Partnering with MIV results in significant cost savings

Endress+Hauser selected as MIV for flow and level devices in $3.8 billion refinery expansion and modernization project

Refineria de Cartagena (Reficar) selected Endress+Hauser as a global Main Instrument Vendor (MIV) partner for level and flow technologies to support a $3.8 billion refinery expansion and modernization project. The Reficar expansion and modernization project consists of twelve new world class plants which will increase its refining capacity and production from 80 KBD to 165 KBD.

The Challenge Reficar was in need of a MIV capable supplier with a global presence that had the project execution capabilities and skills needed to handle an expansion and modernization project of this large scale. Reficar was also in search of a global partner that could easily meet their wide range of measurement technology needs all while acting as a single source supplier to support their project needs.

Our solution **Endress+Hauser supplied over 2,800 flow and level measurement devices to Reficar and acted as a single source of supply partner to:**

- Perform sizing and selection of Endress+Hauser and third-party instrumentation
- Produce and manage all technical, commercial, and logistical documentation
- Coordinate all inspections and logistical related activities

Colsein Ltda, Endress+Hauser's exclusive local partner in Colombia is providing additional support to Reficar through:

- Local training support
- Offering site supervision during installation, commissioning, and startup
- Performing calibration services requests, and more

ecopetrol

Refinería de Cartagena is an Ecopetrol subsidiary and is located in Cartagena, Colombia. The upgraded facility will produce ultra-low sulfur gasoline and diesel from heavy crude oil slate.

Benefits at a glance

- Significant project cost savings
- Reduced engineering rework required
- Reduced total number of purchase orders, quotations and invoices
- Savings in total time invested by procurement department

Endress+Hauser

People for Process Automation

Solution details Studies suggest that significant cost savings can be realized by partnering with a MIV capable supplier. For example:

- Consolidating various measurement technologies with a MIV concept shifts much of the logistic, tender and invoicing responsibilities to the supplier.
- All activities around third-party technical inquiries and orders are routed through a single point of contact.
- By engaging the MIV at an early stage in engineering, the customer can include the selected supplier features and part numbers in the initial version of the specification sheets and ultimately reduce the engineering re-work required.

Colsein Ltda (Endress+Hauser representative in Colombia) delivered a series of training programs to Reficar utilizing a PTU® (Process Training Unit) located in Tocancipa, Cundinamarca Colombia (approximately 16 miles North of Bogotá). The PTU® (Process Training Unit) is a full-scale working mini-process plants with on-line instrumentation and controls. The PTU® allowed Reficar to gain hands-on experience with the types of operation, diagnostics and troubleshooting found in real-life process plants.

Visit **www.us.endress.com/training** to learn more about Endress+Hauser's PTU® (Process Training Unit) Network.

Endress+Hauser's mission is to execute projects with the customer to ensure the end result meets their business objectives by:

- Increasing customer revenue
- Reducing the total cost of ownership
- Increasing safety of their operations
- Integrating information from field operations into our customer's business systems

For more information please email **projects@us.endress.com**

Only a safe plant is an economical plant. Visit **www.us.endress.com/process-safety** to learn more about Endress+Hauser's company-wide design standards reducing risk in design and manufacturing.

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