# Vale Inco Electrolytic Nickel S-Rounds





Vale Inco Electrolytic Nickel S-Rounds is the world's most popular activated anode material with a unique shape that makes it ideal for plating with baskets. Activation is imparted by codepositing a small, controlled amount of sulfur with the nickel during the electrowinning process.

Vale Inco Electrolytic Nickel S-Rounds has all the advantages associated with enhanced anode activity...smooth, uniform dissolution; 100% anode efficiency in all nickel plating solutions, even those without chlorides; absence of metallic residues, and low dissolution

potentials at high current densities. The lower resistance to current flow compared to sulfur-free nickel

accounts for significant power and cost savings in the plating shop. The sulfur in this product does not enter the solution but forms an insoluble nickel sulfide residue that is retained in the anode bag where it acts to remove unwanted copper impurities from the plating solution.

The advantages associated with its shape...improve settling in baskets, safe handling, improved flowability compared to squares of various sizes...combined with its enhanced anodic activity have made this versatile product the world's most popular activated anode material.

Quality Management Systems for the production, packaging and marketing of S-Rounds electrolytic nickel have been registered and comply with the requirements of ISO Standard 9001:2000.

Vale Inco Limited www.valeinco.com

## **Typical Specifications**

#### **Form**

 Button-shaped pieces of nickel approximately 25 mm (1 in.) diameter and about 6.5 mm (0.25 in.) thickness.

#### **Packing Density**

• About 4.6 kg/dm (0.17 lb/in.) of basket capacity.

#### **Packaging**

- 10 kg (22 lb) plastic bags; 5 bags per box;
   20 boxes per pallet; stretch-wrapped. Net weight 1000 kg (2204 lb)
- 250 kg (551 lb) steel drums; 4 drums per pallet; stretch-wrapped. Net weight 1000 kg (2204 lb).

### **Typical Chemical Analysis (percent)**

Nickel plus Cobalt 99.97

 Cobalt 0.050
 Sulfur 0.023

 Copper 0.001
 Arsenic 0.001

 Carbon 0.003
 Lead 0.0005

 Iron 0.0004
 Zinc 0.0001

Exceeds the chemical requirements ASTM B 39 and ISO 6283, NR 9980, except for the sulfur content.