

## Retrofit

# Retrofit – SINOPEC Zhenhai Refining & Chemical Company, China



### Main Facts

Customer: SINOPEC Zhenhai Refining & Chemical Company  
Industry: COG  
Commissioning: October 2009  
ABB service: Retrofit

### Customer Need

- Replace LV compartment with new relay
- Use ABB circuit-breaker to replace locally manufactured equipment to increase operational reliability and reduce need for power outages

### ABB Response

- Site survey
- Professional retrofit solution
- Equipment and installation

### Customer Benefits

- Achieved equipment upgrade
- Minimized power outage and loss of production

### The Story

SINOPEC Zhenhai Refining & Chemical Company (ZRCC) is a backbone enterprise under China Petroleum & Chemical Corporation (SINOPEC). As a key account, ABB had supplied over 1,000 panels of MV (Medium Voltage) switchgear.

When ABB's service team carried out on-site service at the beginning of 2009, ZRCC raised an issue that over 10 panels of MV switchgear produced by a domestic switchgear supplier malfunctioned frequently along with 159 relay units that had been supplied by AREVA as upgrades in the hope that the equipment could be retrofitted without requiring a long power outage.

Due to this situation, ABB provided a retrofit solution including:

- For the 10 panels of MV switchgear, the intrinsic shell and cable was kept, while the original circuit-breaker was replaced by ABB's power block and VD4.
- Replace LV (Low Voltage) compartments with new relays supplied by the customer.

This approach kept the interruption to the site electricity supply to a minimum, and there was no obvious impact on production.

ABB exceeded the needs and expectations of the SINOPEC Zhenhai Refining & Chemical Company. The customer now plans to upgrade the remaining equipment on the same basis.