



*Specialist for Pumping Technology*



**WATER INJECTION PACKAGE  
FOR FLOATING PRODUCTION  
FACILITY**

→ p.2

Geothermal Pumps Solution

→ p.3

Enbridge Energy Company installs 7 brand  
new pump stations

→ p.4

Petrochemical Engineering Limited  
Investment

→ p.5

Braskem Idesa - Ethylene XXI

→ p.6

NSF Certification

→ p.7

HIGHLIGHT TOPIC

# WATER INJECTION PACKAGE FOR FLOATING PRODUCTION FACILITY

The installation will take place overseas in a special tank ship, in Norway.

Ruhrpumpen recently sold a water injection package that consists of quantity (2) SCE 10X8X16 (Booster pumps) and quantity (2) SM 6X13X10 (Main pumps). The 3,084 HP driver for the SM pump will be operated by a variable frequency drive.

The baseplate, will carry the Lube Oil System, is designed as a 3 point support version. This is a special design for platforms and FPSO's (Floating Production Storage and Offloading). The 3 point support will protect the pump unit from stresses due to the twisting of the ship.

The package will be placed on a special FPSO from Sevan Marine, the "Sevan Voyageur". This FPSO from Sevan Marine is a special design (different from the more common standard design of a modified tank ship). The cylindrical design makes it vertical modular and extremely stable.



SM  
Horizontal Split Case  
Multi-Stage API Pump with Lube Oil System

HIGHLIGHT TOPIC

## GEOTHERMAL PUMPS SOLUTION

Once again Ruhrpumpen innovates with its products, now in the Geothermal Market.



With extensive experience across the region and a proven track record of delivering projects in remote and challenging locations, PT Leighton Contractors Indonesia is developing the Rantau Dedap Geothermal project for PT Supreme Energy Rantau Dedap (SERD). This area is geographically located at Muara Enim Regency, a regency of South Sumatra (Indonesia) at an elevation of 3,300 to 8,500 ft., on the Burkit Besar volcanic complex.

The critical conditions of the land required Leighton to find a supplier that could supply equipment that would be able to operate at high altitudes and discharge continuous high volumes of lead water and brine. The project was awarded to Ruhrpumpen. Ruhrpumpen created a special skid which supports the motor, pump and casing; and had to be designed to be able to handle the movement of these three components at the same time. A Horizontal Multistage Split Case pump was designed for the application which will service the Mining and Geothermal Market. The project will consist of seven (7) 5X13 HSM skid packages (all assembled in Mexico Ruhrpumpen plant) that will be located at 6,600 ft. above sea level. The baseplates for the application required a special rigid design (never done before by Ruhrpumpen), suitable for frequent transport and relocation complete with pump and driver. Each skid will handle 212 °F, and 1,268 GPM.

HIGHLIGHT TOPIC

# ENBRIDGE ENERGY COMPANY INSTALLS 7 BRAND NEW PUMP STATIONS

The crude oil pipeline will have an initial capacity of 600,000 barrels per day.

Enbridge Energy Company, Inc., is expanding its existing pipeline system by installing 7 pump stations including one at the Flanagan terminal (Illinois, USA) and 6 along the pipeline route which completes 600 miles. The 36 inch diameter interstate crude oil pipeline will have an initial capacity of 600,000 barrels per day (bpd) originating in Pontiac, IL, USA and terminating in Cushing, OK, USA, crossing Illinois, Missouri, Kansas and Oklahoma. The Flanagan South Pipeline Project will provide the additional capacity needed to increase North American crude oil production to refinery hubs in the U.S. Gulf Coast.

Ruhrpumpen supplied 3 API 610 vertical double casing pumps, model VMT 28KXH to this project, each one handles 9,500 US GPM of crude oil at 515 ft driven by a 1,500 HP motor. This project was executed (designed, manufactured and tested) by a joint team from both RP locations, Tulsa & Monterrey.



Communities located along the pipeline route will benefit from property taxes over the life of the pipeline, as well as from the creation of high-paying construction and manufacturing jobs, and associated economic activity during construction. Other benefits will be the synergies of expanding capacity along an existing pipeline system with pumping station sites and electrical power connections. The estimated cost of the complete project will be around \$2.6 billion USD.



