

# mesc news



Endress+Hauser  
MESC  
04/2009

## MESC establishes Endress+Hauser regional FOUNDATION Fieldbus Competence Center in Dubai

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My visit in Saudi Arabia showed me that our resident team is complete, operative and integrated into the Anasia organization in Dammam.

Craig Horan, the Manager of our operations in Saudi Arabia, together with Syed Salman Ahmed and Sumit Prakash are dedicating their time to help Anasia sales people to develop customer relations and to follow up the needs of our customers having an Endress+Hauser installed base. The cooperation between both organizations works well. The project structure and job repartition between local and international EPCs starts to become more transparent. With patience and persistence we will soon benefit from this set up. I wish great success to Anasia and our team to reach the results which match the level of our ambition.



Yours,  
Jean-Gyl Capt  
CEO  
Instruments International

We are way into 2009 and we now all realize that the worldwide financial crisis will not go away so easily. Yes in places like China and Singapore there is light at the end of a long tunnel but in Europe and America, where Endress+Hauser's substantial strength lies, still the turnaround is not unfortunately round the corner. This situation had affected the Middle East in a certain way as well and we must adopt and be flexible in our policies se we can whether the storm.

In times like this we should fall back and concentrate on our brand values:

■ Commitment

We must demonstrate our personal and customer oriented character. Our clients, associates and partners should perceive us as competent, reliable and trustworthy. Be closer to your clients than ever before.

■ Excellence

Our offerings must continue to be useful, outstanding, and easily differentiable and solution oriented.

■ Sustainability

Always look for value added be responsible and society conscious.

■ Friendliness

Be credible, discreet and straight. Never leave any doubt.

If we concentrate and practice our brand values at these difficult times we will come out of the present turmoil much stronger and on top.



Yours,  
Andreas Parpas  
Managing Director  
Middle East Support Center

## Jean-Gyl Capt in Saudi Arabia and Bahrain

Jean-Gyl Capt, Instrument International's CEO, has been three times in the region in the last six months. This time he visited Saudi Arabia and Bahrain between the 30th August and 4th September. This is an indication of the importance the group's top management is placing on its regional operations especially in the Middle East with its vast energy resources.

Saudi Arabia is the biggest economy in the region and has the largest proven oil reserves world wide. With its massive hydrocarbon development program, the Kingdom of Saudi Arabia is a focus core country for our MESC operations.

During the first leg of the visit in Anasia's, our local representative, offices in Jeddah our market position in the Kingdom has been discussed as well as ways and means of how we can improve our operations and reach our targets. A meeting was also held with Mr. Abudawood, a prominent Saudi businessman and owner of Anasia, where the strengthening of relations between the two companies was discussed. In the second leg of his visit Jean-Gyl Capt visited Anasia's offices in Al Khobar where MESC has established a permanent presence and support office with Craig Horan as head of operations, Salman Ahmed as the local Saudi ARAMCO Key Account Manager and Sumit Prakash Key Account Manager for SABIC. Our business in ARAMCO and SABIC were discussed not only on the daily MRO level but on large investment projects restarted after the economic crisis turnaround. In his visit, Jean-Gyl Capt, was accompanied by Andreas Parpas, Head of MESC, and Jens Winkelmann, Head of Sales Middle East. The visit was concluded with a drive across the causeway to Bahrain to discuss the Bahraini market and for a meeting with Bahman Dastvareh our Endress+Hauser (Qatar) Managing Director for an overview on our business in Qatar.

## Hunting Season "Top 20 Project List"

Week 31 was a special week for MESC. Thomas Vogel, its founding "father" and first General Manager, was back in Dubai in his new capacity with Endress+Hauser Consult as International Business Director.

During the two day visit various topics have been discussed and a strategy was agreed on how to proceed further and coordinate International business in the region.

A topic of particular interest was the drafting and agreeing on the "Top 20 Project List", that MESC will be pursuing. These Top 20 Projects form our short term and long term targets in the region. Local resources were allocated to the various Top 20 Projects and international support has been identified for back up and assistance.

As part of this strategy we have formed non exclusive collaboration agreements with friendly control companies for the purpose to provide better value to our customers and to improve the competitive position of both of us. The control company offering potentially "MAC+" (Main Automation Contractor plus) and Endress+Hauser to act as the "+" offering full MIV (Main Instrument Vendor).

