

# CHEMICAL PLANT

# LNG Terminal

Sort	Project	Start	Completion	Client	Capacity	
<b>POSCO Pohang Steel works</b>						
LNG pipeline	LNG Pipeline	Aug. 2004	Oct. 2005	POSCO	120,000 Nm <sup>3</sup> /hr	A project to newly construct the governor station for reducing NG pressure to enable the substitution of byproduct gases with NG, and to replace combustion facilities of each plant.
<b>POSCO Gwangyang Steel works</b>						
LNG terminal	LNG Storage Tank (Extension)	Jun. 2007	Nov. 2010	POSCO	165,000 kl	A project executed singlehandedly for the additional construction of 1 unit's LNG storage tank (PS outer wall + 9% Ni inner shell) with a capacity of 165,000kl at LNG Terminal, Gwangyang.
LNG terminal	Calorific value adjustment facility	Nov. 2004	Oct. 2005	POSCO	35 Nm <sup>3</sup> /hr X 2units	A project to construct the calorific value adjustment facility for adjusting the heating value of natural gas to 10,500 kcal/Nm <sup>3</sup> so as to be sent out to Pohang steel Works.
LNG pipeline	LNG Pipeline	Jun. 2004	Nov. 2005	POSCO	120,000 Nm <sup>3</sup> /hr	A project to replace the governor station for reducing NG pressure to enable the substitution of COG fuel with NG, and combustion facilities at the valve stand, steel making plant, continuous casting plant and mini mill plant to ensure a constant supply of NG to each plant.
LNG terminal	LNG Terminal (Basic Design)	Jul. 1999	Jan. 2000	POS-Energy	260 ton/hr	A project to provide engineering services for utility facilities of an LNG terminal that can accommodate 100,000kl LNG storage tanks and has regasification facility with a capacity of 260 ton/hr.
<b>Etc.</b>						
LNG terminal	Pyungtaek calorific value adjustment facility	Oct. 2006	Jun. 2007	Korea Gas Corporation		A project to revamp the existing calorific value adjustment facility at Pyungtaek LNG Terminal and newly construct 1 unit of the calorific value adjustment facility for adjusting the heating value of natural gas to 10,500 kcal/Nm <sup>3</sup> to ensure a constant supply of NG.

# Refinery&Petrochemical

Sort	Project	Start	Completion	Client	Capacity	
Refinery	Gwangyang Cokes Byproduct Refinery Plant No.1~4	1986	1992	POSCO	COG treatment: 354,000 Nm <sup>3</sup> /hr Light Crude Oil treatment: 84,037 ton/year	A project to provide engineering services for the refinery plants for converting coke byproducts such as coke oven gas and crude light oil to environmentally-friendly fuel.
	Pohang Cokes Byproduct Refinery Plant No.1~4	1972	1983	POSCO	COG treatment: 303,000 Nm <sup>3</sup> /hr Light Crude Oil treatment: 66,507 ton/year	A project to provide engineering services for the refinery plants for converting coke byproducts such as coke oven gas and crude light oil to environmentally-friendly fuel.

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# Utility Plant

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POSCO Pohang Steel works						
Oxygen plant	No. 15 Oxygen Plant	Dec. 2007	Jun. 2010	POSCO	100,000 Nm <sup>3</sup> /hr	A project to construct the Korea's largest oxygen plants for supplying oxygen, nitrogen and argon to Pohang Steel Works.
	FINEX Oxygen Plant(No.13&14)	Dec. 2004	Nov. 2005	POSCO	55,000 Nm <sup>3</sup> /hr X 2units	A project to erect two oxygen plants for supplying oxygen at 94,000 Nm <sup>3</sup> /hr required by the main body of FINEX I, and 16,000 Nm <sup>3</sup> /hr to be consumed when constructing the dephosphorization furnace.
	No.12 Oxygen Plant	Feb. 2003	May 2005	POSCO	30,000 Nm <sup>3</sup> /hr	A project to construct the oxygen plant with a capacity of 30,000Nm <sup>3</sup> /hr to satisfy increased oxygen needs caused by capacity extension of COREX and No. 3 Blast Furnace in Pohang.
	No.5,8 Oxygen Plant (Revamping)	Jun. 2000	Dec. 2001	POSCO	25,000 Nm <sup>3</sup> /hr x 2units 20,000 Nm <sup>3</sup> /hr x 1unit 30,000 Nm <sup>3</sup> /hr x 1unit	A project to revamp 4 units of existing oxygen plants (25,000 Nm <sup>3</sup> /hr x 2 units, 20,000 Nm <sup>3</sup> /hr x 1 unit and 30,000 Nm <sup>3</sup> /hr x 1 unit) for improving its productivity and safety.
	No.11 Oxygen Plant	May 1995	Aug. 1997	POSCO	25,000 Nm <sup>3</sup> /hr	A project to construct the oxygen plant with a capacity of 25,000Nm <sup>3</sup> /hr to satisfy increased oxygen needs caused by construction and/or extension of facilities such as Pulverized Coal Injection at Pohang Steel Works.
Hydrogen plant	Hydrogen plant	May 2008	Jun. 2009	POSCO	1,200 Nm <sup>3</sup> /hr LNG Reforming type	A project to construct the hydrogen plant to satisfy increased hydrogen needs caused by extension of production capacity for the Grain Oriented electrical steel.
	No.4 Hydrogen plant	Apr. 2005	Jun. 2005	POSCO	1,200 Nm <sup>3</sup> /hr NG Steam Reforming type	A project to construct the hydrogen plant to satisfy increased hydrogen needs caused by retrofit of the existing electrical steel plant as EPC basis.
	No.3 Hydrogen plant	Nov. 1994	Jul. 1996	POSCO	700 Nm <sup>3</sup> /hr COG Treatment type	A project to construct the hydrogen plant for supplying high purity hydrogen to be consumed during the production of stainless steel and electrical steel in Pohang Steel Works.

