



COGNE ACCIAI SPECIALI S.p.a.

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CAP. SOC. 100.000.000 EUR INT. VERS.
C.F. 02187380987
VAT: IT00571320076 - R.E.A. n. AO-50474

Company with management systems ISO
approved and certified according to ISO 9001,
ISO/TS 16949 e ISO 14001.

C168378

INSPECTION CERTIFICATE 3.1 (EN 10204:2004)
DOCUMENT NUMBER 2016048502
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CUSTOMER: COGNE SPECIALTY STEEL USA, INC
CUSTOMER'S ORDER: P038572
MANUFACTURER'S WORKS: AOSTA, VIA PARAVERA 16 - ITALY
PRODUCER OF THE DOC: QUALITY DEPARTMENT
MANUFACTURER'S WORKS ORDER NO: 25210588 / 80 MARK OF THE MANUFACTURER: COGNE
DISPATCH NOTE: 81074516 / 10 WEIGHT: 9,479.72

THE CERTIFIED PRODUCTS ARE COMPLYING TO THE PURCHASE ORDER

INTERNAL SPEC: AMSQQS763
PRODUCT: 56042 SPE ROUGHPEELED ROUND BARS TOLERANCE: + 0,0788 - 0
SURFACE FINISH: 1X Hot Finished
PRODUCT DELIVERY CONDITION: RS SOLUTION ANNEALED
PRODUCT DIMENSIONS (Inch): 8.500 LENGTH (inch) 00264 / 00288
GRADE: AISI 316/316L - UNS31600/31603 INTERNAL GRADE: F316L IMCO
IDENTIFICATION HEAT NO: 601551 IDENTIFICATION LOT NO: 669980
MARKING OF THE PRODUCT: 316L TEST PIECE N: 998

REFERENCE NORMS: ASTM A276/276M(16), ASTM A479/A479M(16), ASTM A484/A484M(16), ASTM A193/A193M(16) B8MCL1, ASME SA276(15), ASME SA479(15), ASME SA484(15), ASME SA193(15) B8MCL1, AMS5653H, AMS5648L, AMS-QQS-763D2015, NACE MR0175/ISO15156-3(15), NACE MR0103 2015, NORSOK M630 MDS S01 Rev5, EN 10272(07).
REFERENCE NORMS FOR CHEMICAL COMPOSITION AND MECHANICAL PROPERTIES: ASTM A182/A182M(15)/ASME SA182(15), ASTM A314/A314M(15)/ASME SA320(15), ASTM A320/A320M(15A)/ASME SA320(15) B8MCL1, EN 10222-5(2000).
AISI 316/316L UNS S31600/S31603, EN 1.4401/1.4404.
SOLUTION TREATED AT 1050°C / 1 min x mm / WATER.
STEELMAKING EAF + AOD
QTC ON PROLONGATION OF BARS TESTS AT MID RADIUS (CENTER POS. FOR SIZES <2 INCHES).
HOT FORGED
REDUCTION RATIO 11.4
INITIAL STATUS 0.0

CHEM. COMP. (%W/W) - LADLE ANALYSIS ACCORDING TO ASTM E1019-A751-E1086-E415-A580
Control lot No. - Weight :020000646396 - 81,698 KG

ELEMENTS OBTAINED	C	Si	Mn	P	S	N	Cr	Mo	Ni	Cu
OBTAINED	0.012	0.36	1.74	0.025	0.023	0.075	16.69	2.08	10.16	0.28
ELEMENTS OBTAINED	Co									
OBTAINED	0.16									

HARDNESS TEST IN AS DELIVERY CONDITION
Control lot No. - Weight :020000647179 - 5,293 KG
SPECIFICATION ASTM A370-E10 HARDNESS TEST HB TESTING METHOD: 10/3000
OBTAINED 164

IMPACT TEST IN AS DELIVERY CONDITION
Control lot No. - Weight :020000647179 - 5,293 KG
SPECIFICATION EN ISO 148-1-KV2 DIRECTION OF THE TEST PIECE: T
TYPE OF TEST PIECE KV
TEST TEMPERATURE °C 196-
MEASUREMENT UNIT J
OBTAINED 107 116 114

C10 8378



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GRAIN SIZE
Control lot No. - Weight :020000647179 - 5,293 KG
SPECIFICATION -- ASTM E112 --
OBTAINED 0 1

HEAT TREATMENT PERFORMED IN CALIBRATED FURNACES ACCORDING TO INTERNAL PROCEDURE PR-GDQ. ITT COMPLYING WITH API6A Annex M.
CORROSION TEST ACCORDING TO ASTM A262 Practice E EN ISO 3651-2 (NO SIGNS OF FISSURES OR CRACKS AT 20X MAGNIFICATION): SATISFACTORY.
SURFACE CONTROL BY VISUAL INSPECTION: CONFORMING.
DIMENSIONAL CONTROL ACCORDING TO ASTM A484: CONFORMING.
ULTRASONIC TEST ACCORDING TO EN 10308 Class.3, equivalent to
ASTM A388 FBH5 (for size <=250 mm) and FBH8 (sizes >250 mm): SATISFACTORY.
ANTIMIX TEST: SATISFACTORY.

TENSILE TEST
Control lot No. - Weight :020000647179 - 5,293 KG
SPECIFICATION -- ASTMA370-E8-0.5"SECC DIRECTION OF THE TEST PIECE: T

MEASUREMENT UNIT	Rm B KSI	Rp02_B KSI	Z B %	AL2 B %
OBTAINED	80	41	56.7	4.0 D 54.0

NO WELDING REPAIR ON THE MATERIAL.
MARKING: PRODUCER LOGO, MATERIAL NO, HEAT NO, LOT NR.
THE PRODUCT SATISFIES CE DIRECTIVES: 2011/65 - 2000/53 2002/95(RoHS) 2003/11 - 2005/618 AND PED 2014/68/EU.
THE MATERIAL IS FREE OF ANY MERCURY, MERCURY COMPOUNDS AND OR RADIUM CONTAMINATION AT TIME OF SHIPMENT AND WAS PRODUCED WITHOUT
USING OZONE DEPLETING SUBSTANCES OF CLASS I AND II.
QUALITY SYSTEM CERTIFIED BY I.G.Q ACCORDING TO UNI EN ISO
9001:2008 - ISO/TS 16949:2009 (THE LAST ONE ONLY FOR HOT ROLLED-PEELED-GROUND, STAINLESS STEEL BARS AND ATOMIZED METALLIC POWDERS).
ALL THE NORMS MENTIONED ARE INTENDED IN THEIR LATEST REVISION AT THE DATE OF ISSUE OF THIS DOCUMENT.
COUNTRY OF ORIGIN: ITALY, THE MATERIAL COMPLES WITH FAR DFARS
252.225-7009 ALT 1.
THE ABOVE ARE TRUE AND CORRECT RESULTS OF TESTS ON SAMPLES OF THE MATERIAL. RESULTS ARE CONFORM TO THE SPECIFICATION(S) APPLICABLE
AND ARE RECORDED.
THE RECORDING OF FALSE, FICTIOUS OR FRAUDULENT STATEMENTS OR ENTRIES ON THIS DOCUMENT MAY BE PUNISHABLE AS A FELONY UNDER U.S.
FEDERAL STATUTES.