Acquisition of Regional Middle East projects involving multinational EPC contractors is a complex multi disciplined operation requiring advanced coordination skills and team work. For the purpose of a seamless coordination and activity integration of all Endress+Hauser parties that might be involved in the acquisition effort of the Top 20 projects, it was agreed to organize a workshop, just before the IKA meeting: On November 22, 2009, where Project Managers and Key Account Managers from SCs from Germany, Italy, Japan etc. will participate in pursuing the commonly agreed project opportunities.

## “Online shop” Training at MESC

In today’s complex world IT is becoming more and more a process that if properly planned and implemented it can elevate interaction within a multinational complex operation, the likes of Endress+Hauser, to the highest degree of efficiency and productivity.

“Online shop” is Endress+Hauser’s tool that enables representatives, sales centers and clients to place their orders directly into the company’s system.

Besides that the “On line shop” offers a variety of distinct advantages for internal and external sales staff. Product configuration and pricing, product status, spare parts list, product documentation and comparisons are easy to use functions of the Online shop. In order to transfer the required skills and properly implement the “online shop” process into the purchasing procedures of regional representatives and partners Oliver Blum, Instrument International’s Director for Logistics and IT, and Tim Tschudin, from I.I.’s IT team, had conducted a hands on “online shop” training in Dubai between the 17th and 18th June for the benefit of our representatives from Oman, Kuwait, U.A.E., Syria and Jordan. The training

was also attended by staff from Endress+Hauser (Qatar) and MESC itself. Many thanks to Oliver and Tim for their visit and a professionally planned and conducted training that helps to integrate more efficiently our regional activities into the group’s main body of operations.

**Oliver Blum and Tim Tschudin with trainees at the MESC Training Center**



## Customer seminar by Endress+Hauser (Qatar)

Endress+Hauser (Qatar) conducted successfully its first Customer seminar which was held on the 17th June at the Ramada Plaza Hotel in Doha. The seminar was attended by more than fifty engineers from the entire industrial community of Qatar. The topics were focused on:

- Innovative technologies replacing conventional devices
- Field instrumentation and safety standards
- Plant Asset and life cycle management

The presentations were carried out by Manoj Kumar and Prasanth Sreekumar, our Petrochemical and Oil & Gas Business Development Managers respectively, from our MESC office in Dubai.

Bahman Dastvareh, our Managing Director, in Qatar was very pleased by the genuine interest shown by the participants and the interactive nature of the discussions.

Now Minette Oriondo and Tariq Bakeer, from our office in Qatar, have to work very hard in order to follow up on the large amount of enquiries that resulted from the seminar.

The seminar which had ended with a dinner for all participants was attended by engineers from: QP, QAFAC, QAPCO, QAFCO, QCon, SHELL GTL, ORYX GTL, Ras Gas, Dolphin Energy, Technip, Qatar Kentz, WORLEY PARSONS and Tadmur.

**Prasanth Sreekumar with Manoj Kumar on the left of the picture during the Customer Seminar presentations.**



Mukund Shiroya, Instrument Engineer QAFCO:

“The seminar was quite comprehensive and useful. Very interactive and in the available time covered in depth details on innovative technologies in level flow etc. It was interesting to learn Endress+Hauser’s unique approach to Life Cycle Management and available platforms which if employed effectively can help in reducing Life Cycle costs and at the same time increase the plant uptime. As safety is getting prominence it was good to see that there are many devices that are safety certified and Endress+Hauser supports “prior use” approach. I believe that with direct presence in Qatar we will see such informative exchanges/seminar activities and quality customer support in future.”



**Mikund Shiroya**

## Instrumentation orders for the world's biggest smelter on MESC

Emirates Aluminium (Emal), founded in February 2007, is aiming to create the world's largest Aluminum smelter at a cost of \$8 billion. The company, one of several Aluminum producers that have recently emerged in the Gulf, is a joint venture of Dubai Aluminum (Dubal) and Abu Dhabi government owned investment organization Mudabala Development.

