

# 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> <ul style="list-style-type: none"> <li>- Inner Volume : 4,150 m<sup>3</sup></li> <li>- Construction Periods : 30 Months</li> <li>- Method of Furnace Proper Cooling : Copper Stave + Cast Iron Stave Cooler</li> <li>- Application of Automatic System for Casthouse &amp; EIC Intergrated Control System</li> </ul>
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 first overseas project through competitive bid.</p> <ul style="list-style-type: none"> <li>- Inner Volume : 2,020 m<sup>3</sup></li> <li>- Method of Furnace Proper Cooling : Copper Stave + Cast Iron Stave Cooler</li> <li>- Application of Automatic System for Casthouse &amp; EIC Intergrated Control System</li> </ul>

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<b>POSCO Pohang Steelworks</b>						
The 2nd Relining Project of No.3 Blast Furnace	Dec. 2004	May 2006	Pohang Steelworks	POSCO	10,100 T/D	<p>The capacity of plant is 3.51 million tons of hot metal in annual. And to shorten the shut down periods, POSCO E&amp;C applied the Method of Construction, "Large Block Ring Construction Method", as 3 Layers 3 Blocks of furnace proper shell. The shut down periods is 58 days.</p> <ul style="list-style-type: none"> <li>- Inner Volume : 3,795m<sup>3</sup> → 4,350m<sup>3</sup></li> <li>- Shut Down Periods : 58 Days</li> <li>- Method of Construction : Large Block Ring Method</li> <li>- Method of Furnace Proper Cooling : Copper Stave + Cast Iron Stave Cooler</li> <li>- Application of Bischoff Scrubber (Gas Cleaning Plant)</li> <li>- Application of Automatic System for Casthouse &amp; EIC Intergrated Control System</li> </ul>
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 : 2,550m<sup>3</sup></li> <li>- Shut Down Periods : 101 Days</li> <li>- Method of Furnace Proper Cooling : All Stave Cooler</li> <li>- Application of Sinter Two Fraction Charging System</li> <li>- Application of Casthouse Floor Flatness</li> <li>- Innovation of Casthouse Dust Collector</li> </ul>

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<b>POSCO Gwangyang Steelworks</b>						
The 1st Relining Project of No.3 Blast Furnace	Jul. 2006	Nov. 2007	Gwangyang Steelworks	POSCO	10,670 T/D	<p>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&amp;C has expanded the inner volume up to 21% as 4,600 cubic meters. And this project is the shortest relining periods which is 55 days in the world.</p> <ul style="list-style-type: none"> <li>- Inner Volume : 3,800 m<sup>3</sup> → 4,600 m<sup>3</sup></li> <li>- Shut Down Periods : 55 Days (New World Record)</li> <li>- Method of Construction : 8 Layers 8 Blocks</li> <li>- Method of Furnace Proper Cooling : Copper Stave + Cast Iron Stave Cooler</li> <li>- EIC Intergrated Control System</li> </ul>
The 1st Relining Project of No.2 Blast Furnace	Feb. 2003	May 2005		POSCO	10,100 T/D	<p>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 up to 14 days. And this project was successfully executed by POSCO E&amp;C's own technology.</p> <ul style="list-style-type: none"> <li>- Inner Volume : 3,800 m<sup>3</sup> → 4,350 m<sup>3</sup></li> <li>- Shut Down Periods : 66 Days</li> <li>- Method of Construction : 8 Layers 8 Blocks</li> <li>- Method of Furnace Proper Cooling : Copper Stave + Cast Iron Stave Cooler</li> <li>- EIC Intergrated Control System</li> <li>- Re-building of Furnace Top &amp; Auxiliaries</li> </ul>

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<b>POSCO Gwangyang Steelworks</b>						
The 1st Relining Project of No.1 Blast Furnace	May 2000	Jun. 2002	Gwangyang Steelworks	POSCO	9,160 T/D	<p>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.</p> <ul style="list-style-type: none"> <li>- Inner Volume : 3,800m<sup>3</sup> → 3,950m<sup>3</sup></li> <li>- Shut Down Periods : 91 Days</li> <li>- Method of Construction : 14 Layers 29 Blocks</li> <li>- Method of Furnace Proper Cooling : Copper Stave + Cast Iron Stave Cooler</li> <li>- EIC Integrated Control System</li> <li>- PCI Individual Flow Control System</li> </ul>
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 : 4,020m<sup>3</sup></li> <li>- Construction Periods : 22 Months</li> <li>- New Construction of Furnace Proper and Subsidiary Facilities</li> <li>- Method of Furnace Proper Cooling : All Stave Cooler</li> <li>- Application of Casthouse Floor Flatness &amp; Slag Granulation System</li> <li>- Application of External Combustion Type Hot Stoves</li> </ul>