

# Vale Inco Nickel Pellets

Ni



Vale Inco Nickel Pellets have the lowest metallic impurity level of any commercially available form of nickel. This feature derives from the specificity of the carbonyl refining process by which pellets are produced in the Clydach. This continuous process is unique in its ability to separate nickel from other elements yielding pellets that are virtually devoid of non-metallics and other subversive elements.

The consistent quality makes Vale Inco Nickel Pellets most suitable for the production of nickel-containing alloys requiring a high-purity charge material. This includes high-nickel alloys and iron-base alloys made to exacting aerospace and electronic industry standards. The exceptionally low cobalt content make this form attractive for the production of alloys meeting nuclear industry specifications.



The spheroidal shape and the compact size result in a high packing density that reduces the furnace backcharging. The flowability of the pellets permits semi- and fully-automated handling operations, such as transfer from bulk storage to weighing and furnace charging stations. Vale Inco Nickel Pellets are available throughout the world in a variety of convenient packages to satisfy large and small scale production needs.

Quality Management Systems and Environmental Management Systems for the production and packaging of Vale Inco Nickel Pellets have been registered and comply with the requirements of ISO 9001:2000 and ISO 14001:2004 respectively.

Vale Inco Limited  
[www.valeinco.com](http://www.valeinco.com)

## Typical Specifications

### Form

- Spheroidal, less than 20 mm (0.8 in.) diameter.
- Bulk Density  
 Approximately 5.4 - 6.0 kg/dm (0.2 - 0.22 lb/in.)

### Packaging

- 250 kg (551 lb) steel drums;  
 4 drums per pallet; strapped.  
 Net weight 1000 kg (2204 lb).
- 1000 kg (2204 lb) steel drums; palletized.
- 2000 kg (4408 lb) returnable totes.
- 2000 kg (4408 lb) bags.

### Typical Chemical Analysis (percent)

Nickel 99.98	Sulfur 0.0005
Cobalt <0.00005	Copper <0.0002
Iron 0.006	Zinc <0.00005
Carbon <0.011	Lead <0.00002

Exceeds the chemical requirements of ISO 6283, NR 9995 and ASTM B 39. Nickel by difference.