Emal's Aluminum smelter is constructed in two phases at the Khalifa Industrial Zone in Taweelah. The smelter will produce 0.7 million tones per year when phase one is completed in the second half of 2010. Phase two will double production to 1.4 million tones per year. The project will be the largest non hydrocarbon industrial plant in the UAE.

MESC, Instrument International's Dubai Branch have been contacted by the project's EPCM (Engineering, Procurement, Construction and Management ) contractor, the joint venture of Australia's Worley Parson and Canada's SNC Lavalin, for putting up various proposals for the supply of instruments. Immediately a local acquisition team was formed in MESC with the task to coordinate a truly international effort to succeed in securing the orders.

The MESC initial team leader acquisition Roberto Brambilla handed over the role of project manager to Siddiqua Tasneem. The MESC team, which was supported by Sumit Sarkar from DESCON's Abu Dhabi office, had undertaken the responsibility of preparing the proposals and was the single point of contact for Emal's procurement team.

Technical evaluation of the proposals was undertaken predominantly by SNC Lavalin in USA. This meant close cooperation mainly with our US colleagues as well as the Key Account Managers in Canada and Australia.

The team was successful in securing several orders worth close to CHF 600,000 for:

- 63 nos. Level Instruments
- 197 nos. P/DP
- 42 nos. Analyser loops
- 13 nos. Pitot tubes
- 22 nos. Mag Flow Meters
- 13 nos. Ultrasonic Flow Meters
- 19 nos. Vortex Flow Meters
- 5 nos. Temp. Transmitters

Orders were negotiated by the MESC acquisition team and were placed on DESCON, our representative in UAE, by Emal and AQUA the project's contractor for the effluent treatment plant. The scope includes supply, documentation and commissioning assistance.



**Siddiqua Tasneem,**  
MESC Project Engineer  
who successfully  
performed the task of  
acting Project Manager



**Inter-tie transformer equipment in the Energy area**  
The first cathode sealing, on 29 April 2009

## Endress+Hauser Qatar lands first order in a Qatar Petroleum project

India's Punj Lloyd the EPIC contractor for QP's "Strategic Gas Transmission Project" had negotiated an order with Endress+Hauser (Qatar) LLC for the supply of 12 nos. Levelflex FMP40 for level measurement in fire water vessels, and 4 nos. Micropilot FMR240 for level measurement in diesel tanks. The order was booked

on DPIS our local distributor. Engineering consultant to this project is the Abu Dhabi office of Nama Mot Macdonald. Normally such an order would have been placed outside Qatar with a real danger of Endress+Hauser not being the successful bidder. The presence of an Endress+Hauser company in Qatar had changed the whole

equation. The whole Qatari industry understands now our commitment to the country and they are responding accordingly.



## International business becomes more and more a local affair

The way of doing business in the Middle East is fundamentally changing. The majority of international EPC contractors and other industrial organizations have moved substantial part of project execution from their headquarters at home to the region. This means the center of gravity of engineering and procurement for all these companies is now their regional offices in the Middle East. Furthermore the local investors and NOC (National Oil companies) now control more and more equipment selection and purchasing with locally negotiated frame agreements and purchase contracts. In actual fact ARAMCO announced already that its mega projects under the new five year plan will be offered only to international companies that have created joint ventures with local organizations. This fact puts an additional responsibility on MESC to make available the necessary resources to handle this business and at the same time coordinate with the corresponding Endress+Hauser Sales Centers whose role although substantially diminished it is still quite significant.

There are many such examples apart from Emal's new smelter at Taweelah.

### **IPIC- Abu Dhabi Crude Oil Pipeline (ADCOP):**

The construction of the 360 km pipe line, with a capacity of 1.5 million bpd of crude oil, is undertaken by China Petroleum Engineering & Construction Corp. (CPECC) local subsidiary company, Worley Parsons is the FEED consultant and ILF Consulting Engineers is the PMC.



MESC was identified as the single point of contact for technical and commercial matters to CPECC who will be placing orders locally by their UAE subsidiary. SC China has an important supportive role in assisting through their long time good relations with the Chinese contractor. Descon, our local representative, will support the team's efforts from their Abu-Dhabi office. We hope that in one of our next news letters we will report that this cooperation had resulted to an order.

