

# Blast Furnace

Project	Start	Completion	Location	Client	Capacity	
India IISCO Project	Oct. 2007	Mar. 2010	IISCO at Burnpur, West Bengal, India	IISCO Steel Company (India)	8,000 T/D	<p>The capacity of plant is 2.50 million tons of hot metal in annual. This project is ordered by IISCO Steel Co. (SAIL Co.) and won by POSCO E&amp;C consortium with NCC(Nafarjuna Construction Company) which is the POSCO E&amp;C's first project in India.</p> <p>- Inner Vol</p>
Iran TAVAZON Project	Jun. 2002	Dec. 2008	ESCo. at Shahrekord, Esfahan, Iran	Esfahan Steel Company (Iran)	3,836 T/D	<p>The capacity of plant is 1.40 million tons of hot metal in annual. This project has been performed to increase the steel making production capacity of Esfahan Steel Company in Iran from 2.60 million tons to 4.00 million tons. And this is the POSCO E&amp;C's f</p>

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POSCO Pohang Steelworks						
The 2nd Relining Project of No.3 Blast Furnace	Dec. 2004	May 2006	Pohang Steelworks	POSCO	10,100 T/D	The capacity of plant is 3.51 million tons of hot metal in annual. And to shorten the shut down periods, POSCO E&C applied the Method of Construction, "Large Block Ring Construction Method", as 3 Layers 3 Blocks of furnace proper shell. The shut down peri
The 2nd Relining Project of No.2 Blast Furnace	Apr. 1995	Jul. 1997		POSCO	5,200 T/D	<p>This Project was successfully executed by POSCO E&amp;C's own technology which is including the Field Service, Panning, Design, Procurement, Erection Work and Performance Guarantee.</p> <ul style="list-style-type: none"> <li>- Inner Volume : 2,550㎥</li> <li>- Shut Down Periods : 101 Days</li> <li>- Method of Furna</li> </ul>

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POSCO Gwangyang Steelworks						
The 1st Relining Project of No.3 Blast Furnace	Jul. 2006	Nov. 2007	Gwangyang Steelworks	POSCO	10,670 T/D	The capacity of plant is 3.71 million tons of hot metal in annual. To follow the world trends of enlarge of Blast Furnace inner volume, POSCO E&C has expanded the inner volume up to 21% as 4,600 cubic meters. And this project is the shortest relining peri
The 1st Relining Project of No.2 Blast Furnace	Feb. 2003	May 2005		POSCO	10,100 T/D	The capacity of plant is 3.51 million tons of hot metal in annual. To shorten the shut down periods, Large Block Construction Method (8 Layers 8 Blocks) and 1000 tons Crawler Crane had been used, as a result that, the shut down periods had been shortened

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POSCO Gwangyang Steelworks						
The 1st Relining Project of No.1 Blast Furnace	May 2000	Jun. 2002	Gwangyang Steelworks	POSCO	9,160 T/D	The capacity of plant is 3.07 million tons of hot metal in annual. To ensure the lifetime of Furnace Proper, the cooler of stave type had been applied. And to reduce the production cost, the capacity of Pulverized Coal Injection System had been increased.
The New Construction Project of No.5 Blast Furnace	Sep. 1996	Mar. 1999		POSCO	8,400 T/D	<p>The capacity of plant is 2.91 million tons of hot metal in annual. And the cooling method of stave type and the high efficiency refractories had been applied to ensure the lifetime of furnace shell as 20 years and more.</p> <ul style="list-style-type: none"> <li>- Inner Volume : 4,020㎥</li> <li>- Constr</li> </ul>



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POSCO Pohang Steelworks						
FINEX, Pohang Steelworks	Jan. 2004	Apr. 2007	Pohang Steelworks	POSCO	1,500,000 T/Y ( 4,110 T/D )	FINEX process is a smelting-reduction technology based on direct use of fine iron ore and non-coking coal. In the FINEX process fine iron ore is preheated and reduced to fine DRI in a four stage fluidized bed reactor system with reduction gas produced from
FINEX DEMO PLANT	Jan. 2001	May 2003		POSCO	600,000 T/Y ( 1,644T/D )	FINEX Demo Plant is a process which produces hot metal 0.6 million tons per year based on direct use of fine iron ore and non-coking coal without sinter and coke plant.

# Sintering

Project	Start	Completion	Location	Client	Capacity	
Australia BSL Project	Feb. 2007	Apr. 2009	BSL, Port kembla, Australia	BSL (Blue Scope Steel)	18,000 T/D	<p>BSL project was performed to replace worn out equipment in accordance with increasing productivity(+1,100,000T/Y, 20%UP) and longterm operation in BSL No. 3 Sinter plant Australia (5,500,000 T/Y).</p> <ul style="list-style-type: none"> <li>- Effective suction area: 420㎡ → 480㎡</li> <li>- Produ</li> </ul>
POSCO Pohang Steelworks						
No. 3 Sintering Plant Revamping	Nov. 2004	May 2006	Pohang Steelworks	POSCO	17,500 T/D	<p>Pohang No. 3 Sintering Plant Revamping project was performed to increase productivity of sinter ore (+1,440,000T/Y, 31.1% UP) in accordance with enlargement of Pohang No. 3 Blast Furnace and change of worn out equipments through longterm operation..</p> <ul style="list-style-type: none"> <li>- E</li> </ul>

# Sintering

Project	Start	Completion	Location	Client	Capacity	
<b>POSCO Gwangyang Steelworks</b>						
No. 2 Sintering Plant Revamping	Jun. 2006	Dec. 2007	Gwangyang Steelworks	POSCO	18,000 T/D	<p>Gwangyang No. 2 Sintering plant revamping project was performed to increase productivity for stable supply of sinter ore after enlargement Gwangyang No. 3 Blast Furnace and replace worn out equipments through longterm operation.</p> <p>- Effective suction are</p>
No. 2&4 Sintering Plant Revamping (Pallet width extension)	Mar. 2003	May 2004		POSCO	15,200 T/D(No.2) 16,100 T/D(No.4)	<p>Gwangyang No. 2 &amp; No.4 Sintering plant revamping project was performed to increase effective suction area and revamp related equipments for increasing sinter ore production.</p> <p>- Effective suction area: Gwangyang No. 2 Sintering PI</p>
No. 1&3 Sintering Plant Revamping (Pallet width extension)	Apr. 2001	Aug. 2002		POSCO	15,300 T/D	<p>This project was performed to increase effective suction areas of Gwangyang No. 1 &amp; No.3 sintering plant and revamp related equipment for increasing sinter ore production in accordance with operation of Gwangyang No. 5 blast furnace.</p> <p>- Effective suction</p>

# Raw Material Handling

Project	Start	Completion	Location	Client	Capacity	
<b>FINEX Raw Material Handling Facility</b>	Oct. 2004	Dec. 2006	Pohang Steelworks	POSCO	4.4 million T/Y	This RMHF(Raw Material Handling Facility) is to provide coke, iron ore and sub-materials into newly installed FINEX(1.5 millions T/Y) in Pohang Steelworks. It includes material yard, stacker/reclaimer, belt conveyor, crushing and screening equipments and
<b>2nd phase Reclamation work of Incheon International Airport</b>	Jan. 2004	Nov. 2010	Incheon International Airport	IIAC (Incheon International Airport Corp.)	4,000 T/H	This project is a part of reclaiming work for 2nd phase construction of Incheon International Airport such as 3rd runway and IBC(International Business Center). POSCO E&C provides and operates carrying equipments for landfill such as belt conveyor, dump h

# Raw Material Handling

Project	Start	Completion	Location	Client	Capacity	
CTS Raw Material Handling Facility	Nov. 2003	Oct. 2005	Gwangyang Steelworks	POSCO/ POSCO Terminal	3 million T/Y	This project had planned to increase the storage capacity of CTS as much as 3millions T/Y in Gwangyang Steelworks. Also, CTS is intermediary business, it carries in materials such as coal, steel, Mn, store them in the yard then take them local site as wel
Venezuela POSVEN Project	Jun. 1997	Jun. 1999	Matanzas Industrial Complex, Bolivar, Venezuela	POSVEN CA	1.5 million T/Y	This project is DRI production facility with a method of HYL process. Produced DRI is compressed by briquetting machine then changed into HBI.  - Supply Scope : Drawings, Equipments and Test run
Brazil KOBRASCO PELLETIZING PLANT	Feb. 1996	Nov. 1998	Tubarao, Vitoria, Brazil	CVRD	4 million T/Y	This project had planned to construct palletizing plant capable of 4 millions T/Y which was J/V businesses between POSCO and CVRD of Brazil on a fifty-fifty basis mainly to stable provide of pellet into newly installed 5th Blast Furnace in Gwangyang Steel

