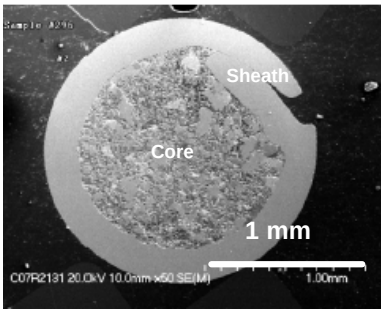
Product Technical Information

Nanostructured Alloyed Cored Wire Feedstock

*Nano*Core™ W7406-N Wire for Hardfacing Surfaces

Photo of a typical cored wire bundle



SEM micrograph of cored wire cross-section

Thermal Spray or Welding Grade Cored Wires

Cored Wire Size: 1.6 mm or 1/16 in diameter (or other sizes can be custom made).

Cored Wire Composition

***Nano*Core™ W7406-N**	**Nominal Composition**								
	Ni	Cr	Fe	Si	C	W	Co	B	Ce
	Balance	14.2	2.52	2.5	1.33	17.3	2.43	1.78	0.81

Features

The NanoCore™ W7406-N is a nanostructured cored wire that exhibit properties including:

- excellent coating bond strength to the coated component
- can withstand high temperatures
- excellent corrosion resistance
- excellent erosion and abrasive wear resistance

This wire exhibits properties similar to Colmonoy products, but may exhibit better high temperature wear resistance due to nanoparticle alloying and dispersion strengthening of the matrix phase.

Suggested Applications

***Nano*Core™ W7406-N** is a special thermal spray or arc welding cored wire for intermediate to high temperature hardfacing applications, providing wear-, erosion-, and corrosion-resistant surfaces. Typical applications are rollers in steel mills and other aggressive working environments, where abrasive, erosive, and corrosive resistance are important

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Contact Information

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