



# **SIKA AT WORK**

## **ATTOCK REFINERY LIMITED**

### **UPGRADATION PROJECT**

**SIKA SOLUTIONS WITH CONCRETE ADMIXTURES & TM  
REFURBISHMENT PRODUCTS**

**BUILDING TRUST**



# ATTOCK REFINERY LIMITED UPGRADATION PROJECT

## CONCRETE ADMIXTURES, PROTECTIVE COATING, GROUT & SEALING & BONDING

### Project:

Attock Refinery Limited is a member of Attock Group of Companies, a fully integrated group covering all segments of oil and gas industry from exploration, production and refining to marketing of a wide range of petroleum products besides it's also engaged in manufacturing and trading of cement, information technology, etc. The Attock Refinery Limited (ARL) is the pioneer in crude oil refining in the country with its operations dating back to the early 1900s and is located at Morga Rawalpindi, Punjab, Pakistan. ARL's current nameplate capacity stands at 43,000 bpd. However, Up-gradation Project will increase the refinery capacity by 10,400 bpd where, motor gasoline production will be increased by 20,000 Tons per month. The overall cost of this Up-gradation Project is around US\$ 251 million.

### Project Requirements:

The Company is the first refinery in Pakistan to declare implementation of ISO 50001 (Energy Management System). ARL Up-gradation Project will not only increase the refinery capacity but, it will also enable ARL to produce Euro II compliant low sulphur diesel. Considering the significance of the project. Sika provided it's World Class solutions at different steps of the project. This project required Concrete admixtures for water reduction and high ultimate strength of the concrete. Client also demanded products that promised protection of the concrete structure. In addition to this, epoxy grouts were demanded by the client for grouting of the Machine foundations & base plates. Lastly, PU sealant was demanded by the customer for building joints.

### Sika Solution:

In order to meet Customer's demands Sika Sales team visited the site and provided Customer with expert opinion and Quality products. Following solutions were recommended by Sika Sales Team: Sika recommended it's widely used admixture Sikament-520BA\* for water reduction and high concrete strength. Sikament-520BA\* is used as a highly effective water-reducing agent and superplasticizer for the production of high quality concrete. As a superplasticizer it provides Substantial improvement in workability without increased water or the risk of segregation.

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For the purpose of concrete protection, Sika Bitumen was recommended which is a brown-black bitumen liquid emulsion with excellent adhesion, which dries to a tough seamless, waterproof and protective coating for concrete structures and steel elements. Sika Bitumen was used as a protective coating on the concrete. In addition to this, SikaGrout®-114 was recommended for the grouting of base plates. It's a one component cementitious, free flowing, nonshrink precision grout with high ultimate strength. SikaGrout®-114 is used for grouting various applications such as Machine foundation, Columns in pre-cast construction, concrete anchors, cavities, gaps and recesses, Base plates etc. Lastly, Sikaflex Construction (AP) was also recommended as a sealant for concrete joints. Sikaflex Construction(AP) is a one part, moisture curing, PU based joint sealant. Sikaflex®-Construction (AP) is used as a general purpose sealant for sealing joints in building construction such as movement and construction/isolation joints around windows and doors, facades, claddings etc. in concrete, brick, wood, metal and PVC sections and structures etc.



Attock Refinery under Construction

**Project Name:** Attock Oil Refinery

**Project Owner:** Attock Refinery Group of Companies

**Consultant:** ACL(Associated Constructors Limited, Karachi)

**Contractor:** Hyundai Consultancy