# Lime Calcination

Project	Start	Completion	Location	Client	Capacity	
<b>POSCO Pohang Steelworks</b>						
FINEX Lime calcination facility	Sep. 2005	Sep. 2006	Pohang Steelworks	POSCO	300 Ton/Day x 1 lot	This project successfully built new facilities capable of annual 100,000 tons of CaO, addressing the shortage problem and responding to the plan to build new FINEX plant and boost production of crude steel in the mid and long term.  - Type of Kiln: Rotar
Revamping of No.1&2 Lime Calcination facility	Sep. 2001	Jul. 2004		POSCO	300 Ton/Day x 2 lot	A project to replace aged calcination furnaces I & II and the auxiliary systems, and to integrate the operation room for the purpose of achieving a good balance between the supply and consumption of lime in accordance with medium and long term investment
<b>POSCO Gwangyang Steelworks</b>						
Lime Calcination for crude steel increase plan	Oct. 1997	Mar. 1999	Gwangyang Steelworks	POSCO	300 Ton/Day x 2 lot	This project had planned to construct 2sets of shaft kiln and other facilities to stable supply of additional requirement of quicklime according to increase plan of crude steel in Gwangyang Steelworks.  - Type of Kiln: Fine Lime Shaft Kiln 300Ton/Day X 2

# Coke Oven

Project	Start	Completion	Location	Client	Capacity	
<b>POSCO Pohang Steelworks</b>						
Extension of the Coke Plant Stage 5	Oct. 2005	Nov. 2007	Pohang Steelworks	POSCO	620,000 T/Y	<p>A new 5A coke oven battery was planned to meet the demand for the improvement of productivity in blast furnace. 5A battery was located next to existing 5B battery and its coke productivity is the same as 5B battery.</p> <p>- Coke Oven Battery 1set (75)</p>
<b>POSCO Gwangyang Steelworks</b>						
Desulfurization Plant for Gas Refinery Plant	Mar. 2005	Jan. 2007	Gwangyang Steelworks	POSCO	6,800 Nm <sup>3</sup> /H	<p>The desulfurization plant was planned to prevent SO<sub>x</sub> emission in the air during the scheduled maintenance period(40 days/year). Also, the installation of desulfurization plant helps the improvement of environmental condition and prevents the surface quali</p>
CDQ for the Coke Plant Stage 4	Dec. 2003	Aug. 2005	Gwangyang Steelworks	POSCO	180 T/H (Dry Coke)	<p>The traditional wet coke quenching system had been used in stage 5 coke plant. CDQ(Coke Dry Quenching) was adopted instead of existing wet quenching system. CDQ improved the energy recovery and the quality of coke for blast furnace which has been aiming</p>

# Oxygen Converter

Project	Start	Completion	Location	Client	Capacity	
POSCO Pohang Steelworks						
Pohang New steelmaking plant	Dec. 2007	Apr. 2010	Pohang Steelworks	POSCO	4.6 milion T/Y	A project to increase annual production capacity to 4.65 million tons by improving compatibility, cost saving, and the quality of the converter furnace operation via the introduction of facilities with the same capacity as those of No.2 steelmaking plant
De-P Converter for No.2 Steelmaking plant	Feb. 2005	Mar. 2007		POSCO	4.5 milion T/Y	A project to construct a De-P converter in No.2 steelmaking plant for the purpose of establishing a system for high quality steel (electro plated steel plates and API) and cost saving to meet the productivity of annual capacity of 1.5 million tons FINEX P
Revamping of No.1 Steelmaking plant (2nd step)	May 1996	Dec. 1997		POSCO	2.5 milion T/Y	<p>A project to improve the capacity of aged No.1 steelmaking plant by revamping the converter shell, trunnion ring, tilting equipment and other converter facility.</p> <ul style="list-style-type: none"> <li>○ Converter capacity : 110ton (Inner volume : 81m<sup>3</sup>)</li> <li>○ Main facility</li> <li>- Converter shell and</li> </ul>

# Oxygen Converter

Project	Start	Completion	Location	Client	Capacity	
POSCO Gwangyang Steelworks						
Converter of SMP for Gwangyang Plate Mill Project	Feb. 2008	Apr. 2010	Gwangyang Steelworks	POSCO	2.43 million T-S/Y	<p>Capacity: 2,430,000 T-S/year (Converter : 280 T/ch)</p> <p>Summary: A project to newly construct KR(2sets) &amp; converter(1set) facilities for the purpose of producing high grade steel plate(TMCP,API)</p> <ul style="list-style-type: none"> <li>○ Main facility</li> <li>1. KR Facility (De-S) : 250 T/ch x 2 set</li> </ul>
De-P converter of No.2 steel making plant	Jun. 2006	Dec. 2007		POSCO	4.5 million T-S/Y	<p>A project to newly construct KR(3sets) &amp; converter(1set) facilities for the purpose of establishing a system for the mass production of strategic products.</p> <ul style="list-style-type: none"> <li>○ Reduction of construction period : 19 months → 16.5 months</li> <li>○ Main facility</li> <li>- Converter vess</li> </ul>
N2 Splash Slag Coating of No.2 steel making plant	May 2000	Mar. 2001		POSCO	8.5 million T/Y	<p>After converter tapping, this facility add coating materials, such as magnesia, dolomite, to slag in converter and uniformly attach them to refractory bricks by blowing high pressure N2 gas through lance.</p> <p>This facility allows stable maintenance of convert</p>

# Hight mill

Project	Start	Completion	Location	Client	Capacity	
Asia Special Steel Project	Dec. 2007	May. 2009	HIBIKINADA, Industrial complex, Japan	Asia Special Steel Co.,Ltd.	Ingot 120,000 T/Y	<p>POSTEEL and KOTOBUKI made a joint venture company to meet increasing demand of Ingot product. This project comprised Electric arc melting plant and Ingot plant.</p> <ul style="list-style-type: none"> <li>○ Work scope : Engineering, Procurement and installation</li> <li>○ Key equipment : Ingot Facility,</li> </ul>
ARCO Project	Apr. 1997	Mar. 2001	Egypt Sadat City	Arab Company for Special Steel	Special Steel 1.4 million T/Y	<p>ARCO project is to build the largest stainless steel plant in middle-east area.</p> <ul style="list-style-type: none"> <li>- SMP (Electric Arc Furnace, Refining furnace, Vacuum Decarburization facility, Continuous casting)</li> <li>- RMP (Heating furnace, Roughing Mill, Billet, Shearing mac</li> </ul>
<b>POSCO Pohang Steelworks</b>						
STS No.3 Steel melt shop	Jul. 2001	Apr. 2003	Pohang Steelworks	POSCO	600,000 T/Y	<p>POSCO E&amp;C supplied 600,000 ton per year stainless product facilities including Plant building, Equipment foundation, Steel structure manufacturing &amp; erection, Equipment installation.</p> <ul style="list-style-type: none"> <li>○ Work scope: Procurement and Construction</li> </ul>
STS Expansion	Dec. 1994	Aug. 1996		POSCO	840,000 T/Y	<p>This stainless steel plant has one of the largest production capacity in the world.</p> <ul style="list-style-type: none"> <li>○ Work Scope: Engineering, Procurement and Construction</li> </ul>

# Hight mill

Project	Start	Completion	Location	Client	Capacity	
<b>POSCO Gwangyang Steelworks</b>						
<b>NO.1 Hight-Mill</b>	Jan. 1995	Oct. 1996	Gwangyang Steelworks	POSCO	1.8 million T/Y	<p>This Project is to build facilities to produce slim sheet of hot roll mill product under 1.8mm thickness sheet and 1,800,000ton per year.</p> <ul style="list-style-type: none"> <li>- Electric Arc Furnace : 130ton x 2</li> <li>- LF x 2</li> <li>- VTD x 2</li> <li>- Continuous casting: 1MC x 1 Str x 2</li> <li>- Heat Holdin</li> </ul>
<b>CEM</b> (Compact Endless Casting & Rolling Mill)	Nov. 2007	June. 2009	Gwangyang Steelworks	POSCO	1.8 million T/Y	<p>This Project is to revamp the existing steel making plant , and to replace the two(2) lines of caster and intermediate facilities with one(1) line of high speed caster and modernized intermediate facilities so as to be connected with the existing rolling</p>

