



## Onça Puma Ferronickel

Onça Puma Ferronickel is an iron-nickel metallic shot used as a feed material in stainless steel production. Vale's ferronickel is produced by a state-of-the-art refining process at our operation in Brazil.

Low impurity levels and high nickel content make Onça Puma Ferronickel ideally suited for the production of high quality stainless steels:

- Ideal shape and size designed for easy handling with automatic conveyors and hopper loading systems
- Solid metallic nature of product ensures no breakage, dusting and resultant losses during handling
- Low impurity levels allow for its addition at multiple stages of the stainless steel production process
- High nickel content ensures precise control of nickel additions, allowing stainless steel producers to meet their specifications

Vale produces a suite of products at our operations throughout the world that meet the diverse needs of stainless steel producers.

Onça Puma Ferronickel is produced in compliance with ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007.

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

### Typical Specifications

#### Form

- Shot Size: 5 - 50 mm (>95%)

#### Packaging\*

- 2 tonne bags
- Bulk shipments in containers

\*Please inquire for availability in your area.

#### Typical Chemical Analysis (wt %)

Ni	30 +/- 5%
Co	~1.1
Si	max 0.6
Cr	~0.05
Cu	~0.03
C	max 0.06
P	max 0.03
S	max 0.06

Co/Ni: ~1/35