### **Manifa Oil Field Project in Saudi Arabia:**

The Manifa project, handled by ARAMCO from their Damman office comprises four packages.

- Package 1 valued at \$1.8 billion is awarded to Italy's Snamprogetti. Purchasing will be done by their local subsidiary in Saudi Arabia. For the best coordination of our acquisition efforts, our Aramco Account Manager in Saudi Ahmed Salman is in close contact with SC Italy's Roberto Brambilla and his colleague Claudio Mattioli.
- Package 2 worth \$800 million is subcontracted to JGC Japan who in turn had subcontracted the Tanajib Water Treatment plant to their local subsidiary, JGC Gulf International LTD, turning the whole exercise of project acquisition into a local affair.
- Package 3 and 4 awarded to Spain's Technicas Reunidas and South Korea's GS Engineering and Construction most likely will be handled in the Headquarters of the corresponding companies but still the local input and cooperation is increasingly more important.



# FOUNDATION Fieldbus Competence Center in Dubai

The advantages of Fieldbus products are recognized the world over and the technology is being adopted in a growing number of applications. FOUNDATION Fieldbus in particular fulfills all the requirements that are demanded of a modern bus system.

FOUNDATION Fieldbus digital communication technology, allowing the device data to become an integral part of the control and operating system, offers a multitude of advantages:

- Improved plant productivity and cost
- Increased safety and reliability
- Improved information flow and accessibility
- More openness

Consequently most process industries worldwide had adopted FOUNDATION Fieldbus as their preferred technology. The Oil & Gas industry worldwide including the Middle East recognizing the undisputed advantages offered by FOUNDATION Fieldbus had adopted this technology as the preferred one for its demanding and complex processes. More than 330 member companies support the FOUNDATION Fieldbus with over 200 products. Endress+Hauser is one of the leading instrumentation manufacturers who implemented the technology since its inception.

Therefore as a matter of policy, MESC is committed to support the region's development on FOUNDATION Fieldbus. Already in MESC's Dubai office a fully equipped FOUNDATION Fieldbus competence center is taking shape being able to provide:

- FOUNDATION Fieldbus solutions
- Supervision of installation, integration, commissioning and troubleshooting by qualified certified engineers
- Training

The competence center is equipped with Endress+Hauser instruments, FF Host and Diagnostic tools as well as control cabinets with Endress+Hauser Pview and Control Care together with Honeywell's Experion PKS 300 as well as Emerson's Delta-V version 10.3 DC equipment.

In this respect Interoperability tests are made in a multi vendor environment which ensures that our devices are operating in an open environment together with control systems of other major FF suppliers. In the competence center we are able to demonstrate our seamless integration capabilities and how we can enable the end user to utilize the best available technology in field instrumentation. Optimal performance is demonstrated by the ability to test function blocks in all third party systems including ours.



Particular attention is devoted to training. The use of FOUNDATION Fieldbus requires a careful approach with respect to defining, designing and implementing an installation. Success depends upon a structured and integral approach based on knowledge experience and continuous training. For this purpose MESC is providing training courses now designed to provide the participants basic knowledge, both theoretical and practical on FF technology from planning to commissioning and maintenance. Particular attention is given not only to process control but on FF applications on plant asset management and predictive maintenance. Target audiences are programmers and device configurators as well as maintenance and service support supervisors. The trainer is Panos Giannakoulis who is certified by the FIELDBUS FOUNDATION organization. The course's duration is three days and the dates are **8th - 10th November 2009** and **13th-15th December 2009**



## The diameter of the flow meters gets bigger

**The bigger our business in the Middle East the larger the diameter of the flow meters we deliver to the region.** BIG mags don't come bigger than DN 2000 in Endress+Hauser's standard production. Our first DN 2000 magnetic flow meter in the Middle East was supplied last year to Qatar Petroleum. Our second DN2000 delivery was early this year to Dubai Municipality. Before midyear our representatives in Jordan, Technical Services Bureau,

have placed another order for two more of those DN2000 big babies for a project for Arab Potash Co. at their Safi plant on the Dead Sea. We thank Fouad Batshone and his team for this latest order and we are now looking forward to receive more such orders for big diameter flow meters from other countries in the region before the year ends. This is an indication of the penetration we are now achieving in the market especially in project business.

