Overseas Major Steelmaking Operations

**Usinas Siderúrgicas de Minas Gerais S/A (USIMINAS)**

- **Business line**: Integrated steel manufacturer
- **Location**: Belo Horizonte, Minas Gerais State, Brazil
- **Capital**: Real 12,150 million
- **Equity participation by Nippon Steel**: 29.2% (Ordinary Share, including indirect participation) [As of Jan. 2012]
- **President**: Julian Alberto Eguren (since Jan. 2012)
- **No. of employees**: 30.6 thousand (Consolidated) [As of Dec. 31, 2012]
- **Crude Steel Production**: 6,699 (Ipatinga Works 3,691 / Cubatão Works 3,008) thousand tons/y [CY 2011]
- **Steelworks**:
  - Ipatinga Works (Ipatinga, Minas Gerais State)
    - Blast Furnaces (No.1 <885㎥> / No.2 <885㎥> / No.3 <3,162 ㎥>),
    - Plate mill (1.00 million tons/y),
    - Hot-strip mill (3.45 million tons/y),
    - Cold-rolling mill (2.20 million tons/y)
    - [Hot-dip galvanizing line (1,030 thousand tons/y) by UNIGAL*]
  - Cubatão Works (Cubatão, São Paulo State)
    - Blast Furnaces (No.1 <1,829㎥> / No.2 <3,365㎥>),
    - Plate mill (1.00 million tons/y),
    - Hot-strip mill (2.20 million tons/y),
    - Cold-rolling mill (1.20 million tons/y)
- **Others**:
  - Acquisition of iron-ore mines of J. Mendes in Serra Azul region (Minas Gerais State) in February 2008
  - Establishment of Mineracao Usiminas SA for mining business in August 2010 (Currently : USIMINAS 70%, Sumitomo Corporation Group 30%)
  - Iron-ore production capacity will be increased to 29 million tons/y in the future
- **Cooperation with USIMINAS**
  - Dec. 1957 Establishment of an investment company, Nippon Usiminas Co., Ltd., with Nippon Steel as the largest stockholder (In 1967, the Japanese government made a capital subscription)
  - Jan. 1958 Establishment of USIMINAS (the Brazilian side 60%, Nippon Usiminas Co., Ltd. 40%)
  - Oct. 1962 Blowing-in of the No. 1 Blast Furnace of Ipatinga Works
  - After 1966 Nippon Steel’s technical assistance started (currently, the seventh program)
  - Dec. 2006 Nippon Usiminas Co., Ltd. became a subsidiary of Nippon Steel, making USIMINAS applicable under the equity method to Nippon Steel’s consolidated accounts (equity ratio: 23.4%, including indirect participation).
  - Jan. 2012 Execution of Share Purchase Agreement (equity ratio: 29.2%, including indirect participation) and New Shareholders Agreement of Usiminas
- **Outline of the capacity expansion plan**
  - Expansion of production capacity for high grade steel (steelmaking, plate mill, etc.) at Ipatinga Works
  - Installation of a new hot-strip mill at Cubatão Works (Operation in 1st half 2012)
  - Construction of the No. 2 hot-dip galvanizing line at UNIGAL* (Operation in May 2011)
  - Optimization Plan for Ipatinga and Cubatão Works
- * For details, see p.30
### <Supply base of automotive steel sheet>

#### I/N Tek
- **Business line**: Commissioned rolling of cold-rolled steel sheets
- **Location**: New Carlisle, Indiana, U.S.A.
- **Start-up**: March 1990 (established in July 1987)
- **Capital**: US$ 195 million
- **President**: Chris Richards
- **Vice president**: J. Hashimoto (dispatched from Nippon Steel)
- **No. of employees**: 250
- **Equity participation by Nippon Steel**: 40.0% (60.0% by ArcelorMittal)
- **Major facilities**: 1 CDCM (continuous descaling and cold-rolling mill) — (1.7 million short tons/y), 1 C.A.P.L. (continuous annealing and processing line) — (1.2 million short tons/y)
- **Sales destination**: Coil centers, auto makers, electric appliance makers, steel furniture makers and construction material makers, including Japanese companies via ArcelorMittal and/or NS Sales (Nippon Steel's subsidiary)

