

### QUALITY CERTIFICATE

№ 2311-118 Issued Date: 12.11.2023

**Manufacturer: PlasmaTec LLC**  
 18 Pravednykiv svitu str., Vinnytsia, Vinnytsia  
 region, Vinnytsia district, Ukraine, 21036

Product	
Welding electrodes Monolith 7018-1 TM MONOLITH d 5 mm (3/16"): pack 5 kg (11 LB)	
Specification/Classification	AWS A5.1 / SFA-5.1: E7018-1 CSA W48: E4918-1 H8 EN ISO 2560-A-E 46 5 B 3 2 H5
Batch classification according to EN ISO 14344	C5
Lot Number	003

#### Mechanical properties of weld metal according to EN 10204, type 3.1

Index	Requirements (AWS A5.1)	Actual data
Tensile strength, (MPa/ksi)	min. 490 (70)	561 (81)
Elongation, %	min. 22	31
Yield strength, (MPa/ksi)	min. 400 (58)	465 (67)
Impact energy (KV), J/(ft-lb) (-50°C/-58°F)	min. 27 (20)	84 (62)
Diffusible hydrogen, ml/100g	max. 8	3.7

#### Chemical analysis of weld metal, % according to EN 10204, type 3.1

Index	Requirements (AWS A5.1)	Actual data
C	max. 0.15	0.08
Si	max. 0.75	0.57
Mn	max. 1.6	1.34
P	max. 0.035	0.026
S	max. 0.035	0.008
Cr	max. 0.2	0.071
Ni	max. 0.3	0.022
Mo	max. 0.3	0.005
V	max. 0.08	0.01
Mn+Cr+Ni+Mo+V	max. 1.75	1.45

#### Post weld heat treatment - As welded

The product was manufactured and supplied according to a Quality System Program that meets the requirements of ISO 9001. The delivery conditions are in accordance with EN ISO 544.

**Head of Technical Control: Andrii Babyn**



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Lot Number identification: **001 3.2 XO** (example of Lot number), where **001** – actual Lot Number, 3.2 XO - additional information (3.2 - electrode size in mm; X – pressing team, O - packing team)