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Establishment May 22, 2006
Investment USD 352 million

Employees 200 persons (as of January 2010)

Business Production and sale of Fe-Ni

and Fe-Ni by-products

Production Capacity 150,000 MT/year of Fe-Ni

Sales place POSCO

Shareholders (equity ratio) SMSP (51%) and POSCO (49%)

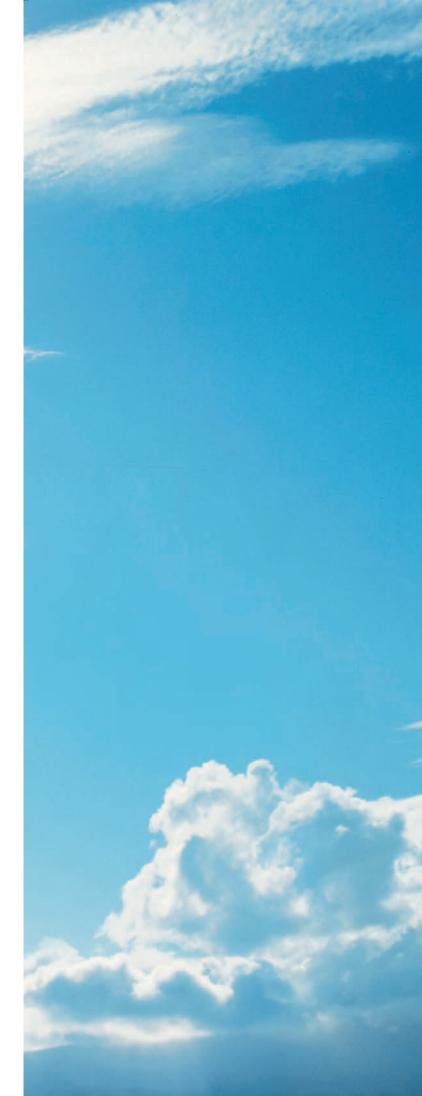
SMSP - Nickel mining company

in New Caledonia

Location 878, Gumho-dong, Gwangyang-si, Jeonnam

(POSCO Gwangyang steel works )

Capital stock KRW 185 billion (as of June 2008)



SNNC challenges to become a global leader of Fe-Ni smelting technology
Challenge
SNNC builds a new success story with ceaseless challenge.
Value
SNNC creates a new value and history.
Passion
SNNC 's passion strives for globalization through innovation and novelty.

## CEO Message



Created "Nickel Myth" out of "Nothing" with the belief of "we can do"

Equipped with an electric furnace of the world's largest production capacity, SNNC builds up its capabilities in quality improvement and energy saving through its excellent technologies, while making a new history of Fe-Ni production.

Taking another leap toward global leader of Fe-Ni smelting technology through ceaseless challenge and p	passion

#### Dear Readers,

Thank you for your unwavering support and interest in SNNC (Société Nickel de Nouvelle-Calédonie et Corée

SNNC is a joint venture established by POSCO and SMSP (Société Minière du Sud Pacifique), the largest nickel ore exporter of New Caledonia, which produces and sells Fe-Ni, the core material of stainless steel.

We contribute to the stable supply of nickel, one of the nation's six strategic mine minerals amid the fierce global competition for stable supply of resources. We started the company in a country without a single stone of nickel with the passion that is hotter than the boiling metal in the furnace. Under the belief of "Do your best, and God will do the rest." We have focused all our energy on the construction of the Fe-Ni factory and the early stabilization of the operation.

Through ceaseless innovation and change, we will strive to realize our vision of becoming a global leader of smelting technology, while caring for the local community.

Thank you.

Chief Executive Officer Kim, Hag-Dong

# Value

SNNC creates a new value and history.

Strong and beautiful stainless steel has its roots in Fe-Ni, the alloy of Ni and Fe. SNNC promotes and protects nature's value to provide a richer standard of living for us all.





#### Vision & Core Value

## **Creating Another Success Story**

Beyond Here, Beyond Now

#### Global Leader in Fe-Ni Smelting Technology



Customer SNNC's 1st management principle is a accountability to keep promises.



Challenge SNNC creates innovative solutions to make the impossible-possible.