# SHELL GTL project Qatar

The efforts of Gulf countries to diversify their economies are almost as well documented as their enormous hydrocarbon wealth. Yet the various attempts to develop new non-hydrocarbon investments have not recorded the same unparalleled success yet. In contrast the case of Qatar's drive towards GTL development is proving an exceptionally intelligent and visionary investment that will help to establish Qatar as a major energy supplier worldwide. Qatar Petrochemical Co. (QAPCO) in joint venture with SHELL are presently constructing the Pearl GTL integrated development project which is SHELL's single largest equity investment anywhere in the world. When the project will be completed at around the end of the decade it will produce 140,000 barrels /day of GTL products as well as an estimated 120,000 barrels /day of condensate, liquefied petroleum gas and ethane. Pearl GTL will also be the largest GTL plant in the world, using SHELL's proprietary and patented catalyst technology, often referred to as the "heart of the process," to convert natural gas into a range of GTL products. The Pearl GTL project will eventually employ 40,000 workers from more than 50 nations.

The execution of such a complex project requires the employment of a multinational group of companies. MW Kellog from Greenford UK are PMC (Project Management Consultants) while Honeywell from Bracknell UK is MAC (Main Automation Contractor).



The execution of the project was split in six packages and was entrusted to the following EPCs:

- Utility, off sites and C6 GTL process packages: JGC/KBR joint venture
  - C5 Liquid process: Toyo/ Hyundai joint venture
  - C6 Gas process: Chiyoda/ Hyundai joint venture
  - Gas separation plant: LINDE
  - Water Treatment plant: Veolia
- Endress+Hauser has been successful in securing instrumentation orders for the supply and commissioning services in excess of 1700 line items involving a multitude of technologies for guided wave and open space radars, coriolis mass flow meters, vortex flow meters, and magnetic flow meters. Communication is achieved by Hart and Foundation Fieldbus technology on preconfigured instruments.

The acquisition of such a complex order required the international coordination of Endress+Hauser Sales Centers in the various countries of the involved EPC contractors like Japan, Korea, Italy, France, Germany, The Netherlands and U.K. with central point of reference Instruments International.

The bill of material for instruments delivered all ready comprised of the following:

- 626 no. Guided wave radar
- 170 no. Free space radar
- 210 no. Coriolis flow meters
- 512 no. Vortex flow meters
- 96 no. Magnetic flow meters
- 90 no. Various instruments

For the commissioning and start up a core service team has been set up with Raymond van Marsbergen, Head of Project Management, taking over as Project Manager. The execution activities and responsibilities of this team have been entrusted locally to Endress+Hauser (Qatar) LLC and MESIC staff.

Nilesh Tawde from Dubai is the Project Service Coordinator while Tariq Bakeer, from our office in Qatar, will assume the role of Site Manager. The commissioning services will be provided by FOUNDATION Fieldbus Certified Engineers Panos Giannakoulis and Costas Arvanitis. A Technology Support team will be formed, if necessary, in Maulburg, PCPS and Flowtec respectively and is ready for any technology back up issues.

Pearl Shell GTL site at Ras Laffan



## Technolead our trusted partner in Syria

Technolead our representatives in Syria, established since 2002 in Damascus, has grown up to become a leading company in the fields of Instrumentation and turn key Process Automation Solutions in their country.

The company is certified for ISO 9001:2000, ISO 14001:2004 and QHSAS 18001:2007.

Technolead has been our representatives since 2006 and in this short period Husam Khanji, the company's General Manager and his team have gained the acknowledgement and respect of their colleagues

in Endress+Hauser. The best proof for this is the following awards:

- MESC 2008 Outstanding Performance Award
- Business Development Award 2008
- International Project Leader Team Award 2008

Technolead had just successfully completed an EPIC Fuel Automation project involving a Tank Gauging system and SCADA with automation software and PLC control of pumps and flow together with an alarm and monitoring system and rfid tracking solution.

The Tank Gauging system which was engineered and supplied by Endress+Hauser comprised

159 sets of Proservos, Prothermos, Deltapilots, and Tank vision for 30 fuel stations.