#### I/N Kote
- **Business line**: Manufacture and sale of coated steel sheets
- **Location**: New Carlisle Indiana, U.S.A.
- **Start-up**: October 1991 (established in September 1989)
- **Capital**: US$ 120 million
- **President**: Chris Richards
- **Vice president**: J. Hashimoto (dispatched from Nippon Steel)
- **No. of employees**: 250
- **Equity participation by Nippon Steel**: 50.0% (50.0% by ArcelorMittal)
- **Major facilities**: 1 continuous galvanizing line (500,000 short tons/y), 1 electrogalvanizing line (450,000 short tons/y)
- **Sales destination**: Japanese and U.S. automobile makers, parts makers, etc.

#### The Siam United Steel (1995) Co., Ltd. (SUS)
- **Business line**: Manufacture and sale of cold-rolled steel sheets
- **Location**: Eastern Industrial Estate, Rayong Province, Thailand
- **Start-up**: November 1998 (established in July 1995)
- **Capital**: THB 9,000 million
- **President**: T. Ohara (dispatched from Nippon Steel)
- **No. of employees**: 847
- **Equity participation by Nippon Steel**: 52.2%
- **Production capacity**: 1 million tons/y
- **Major facilities**: 1 CDCM (continuous descaling and cold-rolling mill), 1 C.A.P.L. (continuous annealing and processing line)

#### Nippon Steel Galvanizing (Thailand) Co., Ltd.
- **Business line**: Manufacture and sale of automotive hot-dip galvanized and galvannealed steel sheets
- **Location**: Eastern Industrial Estate, Rayong Province, Thailand
- **Start-up**: October 2013 (scheduled) (established in June 2011)
- **Capital**: US$ 118 million
- **President**: Akihiko Ota (dispatched from Nippon Steel)
- **No. of employees**: approx. 200
- **Equity participation by Nippon Steel**: 100.0%
- **Major facilities**: 1 continuous galvanizing line (360,000 tons/y)
### UNIGAL Ltda.
- **Business line**: Manufacture of hot-dip galvanized steel sheets
- **Location**: Ipatinga, Minas Gerais State, Brazil
- **Start-up**: October 2000 (established in June 1999)
- **Capital**: Real 585 million
- **President**: Marcelo Dantas
- **Vice president**: H. Kawano (dispatched from Nippon Steel)
- **No. of employees**: 312
- **Equity participation by Nippon Steel**: 30.0%
- **Major facilities**: 2 continuous galvanizing lines (480,000 tons/y + 550,000 tons/y)

### Baosteel-NSC Automotive Steel Sheets Co., Ltd. (BNA)
- **Business line**: Manufacture and sale of cold rolled and hot-dip galvanized steel sheets
- **Location**: Shanghai, People's Republic of China
- **Start-up**: March 2005 (established in July 2004)
- **Capital**: 3 billion RMB
- **President**: Zhanhong Mao
- **Vice president**: S. Hosokai (Dispatched from Nippon Steel)
- **No. of employees**: 650
- **Equity participation by Nippon Steel**: 50.0%
- **Major facilities**:
  - 1 CDCM (continuous descaling and cold-rolling mill) — (2.2 million tons/y)
  - 1 C.A.P.L. (continuous annealing and processing line) — (0.95 million tons/y)
  - 3 continuous galvanizing lines
    - (450,000 tons/y + 350,000 tons/y + 450,000 tons/y)

### Joint Venture with TATA
- **Business line**: Manufacture and sale of automotive cold-rolled steel sheets
- **Location**: Jamshedpur, Jharkhand, India
- **Start-up**: FY 2013 (scheduled) (to be established in 2012)
- **Capital**: INR 8.7 billion
- **President**: 
- **No. of employees**: approx. 300
- **Equity participation by Nippon Steel**: 49.0%
- **Major facilities**: 1 C.A.P.L. (continuous annealing and processing line) — (600,000 tons/y)

