Research Group



The community of independent consultants into geology, mineral resources, mining and metal industry

Standing and prospects of ferronickel market in Russia and CIS

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Contents

1. Resources base and mining nickel-containing ores in Russia and CIS

- 1.1 Deposits of nickel in Russia, their location and reserves.
- 1.1.1 Sulfide copper-nickel deposits of Russia
- 1.1.2. Silicate nickel deposits of Russia
- 1.2 Mining and processing of nickel-containing ores in Russia

Polar division of MMC «Norilsk Nickel»

JSC «Combine «Pechenganickel»

JSC «Combine «Yuzhuralnickel»

JSC «Ufaleinickel»

Pobuzhsky nickel plant

Kimpersai Rudoupravlenie

1.3 Use of nickel-containing ores in production of ferronickel

2. Review of ferronickel production technology and quality of products

- 2.1 Description of ferronickel production technology
- 2.1.1 Production of ferronickel from nickel ores
- 2.1.2 Production of ferronickel from secondary nickel-containing resources
- 2.2 Requirements imposed on quality of ferronickel

3. Production of ferronickel in Russia and CIS

- 3.1 The main company-producers of ferronickel
- 3.2 Volumes and quality of ferronickel, produced by the CIS companies
- 3.3 Current standing of company-producers of ferronickel

PJSC «PO Rezhnickel»

JSC «Combine «Yuzhuralnickel»

Pobuzhsky nickel plant

LLC «Buruktalsky metallurgical plant»

PJSC «Miteks»

JSC «SMZ»

Other companies of Russia

4. Review of prices on ferronickel and their forecast

5. Export-import supplies of ferronickel of Russia and Ukraine

- 5.1 Volumes of export-import of ferronickel in Russia
- 5.2 The main destinations of ferronickel supplies from Russia
- 5.3 Export of ferronickel from Ukraine

6 Analysis of domestic consumption of ferronickel in Russia

- 6.1 Supply-demand balance of ferronickel in Russia
- 6.2 The main companies-consumers of ferronickel

Stainless steel

Alloyed and high-temperature steel

- 6.3 Forecast of domestic consumption of ferronickel in Russia
- 6.4 Production of stainless steel in Ukraine

7. Prospects of ferronickel market in Russia and Ukraine (up to 2010)

Contact information

List of Tables

- Table 1: The main deposits of nickel in the CIS
- Table 2: Dynamics of mining nickel ores in the CIS, kt of nickel
- Table 3: Chemistry of ferronickel (TU 48-3-59-79)
- Table 4: Chemistry of low-iron ferronickel of combine «Yuzhuralnickel»
- Table 5: Nomenclature of ferronickel in the CIS
- Table 6: Production of ferronickel in the CIS (in equivalent of nickel), kt
- Table 7: Export prices on ferronickel, USD/t
- Table 8: Pattern of export supplies of ferronickel, broken by countries, tonnes (1999-2004)
- Table 9: Supply-demand balance of ferronickel in Russia, kt (in equivalent of nickel)
- Table 10: Domestic supplies of ferronickel in Russia, kt (in bulk)
- Table 11: Production of rolled stainless nickel-containing steel, kt
- Table 12: Production of rolled stainless steel in Ukraine, kt

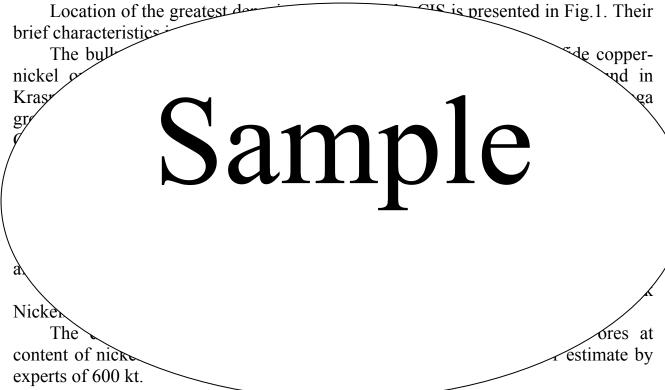
List of Figures

- Figure 1: Map of location of nickel ore deposits in the CIS.
- Figure 2: Dynamics of ferronickel production and exports by JSC «Yuzhuralnickel» (in bulk), kt
- Figure 3: Average annual world prices on nickel, USD/t
- Figure 4: Dynamics of ferronickel exports from of Russia, kt
- Figure 5: Dynamics of ferronickel exports from Ukraine, kt
- Figure 6: Map of location of the main company-producers of stainless steel in Russia.

1. Resources base and mining nickel-containing ores in Russia and CIS

1.1 Deposits of nickel in Russia, their location and reserves.

In the CIS, nickel reserves are available in 88 deposits in Russia, Kazakhstan and Ukraine. From InfoMine estimate, the deposits ores contain around 20 mln tones nickel, of which around 93% fall to Russia, 5% to Kazakhstan, and 2% to Ukraine.