HIGHLIGHT TOPIC

# PETROCHEMICAL ENGINEERING LIMITED INVESTMENT

The Petrochemical Engineering Group chose Ruhrpumpen as a main supplier for their newest project.

Ruhrpumpen has completed manufacturing for quantity 8 API 610 compliant model ZM IV 1060/09 pumps (electric motor driven). Each pump will handle 22,000 GPM of crude oil at 318 ft with an NPSHr of 9.84 ft. The pumps were manufactured and tested at Ruhrpumpen's Germany facility.

The pumps are split case horizontal single stage centrifugal with double volute casing, side to side inline nozzle arrangement, ring oil lubrication, near center line mounting, and the service is in a Tank Farm connected to oil terminals.

The installation location is Yangpu, Hainan (Island of China). This is a great installation for Ruhrpumpen for large capacity tank farms.



NEWS

## Project DTBP

Ruhrpumpen has been awarded the biggest project of Mag Drive pumps.

Chang Chun Plastics Corporation chose Ruhrpumpen as the supplier of quantity 85 Mag Drive pumps, which will carry Methanol, MTBE, Phenol, Acetone and related chemicals.

The project, consisting of 85 sets of Mag-Drives will be located in Taiwan. The manufacturing process and testing will be done at Ruhrpumpen GmbH, Witten Germany. This project will be a good reference for Ruhrpumpen Group.



**CRP-M**  
Magnetic Horizontal Process Pump

HIGHLIGHT TOPIC

## BRASKEM IDESA - ETHYLENE XXI

The contract will be executed by Ruhrpumpen through the contractor TECHNIP, which was also awarded the technology supply contract.

Braskem-Idesa, a joint venture between Brazilian petrochemical company Braskem SA and Mexican petrochemical group Grupo Idesa, built an integrated petrochemical complex located in the Coatzacoalcos / Nanchital region of the Mexican state of Veracruz. With an annual capacity of a million tons of polyethylene, and an equal volume of ethylene feedstock, the project is known as 'Ethylene XXI'. Braskem-Idesa's Project is considered one of the most important petrochemical investments in Latin America in recent years.

For this project Ruhrpumpen supplied five (5) Horizontal Split Case Fire Pumps. Three of the Fire Pumps were model HSC 8X14X21E driven by a 650 HP diesel engine and the remaining two were also model HSC 8x14x21E but driven by a 560 HP electric motor. All five (5) pumps were designed to handle a Rated Flow of 3,000 GPM of Fire Fighting Water at 406 ft of head, and all supported by two jockey pumps model CPP21 3x1.5x13 ANSI. The fire pump packages included controllers and all necessary accessories, and all in compliance with UL/FM, and NFPA-20, latest edition.

Ethylene XXI is expected to be finished by the end of 2015. The production of this project will replace the need to import polyethylene.



HIGHLIGHT TOPIC

## NSF CERTIFICATION

(National Sanitation Foundation)

Ruhrpumpen is pleased to announce it has received NSF/ANSI-61 and NSF/ANSI-372 Certifications for three of its product lines. The VTP (Vertical Turbine Pumps) and ZW (Horizontal Split Case) product lines are now certified by UL (Underwriters Laboratories) for NSF/ANSI-61 and NSF/ANSI-372. GSM Pumps are certified by UL for NSF/ANSI-372 with NSF/ANSI-61 certification pending exposure testing. Ruhrpumpen is committed to remaining an industry leader in the production of safe products.



NEWS

### Ruhrpumpen Brazil completes its first 15 performance tests

The plant of Ruhrpumpen do Brasil has conducted performance tests on vertical pumps model 24SKXL, 6 stages with 1,000 HP motor, 6 poles at 4,160 volts and 60 Hz, witnessed and approved by Compesa, Water Company of Pernambuco state, located in the northeastern region of Brazil.

Ruhrpumpen expansion plans are increasing and we are about to inaugurate a new manufacturing plant in China. Our constant expansion in manufacturing plants, service centers and sales offices has allowed us not only reaching more customers worldwide but offer and improve our service to our actual clients.



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