### TENIGAL, S.de R.L.de C.V.
- **Business line**: Manufacture and sale of automotive hot-dip galvanized and galvannealed steel sheets
- **Location**: In the vicinity of Monterrey City, Mexico
- **Start-up**: CY 2013 (scheduled) (established in December 2010)
- **Capital**: US$ 175 million
- **President**: Cesar Jimenez
- **No. of employees**: approx. 130 (planned)
- **Equity participation by Nippon Steel**: 49.0%
- **Major facilities**: 1 hot-dip galvanizing line (400,000 tons/y)
Global Growth Strategy (Automotive Sheet Steels Supply Setup)

(Capacity/year)
(% : Nippon Steel equity ratios)

Europe
ArcelorMittal
Technology cross-licensing

U.S.A.
I/N Tek 40%
I/N Kote 50%

China
BNA 50%

Thailand
SUS 52.2%
Nippon Steel Galvanizing (Thailand) 100%

(Cold-rolling 1.0 million tons)
CGL [0.36 million tons]
(Operation schedule in CY 2013)

Mexico
TENIGAL 49%

Brazil
UNIGAL 30%

[UNIGAL 30%]

CGL [0.4 million tons]
(Operation schedule in CY 2013)

India
JV with TATA 49%

C.A.P.L [0.6 million tons]
(Operation schedule in FY 2013)

CDCM 2.2/C.A.P.L 0.95/CGL 1.25 (million tons)

Nippon Steel

ACM 2.2/C.A.P.L 1.2 (million short tons)
CGL 0.5/EGL 0.45 (million short tons)

Global Network

Nippon Steel

[ACM 1.7/C.A.P.L 1.2 (million short tons)]
CGL [0.4 million tons]
(Operation schedule in CY 2013)
< Processing and distribution base >

Guangzhou Pacific Tinplate Co., Ltd. (PATIN)

- Business line: Manufacture and sale of tinplate
- Location: Guangzhou City, Guangdong Province, People’s Republic of China
- Start-up: February 1997 (established in December 1994)
- Capital: US$ 36 million
- President: K. Chikamatsu (dispatched from Nippon Steel)
- No. of employees: 265
- Equity participation by Nippon Steel: 25.0%
- Production capacity: 200,000 tons/y
- Major facilities:
  - 1 tinning line
  - 3 shearing lines

Nippon Steel Bar & CH Wire (China) Co., Ltd. (NBC China)

- Business line: Manufacture and sale of steel wire for cold heading
- Location: Weiting Town, Suzhou Industrial Park, People’s Republic of China
- Start-up: September 2007 (established in September 2006)
- Capital: US$ 1.5 million
- Chairman: K. Fukuyasu (dispatched from Nippon Steel)
- No. of employees: 21
- Equity participation by Nippon Steel: 28.0%
- Production capacity: 7,000 tons/y → 42,000 tons/y (capacity increase scheduled)
- Major facilities:
  - 2 wire drawing machines
  - +3 wire drawing machines, +1 pickling and film-application line,
  - +1 heat treatment furnace <Operation schedule in March 2013>

Wuxi NSP Automotive Parts Co., Ltd.

- Business line: Manufacture and sale of automotive steel pipe and automotive parts
- Location: Wuxi City, Chiangsu Province, People’s Republic of China
- Establishment: August 2004
- Capital: YEN 1,200 million (after capital increase)
- Chairman: H. MAJIMA (dispatched from Nippon Steel Pipe)
- No. of employees: 200
- Equity participation by Nippon Steel: 10.0%
- Production capacity: 24,000 tons/y
- Major facilities:
  - 2 electric resistance-welded pipe lines
  - 3 cold-drawing machines

WISCO-NIPPON STEEL Tinplate Co., Ltd. (WINSteel)