# Ladle Refining

Project	Start	Completion	Location	Client	Capacity	
<b>POSCO Pohang Steelworks</b>						
<b>New Steel-Making Plant RH</b>	Dec. 2007	Apr. 2010	Pohang Steelworks	POSCO	35 CH/D (330 T/ch)	Duplex-RH facility (POSCO E&C patent application) is supplied for production enlargement of existing No.1 steel-making plant(110T/Ch) - 2Booster/2Ejector/2Condenser/3WRP - 2 Vessel / 2 Ladle Transfer Car - Multi-function burner - Dust tank system
<b>No.3 RH for No.2 Steelmaking plant</b>	Aug. 2006	Jul. 2007		POSCO	RH: 35 CH/D (330 T/ch)	Duplex-RH facility (POSCO E&C patent application) improved in the capabilities of production & vacuum treatment is supplied. - 3Booster/2Ejector/2Condenser/3WRP - 2 Vessel / 2 Ladle Transfer Car - Multi-function burner
<b>Revamping of No.2 RH for No.1 Steelmaking plant</b>	Apr. 2005	Feb. 2006		POSCO	25CH/Day (110 T/ch)	○ Revamping of obsolete facilities - Capacity enlargement in vacuum vessels / vacuum pumps - Modernization of Alloy equipment - Modernization of Relining & Preheating equipment - Modernization of Transfer car & Bubbling equipment  ○ Key facilities -

# Ladle Refining

Project	Start	Completion	Location	Client	Capacity	
CHIS for No.2 Steelmaking plant	Jul. 2004	Dec. 2004	Pohang Steelworks	POSCO	2.1 million T/Y	<ul style="list-style-type: none"> <li>○ Key facilities</li> <li>- Snorkel Rotating &amp; Lifting equipment</li> <li>- O<sub>2</sub> &amp; PI Lance equipment</li> <li>- Snorkel Transfer Car</li> <li>- Alloy equipment &amp; Wire feeder</li> <li>- PLC control system</li> <li>○ Process effects in CHIS(Cheical Heating in Snorkel)</li> <li>- O<sub>2</sub> pick-up prevention in alloy cha</li> </ul>
Revamping of No.1 RH / VTD for No.2 Steelmaking plant	May 2002	Dec. 2002		POSCO	RH: 25 CH/D VTD: 3 CH/D (330 T/ch)	<ul style="list-style-type: none"> <li>○ PHD(POSCOENC Hybrid Degasser)</li> <li>- Revamping of the old-fashioned RH Facility</li> <li>- Create VTD Degassing facility (Heat size : 320ton/heat)</li> <li>- Diversity and state-of-the-art of Production steel grade</li> <li>○ Main facilities</li> <li>- 3Booster / 2Ejector / 2Condenser / 3W</li> </ul>
LF for No.1 Steelmaking plant	Apr. 2000	Dec. 2001		POSCO	105 T/H x 20 CH	<p>The project that creation of LF (Ladle Furnace) 1 set for the production system of POSCO Pohang No.1 Steel making plant strategy product</p> <ul style="list-style-type: none"> <li>- Arcing Equipment</li> <li>- Alloy addition equipment</li> <li>- Powder Injection facility</li> <li>- Transfer cars</li> <li>- Utility facility, Hoi</li> </ul>
LF for No.2 Steelmaking plant	May 1995	Dec. 1997		POSCO	330 T/H x 20 CH	<p>The project that creation of LF (Ladle Furnace) 1 set for the production system of POSCO Pohang No.2 Steel making plant strategy product</p> <ul style="list-style-type: none"> <li>- Arcing Equipment</li> <li>- Alloy addition equipment</li> <li>- Powder Injection facility</li> <li>- Transfer cars</li> <li>- Utility facility</li> <li>- S</li> </ul>

# Ladle Refining

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<b>POSCO Gwangyang Steelworks</b>						
No.3 RH for NO.1 steel making plant	Apr. 2008	Aug. 2009	Gwangyang Steelworks	POSCO	RH: 33 CH/D (275 T/ch)	A project to construct a Duplex-RH facility to treat the amount of De-gas as increasing amount of hot metal for new steel making plant in Kwang-Yang and eliminate the Neck-operation for existed NO.1 steel making plant in Kwang-Yang.  - Heavy vacuum: 2 Boo
RH-VTD for Increasing productivity of plate	Feb. 2008	Apr. 2010		POSCO	RH/VTD: 30 CH/D (280 T/ch)	A project to construct a RH-VTD facility as constructing a new plate mill producing luxury plates(TMCP,ASP) 2 million ton annually.  - Heavy vacuum: 2 Booster / 2 Ejector/ 2 Condenser / 6 WRP - 2 Vessel / 1 Ladle Transfer Car - Multi-function burner
No.2 RH-TOB for No.2 steel making plant	Aug. 1998	Jun. 2000		POSCO	2.54 million T/Y	A revamping project of vacuum facility and EIC facility to renovate aged facility such as vacuum vessels and pump and produce stratgic steel like a plate of car  - Heat Size (325 T/H ) - Vacuum Unit (Booster 2, Ejector 3, Water Ring Pump 3)
No.2 RH-POSB for No.2 steel making plant	Aug. 1998	Feb. 1999		POSCO	2.3 million T/Y	POSCO E&C renovated aged facilities such as vacuum vessels and pumps to increase their exhaust capacity and decarbonization capability, and established a system for the production of ultra-low-carbon steel for steel sheets for automobiles.  - Heat Size(

# Ladle Refining

Project	Start	Completion	Location	Client	Capacity	
No.2 RH-POSB for No.1 steel making plant	May-98	Nov. 1998	Gwangyang Steelworks	POSCO	2.3 million T/Y	POSCO E&C renovated aged facilities such as vacuum vessels and pumps to increase their exhaust capacity and decarbonization capability, and established a system for the production of ultra-low-carbon steel for steel sheets for automobiles.  - Heat Size(
No.1 RH-TOB for No.2 steel making plant	Feb. 1998	Jul. 1998		POSCO	2.3 million T/Y	POSCO E&C renovated aged facilities such as vacuum vessels and pumps to increase their exhaust capacity and decarbonization capability, and established a system for the production of ultra-low-carbon steel for steel sheets for automobiles.  - Heat Size(
LF for No.1 Steelmaking plant	Apr. 1997	Jun. 1998		POSCO	275 T/H x 20 CH	A project to construct Ladle Furnace to establish a production system for main products of Gwangwang No.1 steel making work.  - Heating system - Flux and Ferro-alloy handling system - Power Injection system - Transfer car - Utility supply system -
No.1 RH-TOB for No.1 Steelmaking plant	Nov. 1996	Sep. 1997		POSCO	2.3 million T/Y	A project to establish a production system of high quality steel by the economical and optimum vacuum facility that is considering limited flow rate of cooling water and steam of the existing facilities.  - Heat Size(275 T/H) - Vacuum Unit(Booster 2, E

# Continuous Casting

Project	Start	Completion	Location	Client	Capacity	
<b>POSCO Pohang Steelworks</b>						
No.2 Bloom for No.1 Continuous casting plant	May 2006	Feb. 2008	Pohang Steelworks	POSCO	1.1 million T/Y	A project to construct a new bloom caster for high grade wire rods in the existing No.1 slab yard. - Bloom size: 400 x 500mm
Revamping of No.4 machine for No.3 Continuous casting plant	Mar. 2005	May 2006		POSCO	3.4 million T/Y	A revamping project to replace an existing continuous caster of casting bow type with a continuous caster of segment type for an improvement in productivity. - Slab Size: 250t x (740 ~ 1,650)mm
poStrip(Strip Caster)	Jun. 2004	Jun. 2006		POSCO	0.6 millionT/Y	A project to construct a poStrip Demo Plant for technical development of strip casting process. POSCO E&C carried out all basic design except Mill line by its own ability. - Casting speed : 27.8 ~133 mpm - Casting thickness : 2.0 ~4.0 mm - Coil thick
Revamping of No.1 machine for No.2 Continuous casting plant	Aug. 2003	May 2005		POSCO	2.8 million T/Y	A revamping project to rebuild an existing continuous caster into an exclusive plate continuous caster for an improvement in productivity. - Slab Size: 220,300t x (1,600~2,200) mm - Casting Speed: max. 2.0m/min
Pilot continuous caster	Dec. 2001	Mar. 2003		POSCO	0.6 millionT/Y	A project to construct a continuous caster including design and supply of equipment with a government task. POSCO E&C carried out all basic design including casting platform, mold and segment by its own ability. - Casting thickness : 100 mm ~ 140 mm -
No.1 Bloom for No.1 Continuous casting plant	Dec. 2000	Nov. 2002		POSCO	0.8 million T/Y	A project to construct a new bloom caster for high grade wire rods and an improvement of productivity in the No.1 continuous casting plant. - Bloom Size: 300 x 400mm

