	0.002	0.0016	0.0116	0.0006	0.0010	0.31	-	0.31
Product	0.09	0.24	1.24	0.005	0.007	0.02	0.02	0.004	0.010	0.043	0.026	0.000	0.001	0.0012	0.0065	0.0003	0.0000	0.31	0.043	0.043
Product (ADD)	0.09	0.24	1.22	0.004	0.007	0.02	0.02	0.004	0.010	0.042	0.026	0.000	0.001	0.0011	0.0116	0.0003	0.0000	0.31	0.042	0.042

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	OTHER TESTS	
	psi	psi	2 inch	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	71 214	47 427	41.0		
(2) Actual	73 969	49 168	44.0		

Remarks (Z01):

Material in accordance with NACE MR0175/ISO 15156-2:21, MR0103:15, Dimensions to ASME B36.10:22. End finish to ASME B1.6:25:17. Material guaranteed to conform to the yield strength requirements as per ASME Sect II, Pt D, Table Y-1, 2021. 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 I, Par 4.3 and AD 2000-Merkblatt W0, certified by TÜV Rheinland Industrie Service GmbH, Certificate No. 01 202 ZK/Q-02 0004. Result values reported were converted from standard SI test results.

Quality Assurance Engineer, Certification: M Makgoba

Date of Release: 2023.05.18

Certified by:

M Makgoba

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.