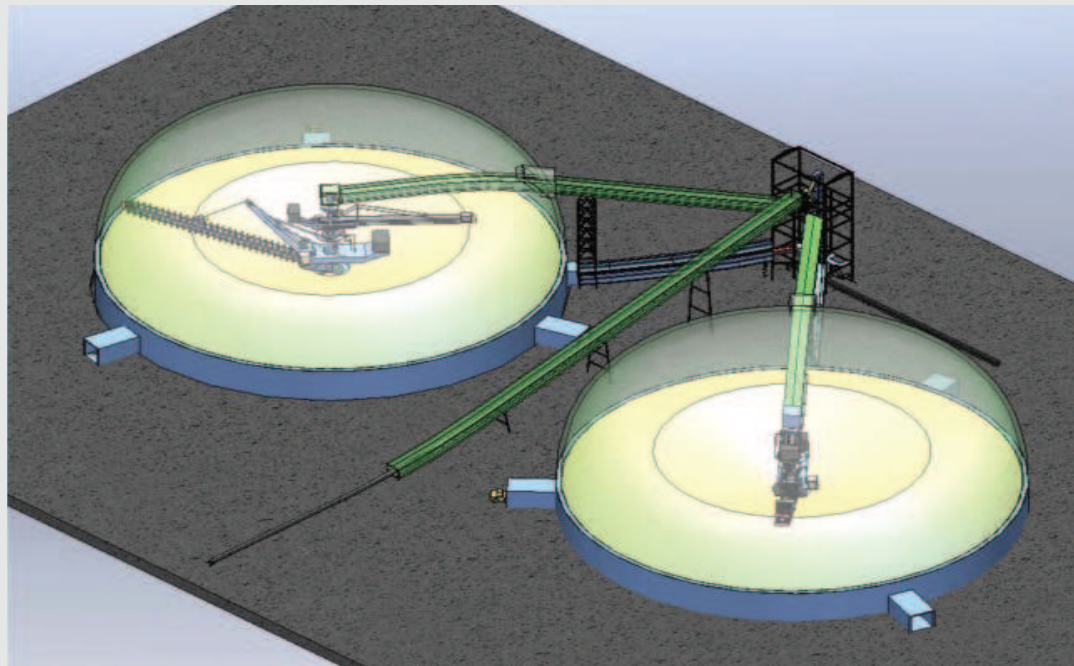
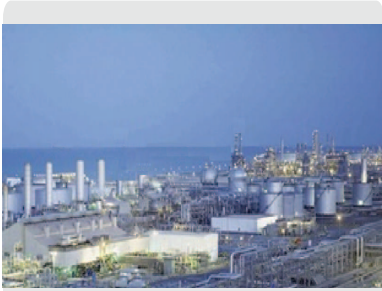


CASE

STUDY

Al-Zour Refinery Project
(Kuwait)



In the first half of 2017, FDH JV, a Joint Venture composed by Fluor, Daewoo Engineering & Construction and Hyundai Heavy Industries, has selected Taim Weser for the supply of a solid sulphur Handling and Storage system for the Al-Zour Refinery Project (ZOR), to be commissioned by the Kuwait National Petroleum Company.

The project consists of the design, manufacture and supply of a Belt Conveying and Storage system in two circular stockpiles..

The conveying system also includes the related firefighting system, dedusting system and auxiliary equipment and the Circular Storage system includes two aluminum storage domes, equipped each one with a slewing/luffing boom stacker and a scraper reclaiming machine, cantilever type, and supported on a central column, around which it rotates. The equipment is contained inside a circular covered building.

The scope of supply of Ingeteam will consist of the electrical engineering definition of the power distribution and drives, automation, software, design and manufacturing, documentation, electrical installation supervision and commissioning of the following equipment:

- 2x Electrical rooms in the area of storage stockpiles (Dome).
- 2x Drawout MCC for fixed and variable speed feeders for the storage stockpiles (Dome).
- 1x Drawout MCC for fixed and variable speed feeders for the conveyor belts.
- 3x PLCs: one per each storage stockpile (2 x Domes) and the third to control the conveyor.
- 4x Operator panels (HMI).
- Engineering station including development software.
- Development software licenses for the PLCs and HMI.
- Diagrams and documentation.
- Factory Acceptance Test (FAT).

Circular Stores

Plant View Diagram

Ingeteam

Emergency MCC: Auto Start Sequence, Auto Stop Sequence, Dust Suppression (P1, P2), Magnetic Separator, Diverting Gate, Belt Scale (Belt 2, Belt 3, Belt 4, Belt 5). User: OPERATOR_01, 4/10/2019 11:38:13.

CONVEYOR 5 - 86-A-0301-AM05

- 86-ZSH-04570 Conveyor 5 Head Drift Switch 1.1
- 86-ZSH-04571 Conveyor 5 Head Drift Switch 2.1
- 86-ZSH-04572 Conveyor 5 Tail Drift Switch 1.1
- 86-ZSH-04573 Conveyor 5 Tail Drift Switch 2.1
- LP HS-04571 Conveyor 5 By-Pass Key Drift Switch
- 86-ST-04570 Conveyor 5 Belt Speed Switch
- 86-ZSH-04574 Conveyor 5 Belt RIP Detector
- 86-ZSH-04575 Conveyor 5 Counter Weight High
- 86-ZSL-04576 Conveyor 5 Counter Weight Low
- 86-LT-04570 Conveyor 5 Chute High Level
- 86-TT-04571 Conveyor 5 Tower Temperature
- 86-TT-04572 Conveyor 5 Enclosure Temperature

86-FT-03205 86-FT-03205 Conveyor 5 PP3B Flowmeter

86-FT-03207 86-FT-03207 Conveyor 5 PP4B Flowmeter

86-A-0401B-XM11A/B EMERGENCY VIBRATING FEEDER B

86-A-0401B-XM10A/B VIBRATING FEEDER B

86-LT-04581 Emergency Vibrating Close Gate Switch

86-LT-04581 Vibrating Central Column Chute High Level

Start General Sequences Drives Auxiliars Trends Alarms Help Maintenance Safety

Communication Diagram

Ingeteam

By-Pass MCC 1, MCC 2; Circuit 2 - Wagons Loading; Circuit 2 - Hooper Loading; Circuit 1 - Stacking; Lubrication; Material In Line. User: OPERATOR_01, 7/28/2017 12:43:12 PM.

ETHERNET COMMUNICATIONS STOCKYARD 1

Diagram showing network connections between CONVEYORS PLC, STOCKYARD 1 PLC, CONVEYORS HMI, STOCKYARD 1 HMI, DCS, SAFETY PLC, and various SIMOCODE PRO V and SENTRON PAC3200 units.

Start General Sequences Drives Auxiliars Trends Alarms Help Maintenance Safety

Zone Language