Nickel S-Pellets™

Nickel S-Pellets™ are a high purity form of sulphur-activated nickel widely used for electroplating with titanium anode baskets. S-Pellets™ are produced by a unique carbonyl gas refining process at the Clydach Nickel Refinery in the UK.

The controlled and consistent purity of S-Pellets™ and the advantages associated with its distinctive shape and sulphur activation make this product attractive for high-end plating (e.g. high-speed engineering, electronics, electroforming) with titanium anode baskets:

- Carbonyl refining produces the purest form of nickel available
- Sulfur activation promotes uniform dissolution and low operating voltage, even in chloride-free plating baths
- Unique shape prevents the formation of bridges and voids in the basket
- Settles uniformly in basket, ensuring uniform current density and high quality deposits
- Flows easily into regular and shaped baskets with standard mesh sizes
- Ideal for use with automated basket loading devices
- Safe to handle (no sharp edges)
- Dissolves at 100% anode efficiency in common nickel plating solutions – with or without chlorides
- Dissolution produces minimal metallic residues

The sulphur in this product does not enter the plating solution; it forms an insoluble nickel sulphide residue, which is 100% contained using cloth anode bags, where it acts to remove unwanted copper impurities.

Typical Specifications

Form

- Spherical pieces of nickel
- Diameter: approximately 6 - 14 mm

Packing Density

Approximately 5.4 g/cm^3 of basket capacity

Packaging

- 10 kg bags, 5 bags per box, 20 boxes per pallet (1,000 kg net weight)
- 1 tonne bulk bags

Chemical Analysis (wt %)

Ni*	>99.97
Co	<0.00002
Cu	<0.0001
C	<0.005
Fe	<0.004
S	~0.022-0.030
Pb	<0.000001
Zn	<0.00002

*Nickel determined by difference.

S-Pellets™ are produced in compliance with the following standards: ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007.

For further information about our products, please visit our website (www.vale.com) or contact a regional sales representative.

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1 tonne bag

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