# Continuous Casting

Project	Start	Completion	Location	Client	Capacity	
<b>POSCO Gwangyang Steelworks</b>						
Revamping of No.2 machine for No.1 Continuous casting plant	Apr. 2008	Aug. 2009	Gwangyang Steelworks	POSCO	3.2 million T/Y	A revamping project to rebuild an existing continuous caster into a vertical bending type caster for the demand of automotive steel - Casting speed: 2.1m/min
2 Strand slab caster for Plate mill CCP3 / CCM1	Jan. 2008	May-10		POSCO	3.2 million T/Y	A project to construct a new plate caster for an improvement in productivity. - Thickness: 250mm, 300mm - Width: 1,400mm ~ 2,400mm - Length: 5,500mm ~ 12,000mm - Weight: Max. 45ton
Revamping of No.3 machine for No.2 Continuous casting plant	Jun. 2006	Nov. 2007		POSCO	3.5 million T/Y	A revamping project to rebuild an existing bending type caster into a vertical bending type and high speed caster for an improvement in productivity. POSCO E&C applied a new technology which is a secondary cooling water nozzle for high speed control, a wid
Revamping of No.4 machine for No.2 Continuous casting plant	Jan. 2004	Jul. 2005		POSCO	2 million T/Y	A revamping project to rebuild an existing bending type caster into a vertical bending type caster for an improvement in cold rolled steel quality. - Slab size: 250t X (820~2000)mm - Casting Speed: Max. 2.2m/min

# Continuous Casting

Project	Start	Completion	Location	Client	Capacity	
Scarfig machine for No.1 & No.2 Continuous casting plant	Mar. 2003	Feb. 2006	Gwangyang Steelworks	POSCO	1 million T/Y x 2M/C	<p>A project to establish a four side scarfig machine and a grinding machine for an improvement of quality in the No.1 &amp; No.2 continuous casting plant.</p> <ul style="list-style-type: none"> <li>- 4 side scarfig machine</li> <li>- Grinding machine</li> <li>- Crack detecting equipment</li> <li>- A dust collector</li> </ul>
Revamping of No.3 machine for No.1 Continuous casting plant	Dec. 2001	Jul. 2003		POSCO	1.8 million T/Y	<p>A revamping project to rebuild an exsiting bending type caster into a vertical bending type caster for an improvement in cold rolled steel quality. It is applied a new soft reduction technology which is operated during the casting.</p> <ul style="list-style-type: none"> <li>- Slab Size: 250t x (</li> </ul>
No.4 machine for No.1 Continuous casting plant	Dec. 1995	Sep. 1997		POSCO	2.25 million T/Y	<p>A project to construct a vertical bending type caster(1M/C x 2Strand) for an improvement in productivity and cold rolled steel quality.</p> <ul style="list-style-type: none"> <li>- Slab Size: 230t X (800~1,600)W</li> <li>- Casting Speed: Max. 2.2m/min</li> </ul>

# Hot Rolling

Project	Start	Completion	Location	Client	Capacity	
Zhangjiagang Pohang Stainless Steel(ZPSS) Hot strip mill in China	May 2004	Sep. 2006	Zhangjiagang City Jiangsu, China	ZPSS (Zhangjiagang-Pohang Stainless Steel)	800,000 T/Y	A project to construct new hot strip mill for stainless steel with an annual capacity of 800,000 tons in order to supply stainless steel products in China domestic market. <ul style="list-style-type: none"> <li>○ Main facilities : Reheating furnace,Roughing mill,Steckel Mill, Down coiler,</li> </ul>
<b>POSCO Pohang Steelworks</b>						
Modernization of Coil Conveyor for No.2 Hot strip mill	Mar. 2006	Apr. 2006	Pohang Steelworks	POSCO	4,900,000 T/Y	This project is to revamp coil conveyor system o to modernize eye vertical type into eye horizontal type. <ul style="list-style-type: none"> <li>○ Main facilities: Car for moving, chain conveyor, Inspection line</li> <li>○ Engineering, Equipment supply, Erection, Commissioning, Supervision</li> </ul>
High Density Cooling System of No.2 Hot strip mill	Mar. 2006	Apr. 2006		POSCO	4,900,000 T/Y	This project is to install the high density cooling system for uniform rapid cooling of all strip. <ul style="list-style-type: none"> <li>○ Main facilities : Runout table, High density cooling system, Water treatment facilities</li> <li>○ Engineering, Equipment supply, Erection, Commissioning, Sup</li> </ul>
Revamping of the Billet Mill	Jan.2001	May 2005		POSCO	760,000 T/Y	With The increasing Demand and the High Quality of the product from the POSCO <ul style="list-style-type: none"> <li>○ Main facilities: Reheating furnace adopted RCB</li> <li>○ Engineering, Equipment supply, Erection, Commissioning, Supervision</li> </ul>
Increasing the unit product weight of No.1 hot strip mill	Jul. 2001	Apr. 2003		POSCO	3,240,000 T/Y	This project is to supply the facilities for increasing the production capacity(2,710,000 T/Y → 3,240,000 T/Y) by increasing the unit product weight, and for improving the quality of stainless steel product. <ul style="list-style-type: none"> <li>○ Main facilities: Slab depiling system, Coil</li> </ul>
Modernization of No.1 hot strip mill	May 1996	Jul. 1997		POSCO	2,400,000 T/Y	This project is to supply the facilities for modernization of No.1 hot strip mill in order to improve good profile and high quality of product. <ul style="list-style-type: none"> <li>○ Main facilities: Crop shear, Finishing scale breaker</li> <li>○ Engineering, Equipment supply, Erection, Commissioni</li> </ul>

# Hot Rolling

Project	Start	Completion	Location	Client	Capacity	
<b>POSCO Gwangyang Steelworks</b>						
High Density Cooling System of No.3 Hot strip mill	Oct. 2007	Nov. 2007	Gwangyang Steelworks	POSCO	4,810,000 T/Y	This project is to install the high density cooling system for uniform rapid cooling of all strip. <ul style="list-style-type: none"> <li>○ Main facilities: Runout table, High density cooling system, Laminar cooling system, Water treatment facilities</li> <li>○ Enginee</li> </ul>
Revamping of Hot dividing line of No.2 Hot strip mill	Mar. 2007	May 2007		POSCO	5,000,000 T/Y	This project is to revamp the existing hot dividing line for transforming 2-hi mill into 4-hi mill. <ul style="list-style-type: none"> <li>○ Main facilities: 4-hi skinpass mill, Roll changing system, Coil car</li> <li>○ Engineering, Equipment supply, Erection, Commissioning, Supervision</li> </ul>
High Density Cooling System of No.1 Hot strip mill	Apr. 2007	Apr. 2007		POSCO	4,800,000 T/Y	This project is to install the high density cooling system for uniform rapid cooling of all strip. <ul style="list-style-type: none"> <li>○ Main facilities: Runout table, High density cooling system, Laminar cooling system</li> <li>○ Engineering, Equipment supply, Ere</li> </ul>
High Density Cooling System of No.2 Hot strip mill	Feb. 2007	Feb. 2007		POSCO	5,000,000 T/Y	This project is to install the high density cooling system for uniform rapid cooling of all strip. <ul style="list-style-type: none"> <li>○ Main facilities: Runout table, High density cooling system, Laminar cooling system</li> <li>○ Engineering, Equipment supply, Ere</li> </ul>
New Preheating Furnace of No.3 Hot strip mill	Jun. 2005	Nov. 2007		POSCO	250 T/Hr	This project is to supply the preheating furnace and the entry & delivery equipment for new installation of preheating furnace. <ul style="list-style-type: none"> <li>○ Main facilities: Preheating furnace, Charger&amp;extarctor, entry&amp;delivery roller table</li> <li>○ Engin</li> </ul>
Modernization of Coil Conveyor for No.3 Hot strip mill	Oct. 2004	Mar. 2005		POSCO	4,810,000 T/Y	This project is to revamp coil conveyor system in order to modernize eye vertical type into eye horizontal type. <ul style="list-style-type: none"> <li>○ Main facilities: Car for moving coils, chain conveyor, Inspection line</li> <li>○ Engineering, Equipment supply, Erection, Commissioning, Supervis</li> </ul>
Modernization for No.2 Hot strip mill	Sep. 2000	Jul. 2002		POSCO	3,000,000 T/Y	This project is to supply the facilities for modernization of No.2 hot strip mill. <ul style="list-style-type: none"> <li>○ Main Facilities : Reheating furnace, Hot skinpass line, Runout table, Entry &amp; delivery equipment of furnace, Coil conveyor</li> <li>○ Enginee</li> </ul>

