

Inco Type 210

Inco Type 210 nickel powder is an extra fine filamentary, high purity, particle developed and produced by Vale Inco carbonyl technology.

The powder consists of a chain-like network of fine sub-particles of 0.5 – 1.0 microns in diameter. The highly branched, three dimensional particles are very long.

The unique morphology makes the powder ideally suited to the formation of conductive networks.

Applications

Inco Type 210 can be sintered at relatively low temperatures either on its own or mixed with Inco Type 255 powder to give highly porous structures

Inco Type 210 is used as a conductive additive in a variety of media including battery and fuel cell active materials, and as a conductive pigment in coatings, especially for EMI shielding applications

Inco Type 210 is used as an effective binder metal in diamond tools and hard metals

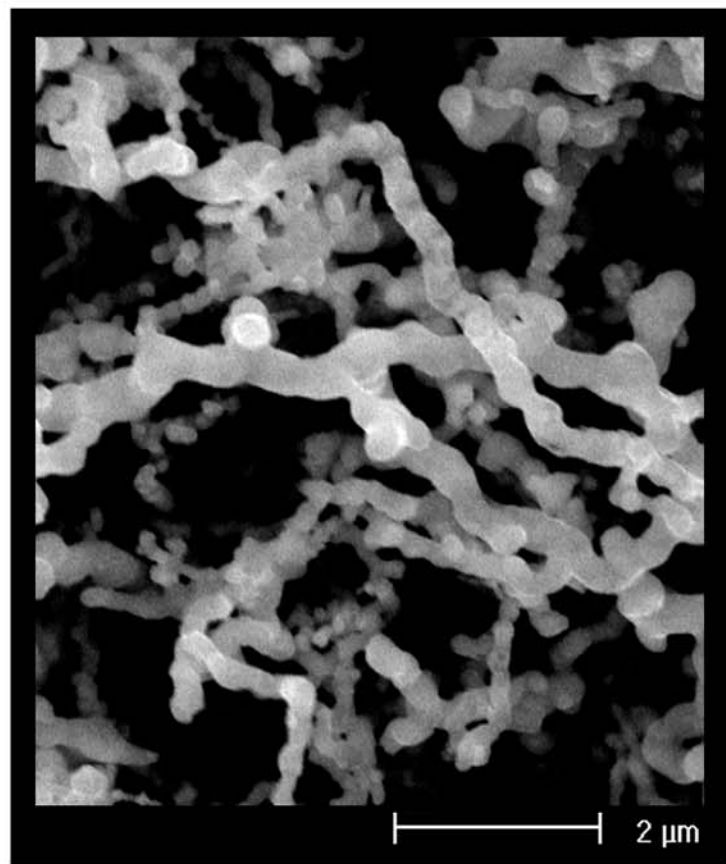
Advantages

Tight control of the particle size and bulk density of Inco Type 210 provides well controlled porosity in battery and fuel cell electrodes and other porous structures.

Provides a ferromagnetic component to shielding paints.

Provides enhanced corrosion resistance in conductive coatings.

Enhances the toughness and corrosion resistance in diamond and hard metal binder applications.



Features

Benefits

Shape

Ultra-fine, three-dimensional filamentary structure

Creation of 3-D Structure:
Allows production of conductive networks

Size Uniformity

Reproducible distribution of ultra-fine filamentary particles

Consistent Performance:
With uniform, repeatable stability and performance

Experience

Decades as a reliable supplier to the nickel battery and conductive paint industry worldwide

Continued Commitment:
To meeting exacting customer specifications

Traceability

Each batch is tested and recorded from refinery to customer delivery

Confidence in Sourcing:
Complete tracking 'paper trail', from refinery to finished product

ISO-9001

All powders are produced in ISO 9001 qualified refineries

Conformance: *To stringent requirements that demand ISO 9001 standards*

Steel drum internally coated with protective, inert resin

Approximate Dimensions

Diameter: 410 mm
 Height: 640 mm
 Net Weight: 25 kg
 Gross Weight: 34 kg

Multiples can be palletised and shrink-wrapped



UN Approved Packaging

Typical Chemical Composition

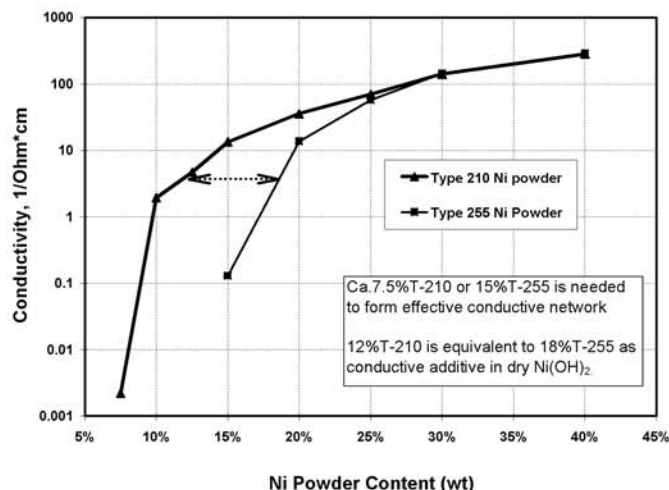
	Typical Wt %	Maximum Wt %
Carbon	0.4	1
Sulphur	0.0003	0.001
Oxygen	0.18	1
Nitrogen	0.008	n.d.
Iron	0.006	0.01
Cobalt	<0.00005	n.d.
Nickel	balance	--
Total Other Elements	<0.001	--

Scott Volumeter Method

Typical Physical Characteristics

Fisher Sub-Sieve Size: (Air Permeability Method)	0.5 - 1.0 microns
Bulk Density:	<0.80 g/cm ³
Typical Specific Surface Area:	1.5 - 2.5 m ² /g (BET)

Conductivity Data



This product is part of a complete range of Inco Special Nickel Products. The range includes: fine and extra fine nickel powders of many different morphologies, nickel coated graphite particles, INCOFOAM™ high porosity nickel foam, nickel oxides and nickel flakes.