Execution SNNC's spirit of accomplishment propels the development of technologies that produce better products



**Ethics** SNNC has adopted ethical management as its basic principal for the highest standards of ethics



SNNC adheres to the harmo and unity among people with respect and consideration

## **Socially Responsible Management**

#### Ethical Management > Trust

SNNC aims to become a respected and trusted company through its righteous management that adheres to the basics and principles. Corporate value is being increased through management innovation and the establishment of an ethical corporate culture for customers, shareholders, employees and suppliers.

#### Co-prosperity > Relation

As a pillar of the national trunk industry, SNNC operates a host of programs that provide technical and educational support to small and medium enterprises all along the production chain. SNNC practices fair trade and voluntary compliance programs to exemplify a totally transparent transaction culture.

#### Environmental Management > Green

SNNC practices environmental management under the notion that protecting environment is the prerequisite conditions for sustainable development of the company. Equipped with eco-friendly facilities, we strive to minimize emissions of air pollutants and put efforts for water quality control through water reuse and sewage treatment facilities.

#### Social Contributions > Love

SNNC has been engaged in various social contribution activities since its inception, fulfilling its responsibilities as a decent corporate citizen. All its employees actively participate in various volunteer activities such as "Saturday of sharing" and "HanMaEum Scholarships" which supports teenage family heads.

# Passion

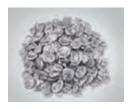




#### **Products**

#### Fe-Ni products

Fe-Ni



Component : Ni 20% , Fe 80% Configuration : Granule Diameter: 3~80 mm

Fe-Ni is the main raw material in the production of stainless steel.

The nickel-based stainless steel demonstrates excellent performance in resistance to heat, corrosion, acid and abrasion, and are used in utensils for household use. In addition, nickel is a very useful metal with various use such as medical devices, aircraft, coins and many other daily items.

### By-products

#### Prime Stone (palletized, air-cooled)



- \* Fe-Ni slag fine aggregate for concrete registered in Korean Standard (KS F 2970)
- \* The roadbed materials acquired Environment-Friendly Mark

Molten slag is slowly air cooled to produce hard, abrasion-resistant aggregates for civil engineering work. Applications: filling materials, roadbed materials, soil covering materials, asphalt aggregates, and substitutes for serpentinite.

#### Prime Sand (granulated, water-cooled)



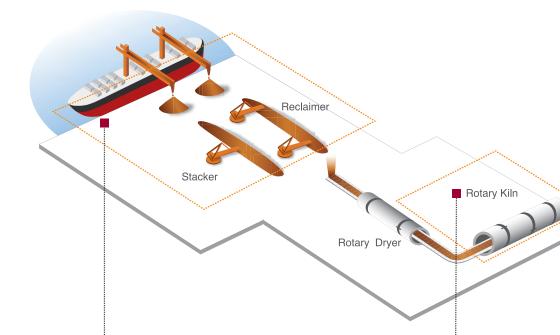
This product is made by spraying water on molten slag to produce granules that, when used in place of natural sand, result in better air circulation and stronger concrete.

## Nickel Story

#### Why is it called Devil's metal?

Nickel was first discovered by Baron Cronstedt, a Swedish mineralogist in 1751 in Germany. Resembling copper, it was first named Kupfernickel (also known as Devil's Copper) after the notorious spirit Nick Alt that appears in mines and plays a hoax on mineworkers. Nickel naturally occurs with copper. Until the early 20th century, it was extremely difficult to extract nickel and it was also called 'Mountain Devil' by the smelters.

## Manufacturing Process





#### **Ore Handling Process**

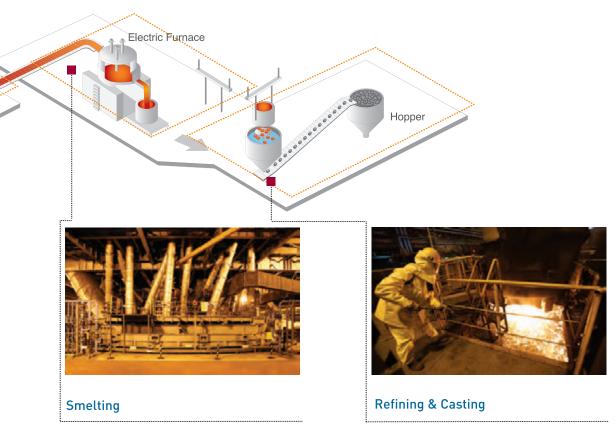
After unloaded at the port, the Ni ores are transported to the stock yard by conveyor belt and stackers. And the reclaimer blends the ores from the different mines in order to maintain a homogenous raw material component. Then the rotary dryer dries out the free moisture from the nickel ore.



