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# Yokogawa plays **key** role in Khurais project

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**Y**OKOGAWA Middle East and Yokogawa Saudi Arabia Company have delivered top-of-the-line process control systems for the Khurais central producing facilities. This is a key project providing Saudi Aramco with a fully integrated world class crude oil processing and stabilising facility.

Partnering with Saudi Aramco, Yokogawa is providing local project execution including testing and implementing a continuing policy of Saudisation.

In addition to several other challenging initiatives in the regional energy sector, Yokogawa is playing a pioneering role in Saudi Aramco's Khurais central producing facility. This plant, the biggest in Saudi Arabia, is being designed to produce 1.2 million barrels per day (mbpd) of stabilised Arabian Light (AL) crude blend from the three fields with an approximate water cut of 30 per cent.

## KHURAI'S CENTRAL PROCESSING FACILITY PROJECT

The Yokogawa process control system (PCS) for the Khurais central processing facility project was selected in August 2006 with Yokogawa working with its lump sum turnkey (LSTK) contractors. The project was divided into three sections and awarded to three major LSTK contractors.

The crude processing facilities and gas oil separation plant (GOSP) – 1, 2, 3 and 4 are executed by Snamprogetti, Italy.

The gas processing facilities Train – 1 and 2, the inlet/outlet and storage/shipping facilities executed by Hyundai Engineering and Construction Co, Seoul, South Korea.

The water injection plants (Wips) and utilities are executed by Snamprogetti, Italy.

Yokogawa's scope of work included the supply, integration and testing as an integrated system at a single location with distributed control system (DCS) - Yokogawa, Saudi Arabia:

- Emergency shutdown system (ESD);
- Compressor control system (CCS);
- Vibration/fin-fan monitoring system (VMS/FFVMS);
- Smart valve monitoring system (SVMS/ SZVMS) – Yokogawa, Saudi Arabia;
- Data acquisition and historisation system (DAHS);
- Large screen TV (LSTV);
- Asset management system (AMS) - Yokogawa , Saudi Arabia;
- Alarm management system (ALMS) - Yokogawa , Saudi Arabia;
- Scada system – Yokogawa, Bahrain;
- Burner management system (BMS);
- Operator training simulator (OTS) – Yokogawa (Omega), Japan; and
- Maintenance training system (MTS) - Yokogawa , Saudi Arabia

The plant, a large scale unit, includes 16,000 hardwired DCS inputs/outputs, 11,000 hardwired ESD inputs/outputs and 1,200 VMS points. YME deployed three teams catering to individual LSTK Contractors.



Yokogawa Saudi Arabia Company building at Dhahran Techno Valley

Yokogawa equipped the new facility of Yokogawa Saudi Arabia Company in Dhahran, to stage and test the entire system configuration in a fully integrated manner to achieve customer satisfaction.

Yokogawa's project teams comprised 60 engineers. Yokogawa also seconded its engineers at the LSTK contractor's location to assist and provide technical support in designing the system. Yokogawa, as part of its Saudisation commitment, recruited several engineers from Saudi Arabia for executing this project trained and integrated with Saudi Aramco and LSTK engineers during the engineering and testing phase.

In addition, Yokogawa is providing the Stardom as RTU's for the Wasia water wells which is integrated onto the Utility DCS. This scope contract was awarded in January 2008 and was executed in a six months period to meet the project requirement and schedule.

Yokogawa supplied state of the art consoles from Evans, Calgary to meet the modern design of central control room (CCR) planned by Italian architects with Snamprogetti, Italy.

The new CCR will control and monitor the GOSPs, stabilising facilities, water injection facilities, gas facilities and Scada from individual operator consoles.

All the equipment has been shipped to site and Yokogawa Middle East and Yokogawa Saudi Arabia are currently involved in the installation of the equipment and supporting the ongoing site acceptance tests (Sat).

Saudi Aramco and customer's feedback appreciate that Yokogawa transferred this project to inside Saudi Arabia since the project bidding and that it perfectly met Saudi Aramco's vision for local joint work with the vendor's project team.

Through the successful execution of these contracts from its base in Bahrain and new facility in Saudi Arabia, Yokogawa Middle East and Yokogawa Saudi Arabia have proven its capability to execute large-scale projects locally in the Middle East, to the fullest satisfaction of its customers.

## Successful joint ventures help Aal Taher

Aal Taher Group is one of Saudi Arabia's most complete and fully diversified firms

**E**URABIA, part of the Jeddah-based Aal Taher Group, is a long established company in Saudi Arabia, having the capability to provide a wide range of technical sales and services to diverse industries including petrochemicals. Established in 1977, Eurabia Engineering and Construction Company Limited, has grown and diversified to meet market trends driven by customers' demands and expectations.

Its parent, the Aal Taher Group, is a major Saudi Arabian private sector group and is among the top 100 companies in Saudi Arabia. The Aal Taher Group is the holder of the prestigious TQM QC100 Diamond International Quality Crown Award in the realm of customer satisfaction, leadership, innovation and efficiency. Eurabia's capability to adapt quickly and meet customers' needs has provided it with new business opportunities.

"Our philosophy is that of being professional and reliable and always concentrating on our customers needs," says Tarek Abdulhadi Taher, president and CEO of Aal Taher Group. In keeping with this philosophy, Eurabia has, over the years, diversified into supply and technical support of Saacke burners, cathodic protection (CP) equipment and analyser systems integration, in addition to its core business of instrumentation and electrical, construction and maintenance.

A manufacturing facility has been established, located in Jubail Royal Commission, which enables it to offer CP materials and equipment to both local and GCC markets. Supported by world-renowned companies such as the UK-based Saacke together with Germany-based Spectro and Rofa of France to name but three of the many partners for technical equipment supply.

*Eurabia has, over the years, diversified into supply and technical support of Saacke burners and cathodic protection equipment*

Eurabia's support services division, ideally situated, adjacent to the Jubail Industrial City, provides safety, technical and logistical support for short and long-term maintenance contracts, allowing speedy mobilisation for our clients' immediate needs.

This support facility houses instrument workshops, fully equipped to maintain, repair and calibrate instrument, electrical and analytical equipment, as well as construction, maintenance and training facilities.

Eurabia's Bahrain facility provides Saacke burners, CP and analytical sales and systems integration services.

The systems integration division prides itself on total local design, construction and after sales support of a multitude of systems. "Our team of world-class engineers and technicians support all of our products locally and provides custom-made training courses to suit individual client needs," he says.

Eurabia's commitment to Total Quality Management (TQM) ensures the continuous improvement of its services, operations and staff development, which in turn guarantees to its customers consistently high quality across all products and services. Continuity of supply, combined with innovative solutions, results in it developing mutually-beneficial business partnerships.