- Business line: Manufacture and sale of tinplate and tin mill black plate
- Location: Wuhu City, Hubei Province, People’s Republic of China
- Start-up: FY 2013 (scheduled) (established in October 2011)
- Capital: 740 million RMB
- President: Michio Harada (dispatched from Nippon Steel)
- No. of employees: Approx. 300
- Equity participation by Nippon Steel: 50.0%
- Major facilities:
  - 1 C.A.P.L. (continuous annealing and processing line) — (400,000 tons/y)
  - 1 tinning line (200,000 tons/y)
<table>
<thead>
<tr>
<th>Company Name</th>
<th>Business Line</th>
<th>Location</th>
<th>Start-up</th>
<th>Capital</th>
<th>President</th>
<th>No. of Employees</th>
<th>Equity Participation</th>
<th>Production Capacity</th>
<th>Major Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIPPON STEEL PIPE INDIA PRIVATE LIMITED (NPI)</td>
<td>Manufacture and sale of automotive machine structural steel pipe</td>
<td>Neemrana Industrial Park in the state of Rajasthan, India</td>
<td>January 2012 (established in September 2010)</td>
<td>Approx. INR 700 million</td>
<td>T. Takamoto (dispatched from Nippon Steel)</td>
<td>80</td>
<td>40.5%</td>
<td>Approx. 800 tons/m → approx. 2,400 tons/m (after integrated manufacturing setup completion)</td>
<td>1 cutting &amp; heat treating +1 electric-welded pipe manufacturing &amp; cold drawing</td>
</tr>
<tr>
<td>PT. Pelat Timah Nusantara (Latinusa)</td>
<td>Manufacture and sale of tinplate</td>
<td>Cilegon, Indonesia</td>
<td>1982</td>
<td>IDR 101.9 billion</td>
<td>T. Honda (dispatched from Nippon Steel)</td>
<td>419</td>
<td>35.0%</td>
<td>160,000 tons/y</td>
<td>1 tinning line 1 shearing line</td>
</tr>
<tr>
<td>PT. Indonesia Nippon Steel Pipe (INP)</td>
<td>Manufacture and sale of machine structural steel pipe</td>
<td>Bukit Indah Industrial Park, Citampek Karawang Province, West Lava, Indonesia</td>
<td>January 2007 (established in December 2005)</td>
<td>US$ 11.6 million</td>
<td>T. Takamoto (dispatched from Nippon Steel)</td>
<td>590</td>
<td>(SNP 69.6%)</td>
<td>42,000 tons/y</td>
<td>2 electric resistance-welded pipe lines 3 cold-drawing machines 2 heat-treating furnaces</td>
</tr>
<tr>
<td>Nippon EGalv Steel Sdn. Bhd. (N-EGALV)</td>
<td>Manufacture and sale of electro-galvanized steel sheets</td>
<td>Prai Industrial Estate IV, Penang, Malaysia</td>
<td>February 2009 (established in January 2006)</td>
<td>33 million Ringgit</td>
<td>Iruru Hidaka (dispatched from Nippon Steel)</td>
<td>90</td>
<td>50.1%</td>
<td>1 electrogalvanizing line (150,000 tons/y)</td>
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<tr>
<td>Company Name</td>
<td>Business Line</td>
<td>Location</td>
<td>Start-up</td>
<td>Capital</td>
<td>President</td>
<td>No. of Employees</td>
<td>Equity Participation by Nippon Steel</td>
<td>Major Facilities</td>
<td>Production Capacity</td>
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<tr>
<td>Yung Kong Galvanising Industries Bhd. (YKGI)</td>
<td>Manufacture and sale of hot-dip galvanized and color coated steel sheets</td>
<td>Kuching, Sarawak, Malaysia</td>
<td>1984 (established in 1977)</td>
<td>102 million Ringgit</td>
<td>Soh Thian Lai</td>
<td>262</td>
<td>10.0%</td>
<td>1 pickling line (300,000 tons/y) 1 cold-rolling line (250,000 tons/y) 1 continuous galvanizing line (250,000 tons/y) 1 cold coating line (90,000 tons/y)</td>
<td></td>
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<tr>
<td>Midland Rolling Mills Limited (MRM)</td>
<td>Manufacture and sale of cold rolled steel sheets and coils</td>
<td>Abeokuta, Ogun State, Nigeria</td>