#### Calcination & Pre-reduction

Using the coal-fired rotary kiln, the crystallized water from the ore is removed and some of nickel oxide and iron oxide is reduced by the counter current reaction. Finally the high temperature calcine is discharged.

Developed by SLN of France from the 1890s and adopted in Japan, Colombia and many other countries for the past 120 years, this methodology involves calcination and smelting of the Laterite Ni ore on the rotary kiln and electric furnace by pyrometallurgical process to manufacture Fe-Ni. The major processes are ore handling, drying, calcination & prereduction, smelting, refining & casting to produce Fe-Ni product containing 20% Ni and 80% Fe.



The electric furnace melts and reduces the hot calcine from the rotary kiln by slag resistance heat and electrode arc heat. Finally the molten crude metal containing the 20% nickel is extracted. During this process, the slag is produced as by-product.

The molten crude metal from the electric furnace is refined by the desulfurized equipment. Finally the Fe-Ni products as granule come from casting process by shot making equipment

# Shareholder Company

POSCO and SMSP have joined forces to produce the world's best Fe-Ni. Global-leading steel maker POSCO and New Caledonia's largest nickel ore exporter SMSP





### Shareholder Company

### World's first vertical integration of nickel miner-smelter-STS maker



SNNC was established in 2006 as a joint venture by POSCO, the global-leading steel maker, and SMSP, New Caledonia's largest nickel ore exporter, in order for stable supply of nickel, the main raw material of stainless steel. With a stable supply of nickel ore for the next 30 years by NMC, an on-site New Caledonia mining company, SNNC is making a new history of Fe-Ni products based on its stable business structure.



#### New Caledonia's largest nickel ore exporter, SMSP

Founded in 1969 as subcontracting company SMSP was controlled by Northen Province of New Caledonia in 1990, then acquired mining title and became New Caledonia's first mining exporters from 1995.

#### Global-leading steel maker, POSCO

posco POSCO was founded in 1968 and has grown as a global leading steel maker, creating success story out of nothing. Just like iron has enormously contributed to the civilization of human culture, so did POSCO to Korea's economic development.

## About New Caledonia

#### Nickel Paradise, New Caledonia. L'île la plus proche du paradis!

French territory of New Caledonia in the South Pacific boasts a beautiful environment and is called 'the island of eternal spring' and 'the island nearest to heaven.' This 220 million-year-old island is the world's largest coral island and a treasure trove of geological diversity. With 20% of the world's nickel reserves and chrome, cobalt, and iron in great abundance, New Caledonia is at the center of the Fe-Ni industry. Over 60% of the national land here has been registered as a heritage site by UNESCO to preserve the area's unique natural beauty.

## History

## 2007

## 2006

01.12 Establishment of a corporation and investment approved
[POSCO Board of Directors]

04.05 JVA concluded between POSCO-SMSP

05.22 SNNC founded

08.01 Code of ethics established and proclaimed

08.28 Site preparation started

11.30 Vision/Mission established and proclaimed

01.22 Ministry of Finance and Economy approved

the Fe-Ni plant business plan
05.02 Construction of Fe-Ni plant commenced

09.27 Production Technology Center completed

10.29 Mining rights transferred (SMSP→NMC)

11.30 Site preparation completed

2005

05.18 POSCO and SMSP exchanged MOU





## 2008

06.02 Trial run started

07.22 First arrival of nickel ore

08.21 Operation of ERP/MES started

08.25 Electric Furnace turned on

10.01 Fe-Ni Plant completed

10.19 First production of Fe-Ni

11.03 Completion Ceremony held

### 2009

02.18 Normal operation capacity achieved

04.16 Innovation campaign QSS adopted

05.29 All staff succeeded to quit smoking

06.04 Management Innovation Prize awarded by Korea Institute of Management Evaluation (KIME)

10.13 Practice of fundamentals proclaimed

10.31 Annual nickel production capacity of 30,000 tons achieved.

11.05 Prime Minister Citation awarded on '2009 Foreign Company Day'



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