In addition to this the scope of work comprised of 107 sets of Micopilot S FMR 540, Prothermos with water bottom sensor, Tank Side Monitors and Tank vision for 18 Fuel Depots.

A measure of the project's complexity and size is the fact that 65 km of cables have been used out of which 35 km. are profibus cables.



**Husam Khanji together with Raymond van Marsbergen and Valentin Ljubic receiving from the Endress+Hauser top management the International Project Leader Team Award 2008**

## Ben White raises the temperature in the Middle East

Temperature applications in the Middle East are becoming a hot topic. For this reason Praveen Menon in our MESC office has been assigned, on top of his normal day to day duties, the task of temperature product specialist. For this purpose Ben White from PC Wetzler has been in Dubai for three days from 30th June to 1st July for training Praveen on general principles of temperature measurement and ap-

plications as well as related engineered solutions.

During his visit in the region Ben stopped over for three days in our Al-Khobar office in Saudi Arabia where he made presentations for our local representative and our own staff Craig Horan, Ahmed Salman, and Sumit Prakash. During his stay in Saudi Arabia he did visit SAUDI ARAMCO and SABIC where various applications on existing plants and ongoing projects have

been discussed as well as temperature measurement in general.

We wish to thank Ben for his support and his complete and informative presentations that had enhanced MESC's competence and Endress+Hauser's reputation in the region as a credible solution provider that includes now such specialized offerings like temperature engineered applications and solutions.



# The three golden secrets in risk assessment for project acquisition

Project business is not without risk. This is an undeniable fact. During the process of acquisition phase various quality gates have been set up in the Endress+Hauser Project Process Handbook (Standard 201) in order to qualify a project. During this exercise, among other duties, the team leader acquisition has to perform a risk assessment for the project.

MESC is right in the middle of a dynamic project oriented market. On any given month various projects land on the desk of Keith Bannister, MESC's contracts manager, who always has to go through a risk assessment procedure for each and every project.

Projects who need particular attention are refurbishment and rehabilitation ones. In our FMS activities replacing old turbine and PD meters with Coriolis is becoming a daily routine.

In all these cases the three necessary steps of risk assessment are always meticulously carried out. Most of the times detailed site surveys are carried out in order to establish the actual site conditions and how they affect the essential elements of risk assessment.

## 1) Identify

The risks must be identified as far as technical, logistical and commercial aspects are concerned.

## 2) Quantify

When the risk is identified it must be quantified. In other words we must understand the technical necessities and if they can be met. We ought to look into the complexity of logistics and the requirements of a multi disciplined operation involving our own resources, sub-contractors and third party suppliers. The commercial environment surrounding a project must be analyzed.

## 3) Mitigate

When we have identified and quantified our risks we then go through the procedures of how best we coop with them and minimize them to a degree that are not disproportional to the benefit we are anticipating from the project.



upper picture: Keith Bannister and Nilesch Tawde with the client's Engineering team on a surveying mission

lower picture: Actual site conditions must be carefully surveyed before committing to any refurbishment or upgrading project

# Anasia Egypt

Anasia (Egypt) our representative in Egypt can be very proud for the steady and sustainable business they have achieved for Endress+Hauser instruments over the last years. Osama Amer and his team of seven motivated and well trained engineers under the expert coaching of Area Manager Dominik Helg have managed to establish one of the leading instrumentation companies in the country. The focus activities are centered on traditional Endress+Hauser core competencies in Water and Waste Water and the Food and Primary Industries.

In order to improve its presence in the market Anasia had recently undergone an assessment where important topics like sales channels, customer segmentation and top customer focusing have been addressed and analyzed.

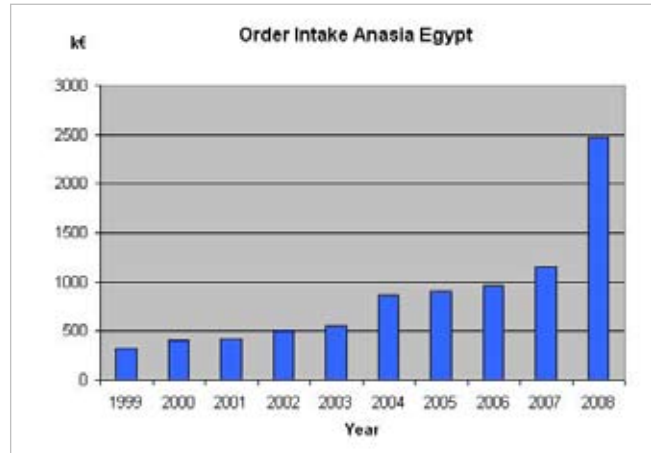
Anasia Egypt is also expanding its business into the Petrochemical industry where it had recently successfully completed the supply,