<td>April 2011 (established in November 2006)</td>
<td>2.4 billion Naira</td>
<td>M. P. Singh</td>
<td>170</td>
<td>10.0%</td>
<td>1 cold rolling line (150,000 tons/y) +1 pickling line (300,000 tons/y) &lt;Operation schedule in 2nd half, 2012&gt;</td>
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</tr>
<tr>
<td>SAFAL STEEL (PROPRIETARY) LIMITED</td>
<td>Manufacture and sale of galvanized and color coated steel sheets</td>
<td>Durban, Kwazulu Natal, South Africa</td>
<td>April 2010</td>
<td>Rand 120 million</td>
<td>Ronnie Graham</td>
<td>345</td>
<td>7.0%</td>
<td>1 pickling line (300,000 tons/y) 1 cold-rolling line (150,000 tons/y) 1 continuous galvanizing line (150,000 tons/y) 1 cold coating line (100,000 tons/y)</td>
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<tr>
<td>Suzuki Garphyttan AB</td>
<td>Manufacture and sale of valve spring wire and stainless wire</td>
<td>Garphyttan, Orebro, Sweden</td>
<td>1906</td>
<td>SEK 15 million</td>
<td>Jan Pieters</td>
<td>340</td>
<td>(Suzuki Metal Industry 100.0%)</td>
<td>1 wire drawing line (30,000 tons/y)</td>
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<tr>
<td>Company Name</td>
<td>Business line</td>
<td>Location</td>
<td>Start-up</td>
<td>Capital</td>
<td>President</td>
<td>No. of employees</td>
<td>Equity participation by Nippon Steel</td>
<td>Major facilities</td>
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<tr>
<td>Siam Tinplate Co., Ltd. (STP)</td>
<td>Manufacture and sale of tinplate and tin-free steel</td>
<td>Map Ta Phut Industrial Estate, Rayong Province, Thailand</td>
<td>February 1992</td>
<td>THB 800 million</td>
<td>T. Kaji</td>
<td>520</td>
<td>15.64%</td>
<td>1 tinning/tin-free steel line (150,000 tons/y) 1 tin-free steel line (120,000 tons/y) 4 shearing lines</td>
<td></td>
</tr>
<tr>
<td>Siam Nippon Steel Pipe Co., Ltd. (SNP)</td>
<td>Manufacture and sale of machine structural steel pipe</td>
<td>Siam Eastern Industrial Park, Rayong Province, Thailand</td>
<td>January 1996</td>
<td>THB 783 million</td>
<td>T. Takamoto (dispatched from Nippon Steel)</td>
<td>1100</td>
<td>60.47%</td>
<td>3 electric resistance-welded pipe lines 5 cold-drawing machines 4 heat-treating furnaces</td>
<td></td>
</tr>
<tr>
<td>Nippon Steel Bar &amp; CH Wire (Thailand) Co., Ltd. (NBC Thailand)</td>
<td>Manufacture and sale of steel wire for cold heading</td>
<td>Eastern Seaboard Industrial Estate, Rayong Province, Thailand</td>
<td>September 2007</td>
<td>THB 230 million</td>
<td>K. Nagase (dispatched from Nippon Steel)</td>
<td>110</td>
<td>28.0%</td>
<td>1 pickling and surface treatment line 6 wire drawing machines 2 heat treatment furnace</td>
<td></td>
</tr>
<tr>
<td>PEB Steel Buildings Co., Ltd. (PEBSB)</td>
<td>Pre-engineered building business</td>
<td>Dong Xuyen Industrial Estate, Ba Ria Vung Tau Province, Vietnam</td>
<td>2005 (established in 1994)</td>
<td>US$ 5 million</td>
<td>Sami Kteily</td>
<td>300</td>
<td>12.0%</td>
<td>36,000 tons/y (steel material conversion)</td>
<td></td>
</tr>
</tbody>
</table>
### Nippon Steel Pipe Vietnam Co., Ltd. (NPV)
- **Business line**: Manufacture and sale of steel pipe piles & steel pipe sheet piles
- **Location**: Phu My II Industrial Zone, Ba Ria-Vung Tau Province, Vietnam
- **Start-up**: May 2011 (established in June 2010)
- **Capital**: US$ 15 million
- **President**: K. Kanezaki (dispatched from Nippon Steel)
- **No. of employees**: 123
- **Equity participation by Nippon Steel**: 51.0%
- **Major facilities**: 1 spiral pipe line (60,000 tons/y)

