POSCO Group’s high technology, POIST, takes its first step forward to Iran. Recently, POSCO Group signed the MOA (Memorandum of Agreement) for PKP Steel Complex in CFZ and with this event as a momentum, POSCO Group will create new success story in Iran.
MOA Signing Ceremony for Integrated Steel Mill

The signing ceremony of the Memorandum of Agreement on 29th February, 2016 in Iran

The signing ceremony of the Memorandum of Agreement (MOA) between POSCO Group (POSCO, POSCO E&C) and PKP (Pars Kohan Diar Parsian Steel) was held on 29th February, 2016 in Tehran, Iran.

During Iran-Korea Business Forum, POSCO Group signed the MOA with Iranian steel company, PKP, to jointly build a steel mill incorporating its FINEX® & CEM® technologies in Iran’s Chabahar Free Trade-Industrial Zone (CFZ).

Under the agreement, POSCO Group will share 8 percent of the investment and introduce POSCO innovative steelmaking technology (POIST) to its Iranian partner.

POSCO E&C has discussed on steel complex in Iran with PKP for a year and a half from 2014. PKP believes POSCO E&C’s technology and its accumulated experience could play an important role to proceed with the project. With the lifting of sanctions, the project has been making progress steadily.

The steel mill will be built based on POSCO’s FINEX® and compact endless cast and rolling mill (CEM®) technologies and it will produce high quality hot coil with its economic benefit, ecological benefit, product quality and etc. In addition, this compact and optimized process enables to consume less energy and emit less carbon dioxide, SOx, NOx and etc. in comparison with conventional process.

Configuration of PKP FINEX® & CEM® Process

Prospect of Steel Market in Iran

The Sixth Iranian Steel Market Conference, also known as ISMC 2016, was convened on 16th to 17th February. During the conference period, POSCO E&C held technical workshops and ran marketing booth to introduce the history of company and state-of-the-art solution for steel structure applications for various market experiences and technologies. Especially, most of participants and governmental officials were interested in POSCO E&C’s advanced technology, FINEX®-CEM®, and impressed with POSCO E&C’s successful history. It is expected that the FINEX®-CEM® process will be adopted in Iranian steel industry in the near future.

POSCO E&C’s Contribution to Iran with IMIDRO

POSCO E&C CEO Chan-Kun Han had a meeting with IMIDRO (Iranian Mines and Mining Industries Development and Renovation Organization) chairman Dr. Karbasian on 29th February in Tehran, Iran. It is the first time to meet between each company’s CEO and they discussed the cooperation plan between two companies in IMIDRO VP Room.

CEO of POSCO E&C explains about POSCO E&C’s experience as a total solution provider and the way in contributing to Iranian plant projects including the Iranian steel industry expansion project up to 55 million tons of production capacity. In this regard, IMIDRO showed a keen interest to POSCO E&C’s active participation in Iranian market and requested for contribution of the operation know-how and technical knowledge accumulated from over 45 years of its experience to Iran.

POSCO E&C CEO and IMIDRO chairman are discussing on the cooperation plan

Prospect of Steel Market in Iran

Jin-Sik Choi, a vice president of POSCO E&C, is explaining its advanced technology of Steel Making Process.
Consecutive Contracts for Material Handling System in Australia

POSCO E&C has been awarded from Moolarben Coal Operations Pty. Ltd. (MCO) for Material Handling System (MHS) project. The project is to expand the materials handling capacity to accommodate the output from the underground mine expansion and improve coal handling efficiencies for a period of 20 months in New South Wales.

The benefits from this project include the aim to maximize the efficient extraction of the economically-viable coal resource, and the creation of direct and indirect employment opportunities during the project’s construction and operational phases. Through this project, MHS facilities such as radial stacker, conveyor, stockpile, sizing station, and tunnel reclaim and etc. are newly constructed in the mine area.

The target completion date is the fourth quarter of 2017 and the project has been executed based on the mutual agreement of companies since March, 2016.