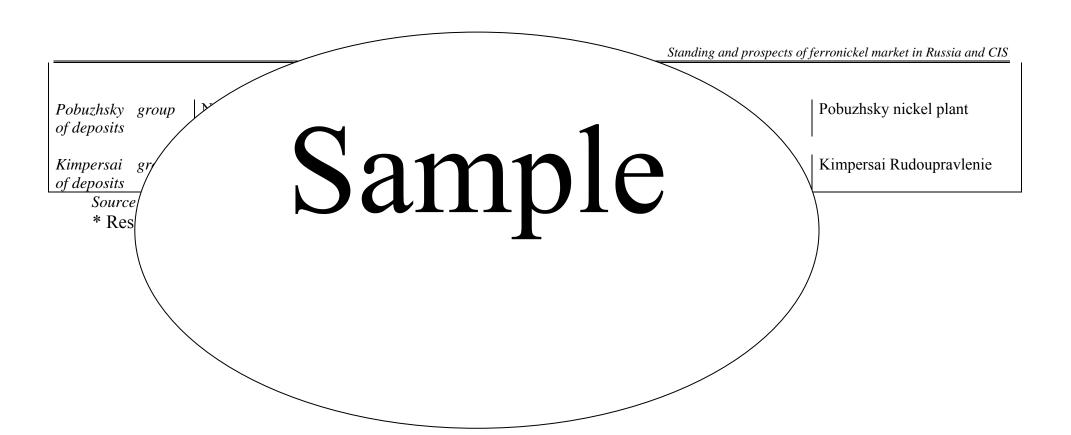


Deposits Talnakh and Oktyaorsky are a part of Talnakh ore cluster. Total reserves, from data of audit, conducted by Micon, are 1418 mln tonnes ores; proven and demonstrated reserves - 238 mln tonnes. Content of nickel in the total reserves is 0.57%, in the proven and demonstrated reserves -2.08%.

The greatest proven and demonstrated reserves of nickel in Russia are contained in Oktyabrsky - around 3.6 mln tonnes. Average content of nickel in the proven and demonstrated reserves is around 2%.

Reserves of nickel in ores of Pechenga group of deposits is much lower than those of the Norilsk deposits. The greatest in reserves of nickel of the deposits of the Pechenga group is Zhdanovsky. Total reserves of the Pechenga group are estimated above 2.5 mln tonnes of nickel at average content of nickel 0.6% (the proven reserves, from data of Micon, are 1.3 mln tonnes of nickel at its content of 0.75%).

Table 1: The main deposits of nickel in the CIS **Deposit Type Degree** of Reserves **Type** Average content of **Company** development * of mining Ni in total reserves, % RUSSIA Muumanak ahlast Pechenga group of deposits Zhdanovsky **KMMC** Ni-Cu-C Zapolyarny Kaula Kotsel'vaara Kammikiz Sample Semil Sa Norilsk-1 MMC DIVISION MMC Talnakh Morilsk Nickel» Oktyabrsky Ni-Cu-Co POLAR DIVISION MMC «Norilsk Nickel»



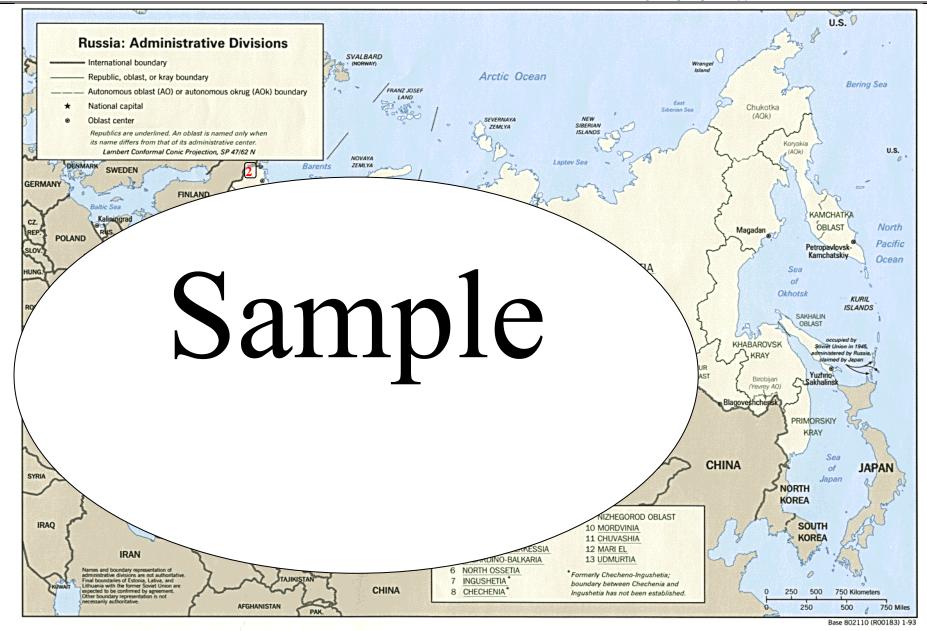


Figure 1: Map of location of nickel ore deposits in the CIS

1 – Norilskaя group, 2 – Pechenga group, 3 – Sakharinsky, 4 – Serovsky, 5 – Buruktalsky, 6 – Kimpersai group, 7 – Pobuzhsky group