

Manufacturer
Ugine
 Avenue Paul Girod - CS 90100
 73403 Ugine Cedex France
www.ugitech.com

INSPECTION CERTIFICATE 3.1
 EN 10204 / 3.1



Certificate :
 All UGITECH products were produced according to the certified quality system (at least ISO 9001) and according to customer requirements on purchase orders, as per requirements in standards IATF 16949, EN ISO 9001:2015, ISO 13485 code RC and/or ASME section III, EN 1204/68/EN AD2010 W0. Chemical analysis and mechanical properties tests were performed by ISO/CEI 17025 accredited laboratories.

Supplier's mark :

Purchase : 12672 BIRCELİK PASLANMAZ CELİK TICARET Purchase order reference : offre DPSM N° 190500 Order number : 919538 10 Certificate : 84107333 900001

Product : UGIPURE 1.4441 BAR GROUND POLISHED WORK HARDENED H8 ROUND 16,000MM LONG 3,000M +50,000MM -0,000M

Melting process : EAF + AOD + CC + ESR Part : 1830067000 Heat n° : 836903 Weight : 203 kg

Pieces Nbr : 1 Shape : round Dimension : 16,000 Forging ratio : 0

Standard & Customer's specification : UNS S31673 Cold-Worked-ASTM F138 -13a 1.4441-Écroui à froid-ISO 5832-1 2016

CHEMICAL ANALYSIS Test n° : GNCW

%	C	Si	Mn	Ni	Cr	Mo	Cu	S	P	N
Min				13,0000	17,0000	2,2500				
Max	0,0300	0,7500	2,0000	15,0000	19,0000	3,0000	0,5000	0,0100	0,0250	0,1000
Heat	0,0210	0,3230	1,8440	14,8810	17,7580	2,7600	0,1050	0,0002	0,0177	0,0790
Product										

MECHANICAL CHARACTERISTICS Result as delivered : Work hardened

T _{test} °C	Test n°	Marker n° Direction	Tensile test				Hardness					
			Yield strength Rp0.2% MPa	Tensile strength Rp1% MPa	Tensile strength Rm MPa	Elongation A5 %	Elongation AG %	Red Area Z %	Hv 5	HRb	HRc	
		Min	690		860	12	12					
		Max			1100							
20	GNCW	1 L	925		1058	14	16		341			

METALLOGRAPHIC CHARACTERISTICS Test n° : GNCW

Apparent grain size	Min - Max	Ferrit %	Min	Max
ASTM E112	> 5	6,5 - 8,5		0,0
Cleanliness : ASTM E45A Meth. A	Thin			
	A	B	C	D
	Max	1,5	1,5	1,5
Cleanliness : ISO 4967 Meth. A	Thin			
	A	B	C	D
	Max	1,5	1,5	1,5

IRON BALANCE
 NO DELTA FERRITE, CHI OR SIGMA PHASE AT X100 MAGNETUDE

We declare that the mentioned product is in compliance with the requirements of the contract and that, after checks and tests, it meets in all respects the Bırçelik requirements and applicable standards and regulations, except reservations or exceptions as listed in this declaration of conformity (NF L 00-015 C); Document validated by electronic signature. Material manufactured in the REACH regulation respect.

Ugine the 10.11.2018
 The quality inspector

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