# Plate

Project	Start	Completion	Location	Client	Capacity	
<b>POSCO Pohang Steelworks</b>						
ACC & DQ Revamping for No.2 Plate Mill	Aug. 2007	Jan. 2008	Pohang Steelworks	POSCO	238 mT/Y	Revamping existing Cooling Facility into Mulpic System to improve product quality. ○ Scope: Design, Supply, Construction, S/V
Facilities covering Extreme Heavy Plate for No.2 Plate Mill	Sep. 2006	Jan. 2008		POSCO	238 mT/Y	Revamping existing Facilities to cover Production Increase and Extreme Heavy Plates. ○ Scope: Design, Supply, Construction, S/V ○ Main Facilities: Reheating Furnace, Cooling Bed
Heat Treatment Furnace for No.3 Plate Mill	Sep. 2006	Aug. 2007		POSCO	20 mT/Y	Installing Heat Treatment Furnace and Side Shifter on Mill Line to produce 20 mT/Y Heat Treated Plates and to improve Productivity of Accelerated Cooling Plates. ○ Scope: Design, Supply, Construction, S/V ○ Main Facilities: Heat Treatment Furnace, Rolle
No.2 Plate Mill Revamping	Mar. 2004	Jul. 2005		POSCO	224 mT/Y	Revamping existing Facilities to produce High Quality Plates and to maintain Stable Operation. ○ Scope: Design, Supply, Construction, S/V ○ Main Facilities: ACC & DQ Facility, Cooling Bed, Finishing Line Facilities
No.2 Heat Treatment Furnace Extension for No.2 Plate Mill	Oct. 2000	Feb. 2001		POSCO	43 mT/Y	Extending existing No.2 Heat Treatment Furnace to increase Productivity. ○ Scope: Design, Supply, Construction, S/V
No.3 Plate Mill	Dec. 1995	Sep. 1997		POSCO	106 mT/Y	Plate Mill producing 106 mT/Y Plates ○ Scope: Design, Supply, Construction, S/V ○ Main Facilities: Reheating Furnace, Finishing Line Facilities
<b>POSCO Gwangyang Steelworks</b>						
Gwangyang Plate Mill	Apr. 2008	Jul. 2010	Gwangyang Steelworks	POSCO	200 mT/Y	Plate Mill producing 200 mT/Y Plates ○ Scope: Design, Supply, Construction, S/V ○ Main Facilities : Reheating Furnace, ACC & DQ Facilities, Cooling Bed, Roller Table, Power Supply, Water Treatment Facilities

# Wire Rod

Project	Start	Completion	Location	Client	Capacity	
The Revamping of the No.3 Wire Rod Mill	Oct. 2000	Nov. 2001	Pohang Steelworks	POSCO	820,000 T/Y	<p>Relating to revamping project designed to improve quality of wire rod products and increase production.</p> <ul style="list-style-type: none"> <li>○ Supply Facility : water cooling system, reformed tub and lubliction equipment of the RSM(Reducing and Sizing M</li> </ul>
Vietnam VPS	Apr. 1994	Sep. 1995	Vietnam Hai-Phong(Anhai) City	VPS (POSCO-VSC)	200,000 T/Y	<p>POSCO E&amp;C carried out the spply of the equipment, costruction, test run and supervision of the VPS mill totally that was found and joint ventured by POSCO and VSC for the producing the wire rod &amp; rebar.</p>

# Cold Rolling

Project	Start	Completion	Location	Client	Capacity	
<b>Overseas Projects</b>						
DALIAN-PCSC CGL Revamping	Jun. 2009	Oct. 2010	Dalian, China	Dalian POSCO C&C	200,000 T/Y	Continuous Galvanizing Line with annually production capacity of 200,000 tons. <ul style="list-style-type: none"> <li>○ Scope of work: EP</li> <li>○ Product: GI, GL for construction, home appliance &amp; automobile</li> <li>○ LINE SPEED(mpm): Entry / Process / Exit: 220 / 170 / 220</li> <li>○ Raw Material                             <ul style="list-style-type: none"> <li>- F/H: 0.2 ~</li> </ul> </li> </ul>
POSCO-Guangdong ACL	May 2008	Nov. 2009	Shunde, Foshan, Guangdong, China	POSCO-Guangdong	150,000 T/Y	Annealing Coating Line with annually production capacity of 150,000 tons. <ul style="list-style-type: none"> <li>○ Scope of work: EP</li> <li>○ Product: LNO, MNO, HNO</li> <li>○ LINE SPEED(mpm): Entry / Process / Exit: 120 / 90 / 120</li> <li>○ Raw Material                             <ul style="list-style-type: none"> <li>- 0.5mm(t) x 1,000mm ~ 1,200mm(w)</li> </ul> </li> </ul>
PROSPERITY CCL	Feb. 2008	Jun. 2009	Kaohsiung, Taiwan	Prosperity Tieh Enterprise Co.,Ltd.	120,000 T/Y	Color Coating Line with annually production capacity of 120,000 tons. <ul style="list-style-type: none"> <li>○ Scope of work: EP</li> <li>○ Product: PCM coil for home appliance, building exterior &amp; Laminated coil</li> <li>○ LINE SPEED(mpm): Entry / Process / Exit: 140 / 100 / 140</li> <li>○ Raw Material                             <ul style="list-style-type: none"> <li>- Aluminu</li> </ul> </li> </ul>

# Cold Rolling

Project	Start	Completion	Location	Client	Capacity	
PROSPERITY PGL	Sep. 2007	Jun. 2009	Kaohsiung, Taiwan	Prosperity Tieh Enterprise Co.,Ltd.	500,000 T/Y	<p>Pickling &amp; Galvanizing Line with annually production capacity of 500,000 tons.</p> <ul style="list-style-type: none"> <li>○ Scope of work: EP</li> <li>○ Product: GI, GL for construction industry application</li> <li>○ LINE SPEED(mpm): Entry / Process / Exit: 100 / 70 / 100</li> <li>○ Raw Material</li> <li>- HR: 0.8 ~ 4.5mm(t)</li> </ul>
POSCO Mexico CGL	Oct. 2007	Jun. 2009	Altamira, Mexico	POSCO Mexico	400,000 T/Y	<p>Continuous Galvanizing Line (including RCL, CPL &amp; Utility) with annually production capacity of 400,000 tons.</p> <ul style="list-style-type: none"> <li>○ Scope of work: EPC</li> <li>○ Product: GI, GA for outer pannel of automobile</li> <li>○ LINE SPEED(mpm) : Entry / Process / Exit: 300 / 180 / 300</li> <li>○ Raw Mate</li> </ul>
POSCO Vietnam CAL	Aug. 2007	Sep. 2009	Phu My Industrial Zone, Vietnam	POSCO Vietnam	700,000 T/Y	<p>Continuous Annealing Line with annually production capacity of 700,000 tons.</p> <ul style="list-style-type: none"> <li>○ Scope of work: EPC</li> <li>○ Product: CR for automotive outer &amp; inner pannel</li> <li>○ LINE SPEED(mpm): Entry / Process / Exit: 600 / 400 / 600</li> <li>○ Raw Material: 0.35~1.6mm(t) x 700mm ~ 1,570</li> </ul>
Chung Hung steel (CHS) RCL	Sep. 2006	May 2008	Kaohsiung, Taiwan	Chung Hung Steel Co.	350,000 T/Y	<p>Recoiling Line with a annually production capacity of 350,000 tons.</p> <ul style="list-style-type: none"> <li>○ Scope of work: EP</li> <li>○ LINE SPEED(mpm): Max. 500</li> <li>○ Raw Material: CR 0.15 ~ 2.0mm(t) x 800mm ~ 1,250mm(w)</li> </ul>
Kao Hsing Chang (KHC) RCL	Feb. 2006	Mar. 2007	Kaohsiung, Taiwan	Kao Hsing Chang Iron & Steel Co.	360,000 T/Y	<p>Recoiling Line with a annually production capacity of 360,000 tons.</p> <ul style="list-style-type: none"> <li>○ Scope of work: EP</li> <li>○ LINE SPEED(mpm) : Max. 500</li> <li>○ Raw Material</li> <li>- CR: 0.16 ~ 2.0mm(t) x 800mm ~ 1,250mm(w)</li> <li>- FH: 0.16 ~ 1.6mm(t) x 800mm ~ 1,250mm(w)</li> </ul>

