

QUALITY CERTIFICATE

№ 2507-079 Issued Date: 07.07.2025

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

Customer: Monolith Bison Inc
501-10022 110 Street Nw, Edmonton, Alberta, T6V 0C6, Canada

Product
Welding electrodes Monolith 7018-1 H4R TM MONOLITH d 4 mm (5/32"): vacuum 5 kg (11 LB)

Specification/Classification	AWS A5.1 / SFA-5.1: E7018-1 H4R EN ISO 2560-A- E 46 5 B 3 2 H5 CSA W48: E4918-1 H4 4Y46H5
Batch classification according to EN ISO 14344	C5
Lot Number	004

**Mechanical properties of weld metal
EN 10204, type 2.2**

Index	Requirements (AWS A5.1)	Typical data
Tensile strength, (MPa/ksi)	min. 490 (70)	586 (85)
Elongation, %	min. 22	25
Yield strength, (MPa/ksi)	min. 400 (58)	527 (76)
Impact energy (KV), J/(ft-lb) (-50°C/-58°F)	min. 27 (20)	55 (41)
Diffusible hydrogen, ml/100g	max. 4	3.1

**Chemical analysis of weld metal, %
EN 10204, type 3.1**

Index	Requirements (AWS A5.1)	Actual data
C	max. 0.15	0.09
Si	max. 0.75	0.64
Mn	max. 1.6	1.37
P	max. 0.035	0.024
S	max. 0.035	0.007
Cr	max. 0.2	0.1
Ni	max. 0.3	0.05
Mo	max. 0.3	0.006
V	max. 0.08	0.01
Mn+Cr+Ni+Mo+V	max. 1.75	1.54

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))