

Better Wear and Corrosion Control

Cobalt-Based Superalloy Wires for Weld Hardfacing and Electric Arc Wire Applications

Oerlikon Metco is pleased to introduce our portfolio of cobalt-based superalloy wire materials designed for wear and corrosion control.

Our hardfacing wires, available in several compositions and diameters, will give you proven results for your application, and can be applied using GMAW (Gas Metal Arc Welding), GTAW (Gas Tungsten Arc Welding), Wire Laser Cladding or Electric Arc Wire Thermal Spray.

Get reliable deposits again and again that are resistant to many types of wear and corrosion, including saline and various acidic media.

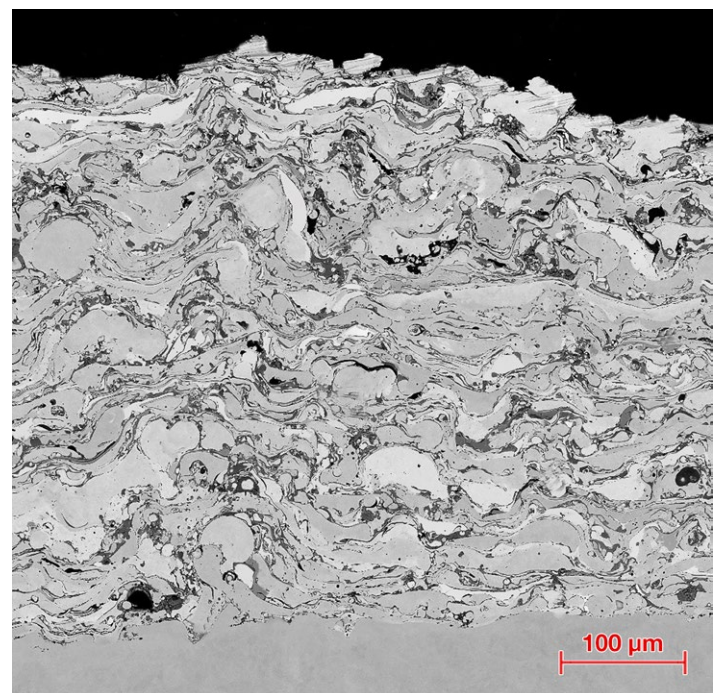
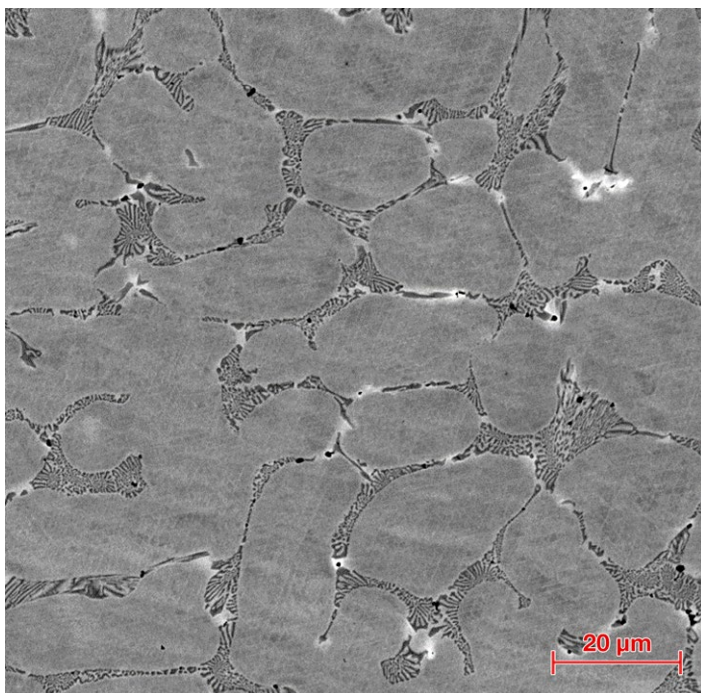
Our cobalt-based superalloy wires will become your 'go-to' choice to solve your toughest surface challenges!

For more information on these products, please refer to our product datasheet.

Product	Similar To	Available Wire Diameters
Metco 8100	Stellite 1	
Metco 8101	Stellite 6	1.2 mm (0.047 in) and
Metco 8102	Stellite 12	1.6 mm (0.063 in)
Metco 8103	Stellite 21	

Use these wires for create deposits for a wide range of purposes, such as:

- Dies
- Extrusion screws
- Gates, seats and plugs for chemical and petrochemical valves
- Bearing surfaces
- Cutting surfaces such as chain saw bars, saw teeth and hot shears
- And much more!



Left: Metco 8101 applied using GMAW. **Right:** Metco 8103 applied using Electric Arc Wire Spray.

Process:	GMAW Weld Deposit ^a			Electric Arc Wire		
Test:	Hardness [HRC]		ASTM G65-A	Impact Cycles ^b	ASTM C633	Microhardness
Product	3-Layer Weld	1-Layer Weld	Abrasion ^b	[20 J Load]	Bond Strength	[HV0.3]
			[vol. loss mm³]		[MPa (psi)]	
Metco 8100	51 to 56	46 to 51	114	5000 no failure	45 to 55 (6500 to 8000)	600 to 800
Metco 8101	39 to 44	34 to 48	271	5000 no failure	52 to 62 (7500 to 9000)	300 to 500
Metco 8102	45 to 50	39 to 44	241	5000 no failure	52 to 62 (7500 to 9000)	400 to 600
Metco 8103	30 to 35	25 to 30	276	5000 no failure	52 to 62 (7500 to 9000)	200 to 400

^a All welds applied to a mild steel coupon (15 to 20 mm thick)

^b Performed on first weld layer

Ready to get better protection for your systems and components?

Talk to your Oerlikon Metco Account Representative today!

Stellite is a registered trademark of Kennametal Inc.

Information is subject to change without prior notice.

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