# Cold Rolling

Project	Start	Completion	Location	Client	Capacity	
HADEED CCL	Apr. 2005	Aug. 2007	Al-Jubail, Saudi Arabia	Saudi Iron & Steel Company (HADEED)	120,000 T/Y	<p>Color Coating Line (including RCL, CPL &amp; Utility) with annually production capacity of 120,000 tons.</p> <ul style="list-style-type: none"> <li>○ Scope of work: EPC Turnkey</li> <li>○ Product: PCM coil for home appliance, building exterior &amp; Laminated coil</li> <li>○ LINE SPEED(mpm): Entry / Process / Exit: 160</li> </ul>
ZPSS HAPL	Dec. 2004	Oct. 2006	Zhangjiagang, China	ZPSS	690,000 T/Y	<p>Stainless HAPL with annually production capacity of 690,000 tons.</p> <ul style="list-style-type: none"> <li>○ Scope of work: EP</li> <li>○ Product: STS HR</li> <li>○ LINE SPEED(mpm) : Entry / Process / Exit: 160 / 100 / 160</li> <li>○ Raw Material: 2.1 ~ 6.1mm(t) x 800 ~ 1,350mm(w)</li> </ul>
PROSPERITY CGL	Feb. 2004	Sep. 2005	Kaohsiung, Taiwan	Prosperity Tieh Enterprise Co.,Ltd.	200,000 T/Y	<p>Continuous Galvanizing Line with annually production capacity of 200,000 tons.</p> <ul style="list-style-type: none"> <li>○ Scope of work: EP</li> <li>○ Product: GI</li> <li>○ LINE SPEED(mpm) : Entry / Process / Exit: 220 / 170 / 220</li> <li>○ Raw Material                             <ul style="list-style-type: none"> <li>- CR, HR: 0.2mm ~ 1.2mm(t) x 600mm ~ 1,250mm(w)</li> </ul> </li> </ul>
SINO LEADING TECH CGL	Oct. 2003	Jun. 2005	Sangsu in China	Sino Leading Tech.	250,000 T/Y x 2 line	<p>Two(2) nos. of Continuous Galvanizing Line with annually production capacity of 250,000 tons each.</p> <ul style="list-style-type: none"> <li>○ Scope of work: EP without S/V</li> <li>○ Product: GI ,GL</li> <li>○ LINE SPEED(mpm) : Entry / Process / Exit: 235/180/235</li> <li>○ Raw Material : 0.2 ~ 1.6mmT, 600 ~ 1,300 mm</li> </ul>
GENERAL TRADE CGL	Jul. 2003	Jul. 2005	Thai Binh, Vietnam	Thai Binh General Trade Company	50,000 T/Y	<p>Continuous Galvanizing Line with annually production capacity of 50,000 tons.</p> <ul style="list-style-type: none"> <li>○ Scope of work: EP</li> <li>○ Product: GI</li> <li>○ LINE SPEED(mpm) : Entry / Process / Exit: 70 / 50 / 70</li> <li>○ Raw Material                             <ul style="list-style-type: none"> <li>- CR: 0.2mm ~ 1.6mm(t) x 600mm ~ 1,300mm(w)</li> </ul> </li> </ul>

# Cold Rolling

Project	Start	Completion	Location	Client	Capacity	
GENERAL TRADE CCL	Jul. 2003	Jul. 2005	Thai Binh, Vietnam	Thai Binh General Trade Company	30,000 T/Y	Color Coating Line with annually production capacity of 30,000 tons. ○ Scope of work: EP ○ Product: PCM Coil ○ LINE SPEED(mpm) : Entry / Process / Exit: 50 / 30 / 50 ○ Raw Material: - GI/EGI/CR: 0.2~1.0mm(t) x 600mm ~ 1,250mm(w)
PCCS CGL Revamping	Jul. 2003	Mar. 2004	Dalian, China	Dalian POSCO-CFM Coated Steel Co., Ltd.	150,000 T/Y	Continuous Galvanizing Line with annually production capacity of 150,000 tons. ○ Scope of work: EP ○ Product: GI for PCM coil, building exterior & automobile ○ LINE SPEED(mpm) : Entry / Process / Exit: 150/120/150 ○ Raw Material: 0.2 ~ 1.6mm Thick, 7
QPSS Stainless CRM	Jan. 2003	Dec. 2004	Qingdao, China	QPSS	150,000 T/Y	Stainless CRM (including ZRM, SPM, APL, CBL, TLL, STL) with annually production capacity of 150,000 tons. ○ Scope of work: EP ○ Product: Stainless ○ LINE SPEED(mpm) : Entry / Process / Exit: 150 / 150 / 150 ○ Raw Material: 0.25 ~ 3.0mm(t) x 600 ~ 1,3
KISCO CGL	Jan. 2003	Jun. 2004	Unnan, China	KUNMING IRON & STEEL	150,000 T/Y	Continuous Galvanizing Line with annually production capacity of 100,000 tons. ○ Scope of work: EP ○ Product: GI for building construction and electric appliance products ○ LINE SPEED(mpm) : Entry / Process / Exit: 180 / 120 / 180 ○ Raw Material -
KISCO CCL	Jan. 2003	Apr. 2004	Unnan, China	KUNMING IRON & STEEL	100,000 T/Y	Color Coating Line with annually production capacity of 100,000 tons. ○ Scope of work: EP ○ Product: PCM Coil for Building exterior ○ LINE SPEED(mpm) : Entry / Process / Exit: 120 / 80 / 120 ○ Raw Material - GI, GL, CR: 0.25 ~ 1.6mm(t) x 750 ~ 1,55

# Cold Rolling

Project	Start	Completion	Location	Client	Capacity	
NAKISCO CCL	Jan. 2003	Feb. 2004	BinhDuong, Vietnam	NAKISCO	20,000 T/Y	Color Coating Line with annually production capacity of 20,000 tons. ○ Scope of work: EP ○ Product: PCM Coil ○ LINE SPEED(mpm) : Entry / Process / Exit: 50 / 30 / 50 ○ Raw Material: - GI/EGI/CR: 0.2~1.0mm(t) x 600mm ~ 1,250mm(w)
NAKISCO CGL	Jan. 2003	Feb. 2004	BinhDuong, Vietnam	NAKISCO	30,000 T/Y	Continuous Galvanizing Line with annually production capacity of 30,000 tons. ○ Scope of work: EP ○ Product: GI ○ LINE SPEED(mpm) : Entry / Process / Exit: 50 / 30 / 50 ○ Raw Material - CR: 0.2mm ~ 1.6mm(t) x 600mm ~ 1,300mm(w)
HANDAN NO.1, 2 CCL	Dec. 2002	Jul. 2005	Handan, China	HANDAN IRON & STEEL Group	100,000 T/Y x 2 line	Two(2) nos. of Color Coating Line with annually production capacity of 100,000 tons each. ○ Scope of work: EP ○ Product: PCM Coil for Building exterior, home appliance & Printed coils ○ LINE SPEED(mpm) : Entry / Process / Exit: 140 / 100 / 140 ○ Raw
PCCS No.2 CCL	Feb. 2002	Mar. 2003	Dalian, China	Dalian POSCO-CFM Coated Steel Co., Ltd.	100,000 T/Y	Color Coating Line with annually production capacity of 100,000 tons. ○ Scope of work: EP ○ Product: CCI For architecture and home appliance, Polyester, Si-polyester, PVDF ○ LINE SPEED(mpm) : Entry / Process / Exit: 120/80/120 ○ Raw Material: 0.2 ~ 1.4
ZPSS NO.2 STS	Dec. 2001	Dec. 2003	Zhangjiagang, China	ZPSS	150,000 T/Y	Stainless CRM with annually production capacity of 150,000 tons. ○ Scope of work: EP ○ Product: Cold Stainless Steel 300 & 400 series ○ LINE SPEED(mpm) : Entry / Process / Exit: 90 / 160 / 90 ○ Raw Material: 0.3 ~ 3.0mm(t) x 1,000 ~ 1,300mm(w)