### Al Ghurair Iron & Steel L. L. C. (AGIS)
- **Business line**: Manufacture and sale of hot-dip galvanized steel sheets
- **Location**: The Industrial City of Abu Dhabi, the United Arab Emirates
- **Start-up**: 2009 (established in May 2005)
- **Capital**: AED 105 million
- **President**: Abu Bucker Husain
- **No. of employees**: 407
- **Equity participation by Nippon Steel**: 20.0%
- **Major facilities**: 1 pickling line (460,000 tons/y), 1 cold-rolling line (360,000 tons/y), 1 continuous galvanizing line (250,000 tons/y), +1 (200,000 tons/y) (as a future expansion)
Global Growth Strategy (Fabrication, Distribution and Sales Bases)

- Nippon Steel

Sales & technology bases
- Companies incorporated overseas, etc.
- Coil centers affiliated with the Nippon Steel group
- Coil centers of trading firms handling Nippon Steel products

(%: Nippon Steel group's equity ratios)

- Subsidiary
- Affiliated company
- Joint venture

- Sweden
  - Suzuki Garphyttan 100% (valve spring wire and stainless wire)

- United Arab Emirates
  - AGIS 20% (galvanized steel sheet)

- India
  - NPI 98% (automotive steel pipe)
  - NRI 98% (automotive steel pipe)
  - AHI 20% (tinplate)

- Nigeria
  - MRM 10% (cold rolled steel sheet and coil)

- South Africa
  - SAFAL STEEL 7% (galvanized and color coated steel sheet)

- Australia
  - BlueScope Steel
    - Long-term joint technical collaboration agreement for coated steel products for building and construction market

- Vietnam
  - POSCO Vietnam 15% (cold-rolling mill)
  - PEBSB 12% (pre-engineered building business)
  - NPV 51% (steel pipe pile and steel pipe sheet pile)

- China
  - Wuxi NSP 73% (automotive steel pipe)
  - PATIN 25% (tinplate)
  - WINSteel 50% (tinplate)
  - NBC China 65% (steel wire for cold heading)

- Thailand
  - STP 22.7% (tinplate and tin-free steel)
  - SNP 63.1% (machine structural steel pipe)
  - NBC Thailand 56% (steel wire for cold heading)

- Malaysia
  - N-EGALV 50.1% (electro-galvanized steel sheet)
  - YKGI 10% (hot-dip galvanized and color coated steel sheet)

- Indonesia
  - LATINUSA 40% (tinplate)

- Africa
  - SAFAL STEEL 7% (galvanized and color coated steel sheet)

- Nigeria
  - MRM 10% (cold rolled steel sheet and coil)

- South Africa
  - SAFAL STEEL 7% (galvanized and color coated steel sheet)

- Australia
  - BlueScope Steel
    - Long-term joint technical collaboration agreement for coated steel products for building and construction market

- Vietnam
  - POSCO Vietnam 15% (cold-rolling mill)
  - PEBSB 12% (pre-engineered building business)
  - NPV 51% (steel pipe pile and steel pipe sheet pile)