commissioning and integration into an AR800 ABB DCS system of the following FOUNDATION Fieldbus instruments for a local Petrochemical Industry producing formalin, phenolic resin, urea formaldehyde and foundry resin:

- 7 no. Promass 83F
- 15 no.Temp. TMT125
- 2 no. Prowirl 72F
- 2 no. Promag 53P
- 12no. FMR 240
- 2no. Vortex 73
- 14 no.PMD 75
- 4 no. Liquiphant FTL51



Petrochemical Mansoura



## Follow up orders after the “59 Stream Project” success

Endress+Hauser, and its local representative MTIS, following up on the success of the “59 Stream Project,” they were able to book another similar large project for a combination of FMS and Tank Gauging solution this time in three remotely located strategic fuel storage depots.

The scope of the project for all three terminals comprises of Engineering, Supply, FAT and Commissioning of custody transfer metering and tank gauging systems. The bill of material includes:

- 39 nos. Coriolis Flow Meters
- 57 nos. Pressure Transmitters
- 57 nos. Temperature Transmitters
- 18 nos. Proservo Level Instrument
- 12 nos. Prothermo
- 12 nos. Tank Vision

The scope included other 3rd party instruments that were taken care of by MTIS.

The value of the Endress+Hauser instruments in this project was half a million Euro.

## Al-Nuha Co. continues their Tank Gauging success in Iraq

Al – Nuha Co, our representative in Iraq, had followed up their successful Tank Gauging project at Arbat Fuel depot in Al Suleimania in Northern Iraq with a new Tank Gauging success for the Iraqi-Turkey pipeline.

The new order worth CHF 250,000 is for North Oil Co the pipeline operator on the Iraqi side. The contractor is SIDDCO with whom Endress+Hauser has an MOU for cooperation.

The scope of work comprises the following equipment plus spares:

- 18 nos. Micropilot S FMR 532
- 16 nos. Pressure Transmitters PMP71
- 16 nos. Prothermo NMT 539
- 18 nos. Tank Side Monitors NRF 590
- 18 nos. RIA 250
- 3 nos. NXA 820
- 3 nos. NXA 822

The place of installation is at three fuel depots supplying an equal number of pumping stations at two locations on the pipeline from Kirkuk to Turkey. The third place of installation is located on the Kirkuk- Beji pipeline.



Belkacem Lagrine Area Manager and Country Coach for Iraq with AL-Nuha's Sales Manager Mustapha Alkhafaji

## Oil Metering System installed in Pakistan

### Alfred Fonseca send us this report from his customer in Pakistan

Coriolis mass flow metering systems at satellite locations at the Tando Alam Oil Complex and at the central facility measure the crude oil production output and identify any oil losses or thievery in the piping system. Two oil metering systems were designed, one for the Dispatch Line and the second for the Decanting Line. The metering system at the Dispatch line consists of a Coriolis Meter with local display, Temperature Sensor and a Flow Computer installed inside the office of in-charge Dispatch for close monitoring. After commissioning, the first reading from the metering system showed an error of 0.004%, that's highly accurate measurement. The flow meter can be helpful in many ways such as to eliminate or minimize factors of oil theft, forgery, tempering, etc. and confirmation against calibration charts of bowsers (road tankers). The installation of other such flow meters will be carried out soon for checking the cumulative oil flow from many distributed line systems of the Tando Alam Oil Complex.

The metering system at the Decanting Line consists of a Coriolis meter with local display, Red Eye Meter for Water Cut and a Net Oil Computer. The system calculates volume of water and oil separately being decanted from a bower.