# Cold Rolling

Project	Start	Completion	Location	Client	Capacity	
SHUNPO MCL	Oct. 2001	Feb. 2003	Shunde, China	Shunde POSCO Coated Steel Co. Ltd. (ShunPo)	NO: 100,000 T/Y Color : 50,000 T/Y	Multi Coating Line with annually production capacity of 100,000 tons. ○Scope of work: EP ○Product: NO ○LINE SPEED(mpm) : Entry / Process / Exit: 160 / 120 / 160 ○Raw Material: F.H NO Coil 0.35 ~ 0.65mm(t) x 600 ~ 1,270mm(w)
POSVINA CCL	Apr. 2001	Jun. 2002	Hochiminh, Vietnam	POSVINA	22,000 T/Y	Color Coating Line with annually production capacity of 22,000 tons. ○Scope of work: E+P ○Product: PCM coil ○LINE SPEED(mpm) : Entry / Process / Exit: 50/30/50 ○Raw Material: CR, GI, EGI coil
HAIER CCL	Oct. 2000	Sep. 2001	Hefei, China	HAIER Co., LTD.	70,000 T/Y	Color Coating Line with annually production capacity of 70,000 tons. ○Scope of work: EP ○Product: PCM Coil for Building exterior, home appliance ○LINE SPEED(mpm) : Entry / Process / Exit: 80/60/80 ○Raw Material: 0.25 ~ 1.2 mmT, 600 ~ 1,320mm W
PCCS No.1 CCL	Aug. 1997	Nov. 1998	Dalian, China	Dalian POSCO-CFM Coated Steel Co., Ltd.	50,000 T/Y	Color Coating Line with annually production capacity of 50,000 tons. ○Scope of work: EP ○Product: PCM Coil for Building exterior, home appliance ○LINE SPEED(mpm) : Entry / Process / Exit: 80/60/80 ○Raw Material: 0.2 ~ 1.2 mmT , 600 ~ 1,250 mmW
ZPSS No.1 STS	Apr. 1997	Jan. 1999	Zhangjiagang, China	ZPSS	150,000 T/Y	Stainless CRM with annually production capacity of 150,000 tons. ○Scope of work: EP ○Product: Cold Stainless Steel 300 & 400 series ○LINE SPEED(mpm) : Entry / Process / Exit: 90 / 160 / 90 ○Raw Material: 0.3 ~ 3.0mm(t) x 1,000 ~ 1,300mm(w)
ZPSS CGL	Sep. 1996	May 1998	Zhangjiagang, China	ZPSS	100,000 T/Y	Continuous Galvanizing Line with annually production capacity of 100,000 tons. ○Scope of work: EP ○Product: GI ○LINE SPEED(mpm) : Entry / Process / Exit: 150 / 120 / 150 ○Raw Material: 0.2 ~ 1.6mm(t) x 720 ~ 1,250mm(w)

# Cold Rolling

Project	Start	Completion	Location	Client	Capacity	
<b>POSCO Pohang Steelworks</b>						
No.3 HCL For Silicon Steel Plant	Dec. 2007	Aug. 2009	Pohang Steelworks	POSCO	85,000 T/Y	HCL with annually production capacity of 85,000 tons. ○Scope of work: EPC ○Product: GO(silicon steel) ○LINE SPEED(mpm) : Entry / Process / Exit: 170 / 110 / 170 ○Raw Material: 0.15mm ~ 0.5mm(t) x 960mm ~ 1,270mm(w)
No.3 COF For Silicon Steel Plant	Dec. 2007	Aug. 2009		POSCO	100,000 T/Y	COF with annually production capacity of 100,000 tons. ○Scope of work: EP+C ○Product: Grain oriented electromagnetic steel ○LINE SPEED(mpm) : Entry / Process / Exit: ○Raw Material - Annealed steel:0.15mm~0.35mm(t)x800mm~1,270mm(w)
No.3 DCNL For Silicon Steel Plant	Dec. 2007	Aug. 2009		POSCO	100,000 T/Y	DCNL with annually production capacity of 100,000 tons. ○Scope of work: EP+C ○Product: GO ○LINE SPEED(mpm) : Entry / Process / Exit: 180 / 120 / 180 ○Raw Material: 0.15 ~ 0.65mm(t) ~ 960 ~ 1,270mm(w)
No.3 APL For Silicon Steel Plant	Sep. 2007	Aug. 2009		POSCO	352,000 T/Y	No.3APL with a annually production capacity of about 352,000tons. ○ Scope of work: EP+C ○ Product: Non Grain Oriented Hyper NO,HN0,HGO,CGO ○ LINE SPEED(mpm): Entry / Process / Exit: 120 / 75 / 120 ○ Raw Material - FH 1.5 ~ 3.0mm(t) x 950mm ~ 1320m
STS APF	Aug. 2007	May 2009		POSCO	400,000 T/Y	APF with annually production capacity of 400,000 tons. ○Scope of work: EP+C ○Product: Cold Stainless Steel 300 & 400 series ○LINE SPEED(mpm) : Entry / Process / Exit: 210 / 150 / 210 ○Raw Material: 0.3 ~ 3.0mm(t) x 1,000 ~ 1,350mm(w)

# Cold Rolling

Project	Start	Completion	Location	Client	Capacity	
No.2 HCL For Silicon Steel Plant	Oct. 2005	Jun. 2006	Pohang Steelworks	POSCO	160,000 T/Y	HCL with annually production capacity of 160,000 tons. ○Scope of work: EPC ○Product: GO(silicon steel) ○LINE SPEED(mpm) : Entry / Process / Exit: 230/170/230 ○Raw Material: 0.15mm ~ 0.5mm(t) x 550mm ~ 1,270mm(w)
No.2 COF For Silicon Steel Plant	Oct. 2005	Jun. 2006		POSCO	80,000 T/Y	COF with annually production capacity of 80,000 tons. ○Scope of work: EP+C ○Product: Grain oriented electromagentic steel ○LINE SPEED(mpm) : Entry / Process / Exit: ○Raw Material: Annealed steel:0.2mm~0.35mm(t)x800mm~1,270mm(w)
Modernization of No.2 DCNL For Silicon Steel Plant	Oct. 2005	Jun. 2006		POSCO	80,000 T/Y	DCNL with annually production capacity of 80,000 tons. ○Scope of work: EP+C ○Product: Annealed steel ○LINE SPEED(mpm) : Entry:180mpm / Process:120mpm / Exit:180mpm ○Raw Material: cold rolled steel
No.3 ACL For Silicon Steel Plant	May 2005	Jul. 2006		POSCO	362,000 T/Y	Annealing and Coating Line with a annually production capacity of about 361,732tons. ○ Scope of work: EP+C ○ Product: Non Grain Oriented MNO & HNO ○ LINE SPEED(mpm): Entry / Process / Exit: 320 / 250 / 320 ○ Raw Material: FH 0.15mm ~ 0.7mm(t) x 914mm
No.2 APL For Silicon Steel Plant	Nov. 2003	Jun. 2005		POSCO	250,000 T/Y	No.2APL with a annually production capacity of about 250,000tons. ○Scope of work: EP+C ○Product: HGO,CGO,NO ○LINE SPEED(mpm): Entry / Process / Exit: 60 / 45 / 60 ○Raw Material: 1.5 ~ 3.0mm(t) x 550mm ~ 1300mm(W)
No.1 COF For Silicon Steel Plant	Sep. 2003	Dec. 2004		POSCO	75,000 T/Y	COF with annually production capacity of 75,000 tons. ○Scope of work: EP+C ○Product: Grain oriented electromagentic steel ○LINE SPEED(mpm) : Entry / Process / Exit: ○Raw Material: Annealed steel 0.2mm~0.35mm(t)x800mm~1,270mm(w)

# Cold Rolling

Project	Start	Completion	Location	Client	Capacity	
1CAL of No.1 Cold Rolling Mill	May 2002	Mar. 2005	Pohang Steelworks	POSCO	300,000 T/Y	Continuous Annealing Line of BP with a annually production capacity of 300,000 tons. ○ Scope of work: EP+C ○ Product: Black Plate ○ LINE SPEED(mpm): Entry / Process / Exit: 750 / 600 / 850 ○ Raw Material: FH 0.15mm ~ 0.6mm(t) x 600mm ~ 1,070mm(w)
3CAL of No.2 Cold Rolling Mill	Nov. 2001	May 2003		POSCO	700,000 T/Y	Continuous Annealing Line with a annually production capacity of 700,000 tons. ○ Scope of work: EP + C ○ Product: Cold rolled annealed steel ○ LINE SPEED(mpm) : Entry:600mpm / Process:450mpm / Exit:640mpm ○ Raw Material: Cold rolled steel 0.2mm~2.0mm(t)
STS No.3 H-APL	May 2001	May 2003		POSCO	500,000 T/Y	H-APL with annually production capacity of 500,000 tons. ○ Scope of work: EP + C ○ Product: STS HR ○ LINE SPEED(mpm) : Entry / Process / Exit: 130 / 80 / 130 ○ Raw Material: 1.5 ~ 5.0mm(t) x 600 ~ 1,350mm(w)
Modernization of No.1 Cold Rolling Mill	Mar. 1997	Jul. 1999		POSCO	1,100,000 T/Y	Enhancement of annually production capacity from 900,000 tons to 1,100,000 tons ○ Scope of work: EP + C ○ Product: Full hard ○ LINE SPEED(mpm) : Entry :650mpm/ Process:260mpm / Exit:350mpm ○ Raw Material: Hot coil 2.0mm~4.5mm(t) x600~1,300mm(w)
No.1 ACL Revamping For Silicon Steel Plant	Nov. 1996	Jun. 1998		POSCO	100,000 T/Y	Annealing and Coating Line with annually production capacity of 100,000 tons. ○ Scope of work: EP + C ○ Product: Non Oriented Silicon steel LNO,MNO,HNO ○ LINE SPEED(mpm) : Entry 100 / Process 80 / Exit: 100 ○ Raw Material: F/H NO Coil: 0.2 ~ 0.65mm{
No.2 ACL For Silicon Steel Plant	Aug. 1996	Sep. 1998		POSCO	220,000 T/Y	Annealing and Coating Line with annually production capacity of 220,000 tons. ○ Scope of work: EP+ C ○ Product: Non Oriented Silicon steel LNO,MNO ○ LINE SPEED(mpm) : Entry 250/ Process 170/ Exit: 250 ○ Raw Material: F/H NO Coil: 0.2 ~ 0.65mm(t) x 60

