

**ArcelorMittal South Africa Limited
Tubular Products**

273 Genl. Hertzog Rd
Peacehaven Vereeniging 1939
PO Box 48 Vereeniging 1930
South Africa

Telephone +27 (0)16 450 4220
Fax +27 (0)16 423 4906

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**
Mario Milani Road, Peacehaven
Vereeniging 1939
PO Box 48, Vereeniging 1930
South Africa



Order No (A00):	4000040773	Contract No/Customer Order (A07):	SUS8 174162
Certificate Reference No (A03):	040062774628	Material No:	1000042312
Product (B01):	FULLY KILLED HOT FINISHED CARBON STEEL SEAMLESS TUBES	Cast/Heat No (B07):	38B0024
Specification (B02):	API5L:18 B/X42 PSL1 ISO3183:19 L245/L290 ASTM A106B/C/A53B/A530:18 ASME SA106B/C//SA53B/SA530:17		
Product Marking (B06):	ARCELORMITTAL SA API Spec 5L-0319 MONOGRAM 09-21 ISO3183 L245/L290 PSL1 ASTM/ASME A/SA106B/C A53B 5.563 0.375 20.014 B/X42 PSL1 SMLS CAST NO: 38B0024 PROD/ONO: T0742849510 TESTED 3000 psi 416.5 lbs NDE MADE IN RSA		

General Information:

Quantity (B08)	Mass (B12)	Dimensions (B09-B11)			Total Length
		Tube OD	Thickness	Length	
149(ea)	62,050.892(lb)	5.563(")	0.375(")	20.014(ft)	2,982.086(ft)

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

Chemical Composition: (C71-C92) R22-(V+Nb+Ti)

R24-(Nb+V)

Element(%)	C	Si	Mn	S	P	Cr	Ni	Mo	Cu	V	Al	Ti	Sn	Ca	N	B	Nb	CE	R22	R24
Minimum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum	0.200	1.30	0.030	0.030	0.40	0.40	0.40	0.150	0.400									0.43		
Heat	0.140	0.27	1.23	0.003	0.006	0.08	0.08	0.018	0.180	0.002	0.041	0.018	0.010	0.0017	0.0069	0.0005	0.0260	0.38		
Product	0.10	0.28	1.19	0.003	0.013	0.10	0.08	0.019	0.150	0.045	0.023	0.001	0.009	0.0013	0.0217	0.0006	0.0030	0.35	0.049	0.048
Product (ADD)	0.10	0.28	1.19	0.003	0.013	0.10	0.08	0.019	0.150	0.045	0.023	0.001	0.009	0.0013	0.0217	0.0060	0.0030	0.35	0.049	0.048

Mechanical Properties:

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

Orientation of impact test piece (C41):

Specification Limits	UTS (Rm) C12 psi	Yield (0.2%) C1 psi	%EL C13 2 inch
Minimum	70 000	42 100	30.0
Maximum	-	-	-
(1) Actual	74 404	57 290	36.0
(2) Actual	76 290	59 176	38.0

OTHER TESTS	
Category	Results
Flattening (D51-D99)	PASSED
Hydrostatic (D02-D50)	20700 kPa (3000 psi) - 5 sec

OTHER TESTS	
Category	Results
NDI: EMI (D02-D50)	PASS - ASTM E570 - 12.5% NOTCH
NDI: UT (D02-D50)	UT not required
HV 22 lbs C31	164 166 166

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, 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 ZA/Q-02 0004.

Result values reported were converted from standard SI test results.

Quality Assurance Engineer, Certification: M Makgoba

Date of Release: 2021.09.17

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.