

OK Autrod 2504

A ferritic stainless steel solid wire with approximately 15 % austenite, high carbon content and 25 % Cr for welding similar and matching heat resistant ferritic-austenitic and ferritic steels. OK Autrod 2504 is developed and designed for the automotive industry and used for production of exhaust systems where oxidizing and sulfur containing combustion gases are expected. The wire has excellent welding properties and should be used when there is a need for very good resistance to corrosion and thermal fatigue. Resistant to scaling up to 1100°C. OK Autrod 2504 is suitable to use when welding base material 1.4821 / X15CrNiSi25-4; 1.4823 / GX40CrNiSi27-4 1.4713 / X10CrAlSi7; 1.4724 / X10CrAlSi13; 1.4742 / X10CrAlSi18; 1.4762 / X10CrAlSi25; 1.4710 / GX30CrSi7; 1.4740 / GX40CrSi17; ASTM A 297 Gr. HC, HD; AISI 327.

Specifications

Classifications	EN ISO 14343-A : G 25 4 Werkstoffnummer : ~1.4820
Approvals	CE : EN 13479 UKCA : EN 13479

Approvals are based on factory location. Please contact ESAB for more information.

Alloy Type	Ferritic (with ~15 austenite) 25 % Cr - 4 % Ni - High C
Shielding Gas	M12 (EN ISO 14175)

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
As Welded	570 MPa	680 MPa	20 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
As Welded	20 °C	60 J
As Welded	-20 °C	20 J

Typical Wire Composition %

C	Mn	Si	S	P	Ni	Cr	Mo	Al	Cu
0.07	1.1	0.65	0.005	0.019	4.4	25.1	0.1	0.001	0.08

Typical Wire Composition %

N	Nb	Ti	Co	PRE
0.06	0.01	0.001	0.05	26.5

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
0.07	1.1	0.6	0.004	0.019	4.4	25.1	0.1	0.08	0.07

Typical Weld Metal Analysis %

Nb	Co	PRE
0.01	0.05	26.5

Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate
0.8 mm	50-140 A	16-22 V	3.4-11.0 m/min	0.8-2.7 kg/h
1.0 mm	80-190 A	16-24 V	2.9-8.4 m/min	1.1-3.1 kg/h
1.2 mm	180-280 A	20-28 V	4.9-8.5 m/min	2.6-4.5 kg/h
1.6 mm	230-350 A	24-28 V	3.2-5.5 m/min	3.0-5.2 kg/h