# Cold Rolling

Project	Start	Completion	Location	Client	Capacity	
<b>POSCO Gwangyang Steelworks</b>						
NO.7 CGL	Feb. 2008	Mar. 2011	Gwangyang Steelworks	POSCO	500,000 T/Y	Continuous Galvanizing Line with annually production capacity of 500,000 tons. ○ Scope of work: EP+C ○ Product: GA for automobile ○ LINE SPEED(mpm) : Entry / Process / Exit: 350 / 180(220) / 350 ○ Raw Material: 0.4 ~ 2.3mm(t) x 800 ~ 1,900mm(w)
NO.2 CGL Revamping	Nov. 2006	Dec. 2007		POSCO	430,000 T/Y	Continuous Galvanizing Line with annually production capacity of 430,000 tons. ○ Scope of work: EP+C ○ Product: GA for automobile ○ LINE SPEED(mpm) : Entry / Process / Exit: 350 / 250 / 350 ○ Raw Material: 0.4 ~ 2.3mm(t) x 720 ~ 1,900mm(w)
NO.1 CGL Revamping	Oct. 2005	Jun. 2006		POSCO	450,000 T/Y	Continuous Galvanizing Line with annually production capacity of 450,000 tons. ○ Scope of work: EP+C ○ Product: GI ○ LINE SPEED(mpm) : Entry / Process / Exit: 350 / 250 / 350 ○ Raw Material: 0.4 ~ 2.3mm(t) x 800 ~ 1,860mm(w)
NO.6 CGL	Jun. 2004	Jun. 2006		POSCO	400,000 T/Y	Continuous Galvanizing Line (including Utility) with annually production capacity of 400,000 tons. ○ Scope of work: EPC ○ Product: GI, GA for outer pannel of automobile ○ LINE SPEED(mpm) : Entry / Process / Exit: 300 / 180 / 300 ○ Raw Material: 0.4mm
MCL	Jan. 2003	Aug. 2005		POSCO	250,000 T/Y	Multi Coating Line with annually production capacity of 250,000 tons. ○ Scope of work: EP+C ○ Product: GI, GA Coating ○ LINE SPEED(mpm) : Entry / Process / Exit: 250 / 140 / 250 ○ Raw Material: 0.45 ~ 3.25mm(t) x 800 ~ 1,860mm(w)
NO.5 CGL	Jul. 2003	Oct. 2005		POSCO	450,000 T/Y	Continuous Galvanizing Line (including CPL & Utility) with annually production capacity of 450,000 tons. ○ Scope of work: EPC ○ Product: GI, GA for outer pannel of automobile ○ LINE SPEED(mpm) : Entry / Process / Exit: 300 / 180 / 300 ○ Raw Material:

# Cold Rolling

Project	Start	Completion	Location	Client	Capacity	
No.4 Cold Rolling Fingerprint-Resistant Facility	Dec. 1999	May 2000	Gwangyang Steelworks	POSCO	100,000 T/Y	Fingerprint-Resistant Facility with annually production capacity of 100,000 tons. ○ Scope of work: EP+C ○ Product: Anti Finger printed coil for Home appliance ○ LINE SPEED(mpm) : Entry / Process / Exit: 300/180/300 ○ Raw Material: 0.4 ~ 2.0 mmT , 70
NO.4 CGL	May 1998	Jun. 2000		POSCO	400,000 T/Y	Continuous Galvanizing Line (CPL & Utility) with annually production capacity of 450,000 tons. ○ Scope of work: EPC ○ Product: GI, GA for outer pannel of automobile ○ LINE SPEED(mpm) : Entry / Process / Exit: 350 / 250 / 350 ○ Raw Material: 0.4mm ~
No.4 Cold Rolling Mill (PL/TCM)	Sep. 1995	Aug. 1997		POSCO	1,800,000 T/Y	Cold Roll Mill with annually production capacity of 1.8 million tons. (1.5 million tons of Cold Rolling Coil & 300,000 tons of Electrically Zinc-Galvanized Plate) ○ Scope of work: EP+C ○ Product: HR ○ LINE SPEED(mpm) : Entry / Process / Exit: 350 / 250
EGL of No.4 Cold Rolling Plant	Jul. 1995	Aug. 1997		POSCO	300,000 T/Y	EGL with annually production capacity of 300,000 tons. ○ Scope of work: EP+C ○ Product: EI, ○ LINE SPEED(mpm) : Entry / Process / Exit: 300/180/300 ○ Raw Material: 0.4 ~ 2.0 mmT , 700 ~ 1,570 mmW

# Cold Rolling

Project	Start	Completion	Location	Client	Capacity	
<b>Other Domestic Projects</b>						
Union Steel NO.5 CGL	Dec. 2007	Jun. 2009	Busan, Korea	Union Steel	370,000 T/Y	Continuous Galvanizing Line with annually production capacity of 370,000 tons. ○Scope of work: EP ○Product: GI, GA ○LINE SPEED(mpm) : Entry / Process / Exit: 360 / 240 / 360 ○Raw Material: F.H 0.25 ~ 2.5mm(t) x 800 ~ 1,600mm(w)
Magnesium Production Plant	Sep. 2006	Jul. 2007	Suncheon, Korea	POSCO	3,000 T/Y	The Magnesium Production Plant with nominal annual capacity of 3,000 tons per year Magnesium Coil & Sheet. ○ Scope of work: EP+C ○ Product: Magnesium Coil & Sheet ○ LINE SPEED(mpm) : Entry / Process / Exit: ○ Raw Material: 0.4 ~ 3.0mm(t) x 630mm(w)
POCOS NO.2 CCL Revamping	Mar. 2005	Dec. 2005	Pohang, Korea	POCOS	150,000 T/Y	Color Coating Line with annually production capacity of 150,000tons. ○ Scope of work: EPC turnkey ○ Product: CCI for architecture and Home appliance ○ LINE SPEED(mpm) : Entry / Process / Exit: 160/120/160 ○ Raw Material: 0.3 ~ 1.2 mmT, 600 ~ 1,320 mm
POCOS NO.1 CGL Revamping	Feb. 2005	Aug. 2006	Pohang, Korea	POCOS	300,000 T/Y	Continuous Galvanizing Line with annually production capacity of 300,000 tons. ○Scope of work: EP+C ○Product: GI, GL ○LINE SPEED(mpm) : Entry / Process / Exit: 220 / 150 / 220 ○Raw Material: 0.3 ~ 2.3mm(t) x 600 ~ 1,270mm(w)
POCOS NO.2 CGL	Sep. 2002	Dec. 2004	Pohang, Korea	POCOS	300,000 T/Y	Continuous Galvanizing Line with annually production capacity of 300,000 tons. ○Scope of work: EP+C ○Product: GI, GL ○LINE SPEED(mpm) : Entry / Process / Exit: 350 / 200 / 350 ○Raw Material: F.H 0.2 ~ 2.3mm(t) x 700 ~ 1,300mm(w)
POCOS NO.1 CCL Revamping	Jul. 1998	Jun. 1999	Pohang, Korea	POCOS	120,000 T/Y	Color Coating Line with annually production capacity of 120,000 tons. ○ Scope of work: EPC Turnkey ○ Product: CCI for architecture and Home appliance ○ LINE SPEED(mpm) : Entry / Process / Exit: 160/120/180 ○ Raw Material: 0.3 ~ 1.6mmT , 600 ~ 1,320mm
Dong-Kuk Industries HGL	Aug. 1996	Nov. 1997	Pohang, Korea	Dong-Kuk Industries	150,000 T/Y	This production facility adopts the continuous galvanizing line (CGL) treatment after the pickling process of hot-rolled coil, and produces construction materials.