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<b>POSCO Pohang Steel works</b>						
Gas Holder	LDG Holder & Booster	Apr. 2008	Apr. 2010	POSCO	Holder: 70,000m <sup>3</sup> Booster: 70,000 Nm <sup>3</sup> /hr X 2units	A project to newly construct and replace the LDG Holder, LDG Booster and Pipelines for storing and supplying the LDG produced from Pohang steel mills.
	FINEX GAS HOLDER	Mar. 2005	Apr. 2007	POSCO	100,000m <sup>3</sup>	A project to construct the M.A.N Type Gas Holder with size of 100,000m <sup>3</sup> for supplying FOG(FINEX off gas) to facilities consumes the gas.
	NO.3 BFG HOLDER	Nov. 2000	Jun. 2002	POSCO	120,000m <sup>3</sup>	A project to secure a streamlined supply system of BFG by replacing the aged No. 1 BFG holder with size of 120,000m <sup>3</sup> .
	NO.2 LDG HOLDER (Replacement)	Dec. 1998	Oct. 2000	POSCO	100,000m <sup>3</sup>	A project to replace the aged LDG Holder with a bigger sized Holder in order to expand its storage capacity.
	NO.1,2 COG GAS HOLDER (Replacement)	Mar. 1995	Mar. 1997	POSCO	50,000m <sup>3</sup> X 2units	A project to enlarge the storage capacity of the existing COG Holder from 30,000m <sup>3</sup> to 50,000m <sup>3</sup> and to replace the aged 50,000m <sup>3</sup> COG Holder with a new 50,000m <sup>3</sup> Holder.
<b>POSCO Gwangyang Steel works</b>						
Oxygen plant	No.15	Jul. 2008	May 2010	POSCO	100,000 Nm <sup>3</sup> /hr	A project to construct the Korea's largest oxygen plants for supplying oxygen, nitrogen and argon to Gwangyang Steel Works.
	No.14	Apr. 2007	Dec. 2008	POSCO	55,000 Nm <sup>3</sup> /hr	A project to construct the oxygen plant with a capacity of 55,000Nm <sup>3</sup> /hr to satisfy increased oxygen needs caused by revamping of No. 2 Furnace, extension of No. 5, 6, 7 CGL(Continuous Galvanizing Line) and operation of Pulverized Coal Injection.
	No.13	May 2003	Jul. 2005	POSCO	35,000 Nm <sup>3</sup> /hr	A project to construct an oxygen plant with a capacity of 35,000 Nm <sup>3</sup> /hr for ensuring a constant supply of oxygen to Gwangyang Steel Works.
	No.11&12	May 1997	Apr. 1999	POSCO	35,000 Nm <sup>3</sup> /hr x 2units	A project to construct 2 units of oxygen plants with a capacity of 35,000 Nm <sup>3</sup> /hr each for ensuring a constant supply of oxygen to Gwangyang Steel Works.
	No.10	Nov. 1994	Apr. 1996	POSCO	20,000 Nm <sup>3</sup> /hr	A project to construct an oxygen plant with a capacity of 20,000 Nm <sup>3</sup> /hr for ensuring a constant supply of oxygen to Gwangyang Steel Works.

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POSCO Gwangyang Steel works						
Hydrogen plant	Hydrogen plant for No.5 CGL	2004	2006	POSCO	350 Nm <sup>3</sup> /hr COG Treatment type	A project to construct the hydrogen plant to satisfy increased hydrogen needs caused by extension of No. 5 CGL(Continuous Galvanizing Line).
Gas Holder	LDG Holder & Booster	Aug. 2008	Mar. 2010	POSCO	Holder: 70,000m <sup>3</sup> Booster: 70,000 Nm <sup>3</sup> /hr X 2units	A project to newly construct and replace the LDG Holder, LDG Booster and Pipelines for storing and supplying the LDG produced from Gwangyang steel mills.
	BFG Pipeline network improvement	Sep. 2007	Feb. 2009	POSCO	Ø 3,800	A project to design and construct pipelines with supplementary facilities that transport BFG generated at No.5 blast furnace to No.9 power plant.
	Sinter Offgas Cleaning Plant	Aug. 2006	Apr. 2007	Korea Cottrell		A project to provide the LDG Booster, auxiliary facility for supplying LDG to Sinter Offgas Cleaning Plant and to perform piping design.
	Gas Mixing Facility	Oct. 1997	Jun. 1998	POSCO		A project to install the gas mixing facility for blending LPG and BFG in order to avoid shortage of COG used in No. 1 Hot Rolling shop by substituting COG with the mixed gas.