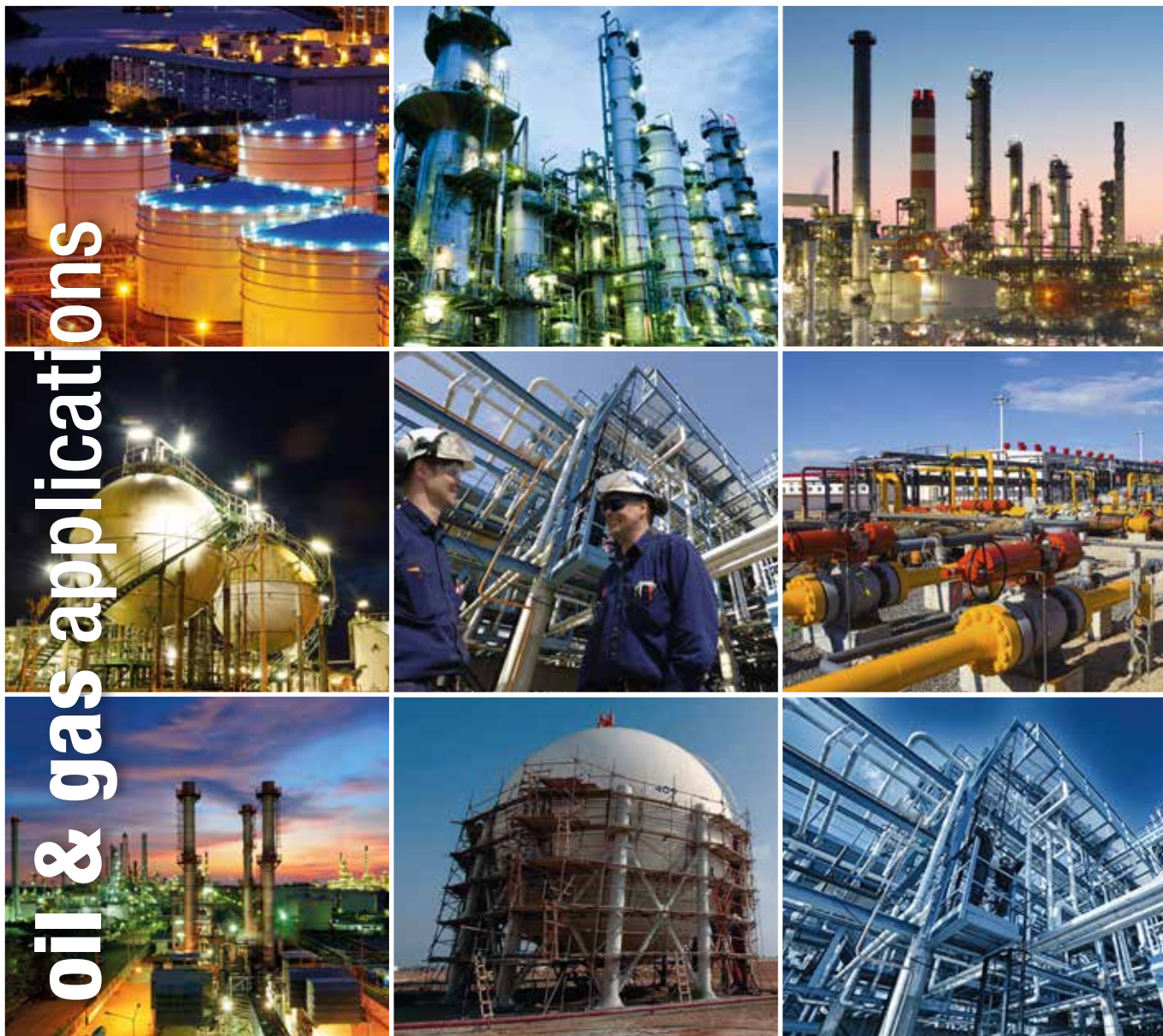


# Case Study

SK Energy Incheon Complex V Project - Korea



oil & gas applications



SK Energy is investing KRW1.6 trillion (\$1.41 billion) to transform the Incheon complex into an aromatics-focused refinery to boost product competitiveness and profitability. SK Energy is building a paraxylene plant with a capacity of 1.3 million tpy, a condensate splitter and a reformer. Commercial production is slated to begin in the second half of 2014. SK Energy will target sales to the growing Chinese market.

SK Energy, which is fully owned by SK Innovation, has a total refining capacity of 1,115,000 bpd, including 275,000 bpd from its Incheon complex.

#### KEY FACTS

- Location: Incheon, Korea
- Category: Aromatics-focused refinery
- Ownership: SK Innovation
- Operator: SK Energy
- Development cost: \$1.41 billion
- Peak: refining capacity 275,000 bpd resulting in:
- Production: Paraxylene plant with a capacity of 1.3 million tpy
- Key contractors: Hyundai Engineering & Construction  
SK Engineering & Construction
- Installers: Woo Sung, Korea
- Product: Cafo FENDOLITE® MII System
- Application: Structural Steel



### PROJECT

Promat has a strong track record of product and supply performance in Korea. Over three decades the FENDOLITE® MII system has been a widely used proprietary passive fire protection arrangement for onshore plant structures.

Promat fire protected more than 70,000m<sup>2</sup> area of steel structures and supplied more than 73000 Bags of FENDOLITE® MII manufactured in Korea to the project.

### TECHNICAL DESCRIPTION

Promat has a strong track record of product and supply performance in Korea. Over three decades the FENDOLITE® MII system has been a widely used proprietary passive fire protection arrangement for onshore plant structures.

Promat fire protected more than 70,000m<sup>2</sup> area of steel structures and supplied more than 86,680 bags of FENDOLITE® MII manufactured in Korea to the project.

ANSI/UL1709 Rapid Rise Fire Tests of Protection Materials for Structural Steel

Cafco FENDOLITE® MII/TG are commercial brand names the corresponding UL designations are: Type PFM2 and Type PFTG.

Type PFM2 (investigated for exterior use) in design number XR719

Type PFM2 and Type PFTG are covered by the UL Follow-Up and Inspection Label Service; each bag has the appropriate UL label.

### REQUIREMENTS

Promat supplied the Cafco FENDOLITE® MII/ integrated fire protective coating system.

Cafco FENDOLITE® MII is a spray applied, single package factory controlled premix, based on vermiculite and Portland cement.

CAFCO® PSK 101 is a single pack, multi-purpose; water based synthetic latex emulsion for use as a sealer and keycoat as a component of the Cafco FENDOLITE® integrated fire protective coating system.

CAFCO® Plastic Coated Galvanised Mesh & CAFCO® Helical CD Weld Pin Reinforcement System

CAFCO® TOPCOAT 200 Acrylic Polymer Coating is a single pack, water based acrylic polymer for use as a water vapour permeable topcoat.

### SOLVING THE CASE

Promat FENDOLITE® MII is proven globally and exceeds the design and application requirements specified by the project whereby FENDOLITE® MII is effective and practical in terms of availability, maintainability and reduction of risk.

Promat counts SK and Hyundai E&C as valued global customers having had the privilege to provide solutions on projects throughout Africa and Asia over decades.

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