The representative of POSCO E&C said, “We recently signed the contract on a Lump Sum Turn Key basis and the signing ceremony was held in Australia on 25th February, 2016. POSCO E&C already has been working on Moolarben Open Cut 4 project to expand its production from 8 million to 12 million tons per annum of Run of Mine coal, and we understand the importance of the project at community as well as to other stakeholders. With this opportunity, POSCO E&C will secure again its track record for coal handling plant in Australia, and we will commit to put much efforts to undertake the work as an EPC contractor, consistent with the negotiated scope of works and outcomes from the numerous technical design review session conducted throughout the negotiation process.”

The panorama of Moolarben Open Cut 4 project site

Last Blow Working of Gwangyang No.5 Blast Furnace

- Great production achievement of 50 MTPA in 5,781 days, contributed to lay the groundwork for its stable operation
- Blowing-in on 24th May, 2016 after relining work from original 3,950m³ to 5,500m³ for 100 days

On 15th February, Gwangyang No.5 blast furnace entered the status of last tapping after the successful completion of its operation for last 16 years. With this, the volume of No.5 blast furnace which has produced about 50 million tons of molten metal for 5,781 days since blowing-in on 18th April, 2000, will be increased to 5,500m³ from original size 3,950m³ by relining work by POSCO E&C for about 100 days. Accordingly, the annual production capacity of the molten metal will be drastically increased from 3 million tons to 5 million tons. Currently, there are only 11 mega-scale blast furnaces exceeding the volume 5,500m³ all over the world, so this relining work would become a great opportunity for POSCO E&C to leap forward.

Gwangyang No.5 blast furnace was the project POSCO E&C aimed at over 20 years of lifespan of blast furnace with installing the stave cooler as a cooling system and using high quality refractories while making its thickness thinner and it was constructed from May 1997 to March 1999. After 100 days of relining work, Gwangyang No.5 blast furnace will have a blowing-in ceremony on 24th May, then it will restart the operation.

With the specialty in technology of large-scale blast furnace including others, POSCO E&C could provide high productivity and availability with low operating cost to the clients as shown in below chart.

![Value Improvement by POSCO E&C’s Technologies Chart](chart.png)
Shape Control Technology of SPM High Tensile Steel

Nowadays, steel products for automobile are emerging as a major cash cow for steel company. In this sense, more and more companies are enhancing (or are considering to enhance) its Skin Pass Mill (SPM) and Tension Leveler (TL) to manufacture high value added steel products. POSCO E&C would like to introduce its SPM and TL equipment which can enlarge future business opportunity in the industry.

POSCO E&C has continuously developed its SPM equipment to provide high quality steel products. One of the POSCO E&C’s distinct technologies is Advanced Roll Force Simulation Program for SPM. This program enables its operator to achieve the required roughness of the strip, improve the strip flatness and modify the strip metallurgic structure. POSCO E&C’s SPM simulation system consists of Roll Simulation, Roll Choke Simulation and Housing Simulation to make various types of steel products.

Adding to that, POSCO E&C boasts of Advanced Exclusive Roll Force Controller’s precise position and pressure control. Our system’s specification is as follows:

To add delicacy on steel products, POSCO E&C’s SPM has effective and preventive processes, which are Controller Verification through Pre-Pilot Simulation and effective high pressure roll cleaning system. Roll Force Controller shall guarantee high accuracy and make tuning time reduced through pre-pilot simulation on shop.

![Image](image.png)

For a Better World
Promote Global Harmony in Uzbekistan

Mr. Wook-Hun Lee, an ambassador of Korean embassy in Uzbekistan who also participated in this cultural exchange event delivered a congratulatory address, “Korea and Uzbekistan have a strong tie to each other under the amicable relationship. I sincerely appreciate POSCO E&C for its continuous social activities with unstinted support to Uzbekistan after your activity in Tashkent last year.”

In addition, a vice-governor of Bukhara added, “POSCO E&C is currently contributing to regional economy development with construction works here in Bukhara and through this valuable exchange event we confirmed without doubt that POSCO E&C is a leading company for social contribution in the world.

![Image](image.png)

NEXT EVENT
AISTech 2016 16th to 19th May, 2016
Location: David L. Lawrence Convention Center, Pittsburgh, PA, USA

Booth No. 3127

CONTACT
Name: HO-SEONG LEE / Director
POSCO E&C Tower 1, 241 Inchon tower-daero, Yeonsu-Gu, Incheon, 406-732, Korea
E-mail: lhs@poscoec.com
Phone: 82 32 748 2365