How is the Water Cut calculated? All wells are on artificial lift system and some of the wells produce more water than oil and have water cuts as high as 70-80%. Promass could calculate the water cut on mathematical calculation based on density measurement, while the Red Eye meter does this through actual measurement. Difference in readings between Red Eye and Promass came out to be around +/-5%, which is also very good. Many parameters for each well need to be entered and stored in the Net Oil computer for water cut calculation. Since each well has different salinity water and even changing oil densities the calculation gets very complex and is not at all what a Promass could handle.



Alfred Fonseca



### Top 20 International project list news:

**SHAH GAS SOUR FIELD:** The UAE's state owned Abu Dhabi National Oil Company (ADNOC) signed the Shah gas field joint venture and field entry agreement with the US-based energy major Conoco Philips. In the joint venture ADNOC has 60% while Conoco Philips the remaining 40%. The development of sour gas reserves in the Shah Field is expected to cost more than US \$ 10 billion.

The project will involve several gas gathering systems, construction of processing trains to process one billion cubic feet per day of gas at Shah to produce 540 million cubic feet per day of network gas, in addition to new gas and liquid pipelines and the construction of sulphur exporting facilities at Ruwais Industrial City. The UAE is saddled with limited supply from the Dolphin gas pipeline and Sharjah's Crescent is not making much progress in getting gas supplies from Iran. Therefore the UAE had to look inward to develop new supply sources to meet its growing gas demand. Sour gas is called as such because of its high sulphur content corrosive properties.

Abu Dhabi has more than 200 trillion cubic feet of gas reserves, the fifth largest in the world, a large part of which is sour.

### QAPCO new LDPE III plant expansion

In our MESC news letter 02/2004 we have recorded that QAPCO'S LDPE III expansion was under EPC bidding.

The evaluation of bids is completed and Germany's UHDE emerged as the winner of the US\$550 million engineering, procurement and construction contract.

QAPCO is 80% owned by Industries Qatar Group and 20% by Total Petrochemicals

(Brussels, Belgium), a subsidiary of Paris based Total SA.

Under the terms of the \$ 550 million contract, UHDE will be responsible for the entire project, providing project management and detailed engineering service, and managing the supply of materials and construction work up to the final feed in stage. The plant will be constructed as part of QAPCO's existing polyethylene production facility in the Mesaieed industrial city and is scheduled for completion in December 2011.

When operational, the plant will operate on a feedstock of ethylene procured from the surplus produced by Qapco and Qatofin, to produce up to 300,000 tons per year of LDPE. Manoj Kumar, MESC Chemical and Petrochemical Industries business development manager assisted by Endress+Hauser (Qatar) is following up this project.

### JUBAIL EXPORT REFINERY

State Oil Giant Saudi Aramco with its joint venture partner France's Total is going ahead, since June, with the US \$ 7 billion Jubail export refinery.

The winners of the seven packages of the 400,000 barrels per day refinery are:

Package1 : Distillation and hydrotreating (US \$ 1.2 billion) TR Spain

Package2A: Conversion Unit (US \$ 1.7 billion) Technip France

Package3A: Sulphur Treatment (US \$ 400 million) Daelim South Korea

Package 4: Coker Unit (US \$ 800 million) Samsung and Chiyoda Japan

Package5A: Offsite and utilities (US \$ 1.3 billion) Technip and CTCI

Package5B: Plant Utilities (US\$700 million) SK Engineering and Construction South Korea

Ahmed Salman our Resident Engineer in Dammam in charge of Aramco is following this project.

### ELIXIER HYDROGEN PLANT ABU DHABI

Pakistan's Descon Engineering has won a US \$ 100 million contract to build an air separation unit at German/UAE joint venture Elixier's new nitrogen plant at Mirfa in Abu Dhabi.. Descon signed the contract with the Joint Venture of Linde and ADNOC (49:51%) in last July. The job is scheduled to be completed in March 2010. The air separator unit, which will distil compressed air into nitrogen and oxygen, is the first of two to be built at the Mirfa plant. When both are completed, they will have a total nitrogen production capacity of 670,000 cm<sup>3</sup>/h. The nitrogen will be used for re injection into the Habshan condensate field to free up new natural gas supplies in the emirate. Prasanth Sreekumar, MESC Oil and Gas business development manager, assisted by our local representative Descon Trading is following up this job.

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