

"Technological evolution has progressively increased the complexity of our products. That's why we require increasingly effective and sophisticated measurement instruments."

GIUSEPPE RAMPONI, QUALITY MANAGER
PETROLVALVES S.R.L.



State-of-the-Art Measurements for Special Valves

PETROLVALVES purchased a new FARO Edge ScanArm for greater flexibility when taking precise measurements of parts with very complex geometry.

Based in Castellanza, in the Province of Varese (Lombardy, Italy), Petrolvalves S.r.l. has been operating in the Oil & Gas industry for over 50 years, designing and manufacturing valves for extraction, transport, piping, refining, etc., which are

used under the most diverse conditions (standard, high or low temperature, undersea, etc.) on systems scattered throughout the world.

The company's Quality Manager, Giuseppe Ramponi, explained: "The particularity and geometric complexity of our products require highly specialized production processes and control procedures to ensure compliance with requirements and specifications." To meet these requirements Petrolvalves has been using a FaroArm Platinum six-axis measurement arm with Measure X software (subsequently updated

to CAM2 Measure 10) since 2005. "It is a sophisticated instrument that meets our needs perfectly," Ramponi added.

With the production of increasingly complex and technological components, and having seen the excellent results achieved using the "old" arm, at the end of 2011 Petrolvalves decided to evaluate the purchase of a second instrument. This device would be used to solve problems related to the measurement of actuators with highly complex geometry, recently produced for undersea valves. Following detailed research and >>

– FOUR GOOD REASONS –

- 1 The FARO Edge ScanArm was chosen to measure geometrically complex pieces with the goal of reducing time and costs.”
- 2 “In addition to its reliability, we chose the new FARO measurement arm to take high precision measurements within our tolerances and with a repeatability coefficient of 0.024 mm.”
- 3 “The FARO Edge ScanArm is a versatile measurement system and, despite its many functions, it is relatively simple to use.”
- 4 “One of the main advantages of the CAM2 Measure 10 software is its “merging” functionality, i.e., the possibility of comparing the 3D scan with the original design in real-time.”



@ WWW.MEASURING-ARMS.FARO.COM

SUMMARY

The constant development of new products led Petrolvalves to invest in new measurement systems. Expectations for the new FARO Edge are high and the precision, reliability and flexibility of FARO products provide a solid guarantee.



>> several consultations with FARO, the company chose the FARO Edge ScanArm (i.e. a FARO Edge measurement arm with a Laser Line Probe), equipped with CAM2 Q and Geomagic Qualify software.

Ramponi: “Tests demonstrated that this was the right instrument for our specific situation since it takes fast, precise measurements of geometrically complex components such as undersea actuators, worm-screws, special shafts and grooves.”

In short, the FARO Arm offers a level of precision that is comparable to fixed-coordinate measurement machines. In addition to taking up less space in the workshop, it performs inspections more efficiently and eliminates machine downtime.

In particular, FARO's new Laser Line Probe gives the FARO Edge new functionality and performance with regard to contactless measurement that would be difficult to match. In fact, the wide laser beam significantly increases scanning capacity without sacrificing precision while ensuring extremely high speed and definition. Without forgetting that it is possible to optimize measurement and scanning operations with the CAM2 Measure 10 software.

Giuseppe Ramponi concluded: “We have only been using the new arm for a short time - it went into operation in January 2012, following the training course – however, we are already using it with excellent results. We have even begun measuring geometrically complex pieces and we are obtaining excellent results in terms of precision, reliability and speed.”

PETROLVALVES S.R.L.

Petrolvalves S.r.l. (Castellanza, in the province of Varese (Lombardy, Italy) is an industry leader in the production of valves for the Oil & Gas industry. Founded in 1956, the company produces valves for export worldwide through its significant network of sales offices. Constant investment in the development of new technologies allows the construction of sophisticated, highly technological valves which are mostly customized according to users' specifications. The development of exclusive products has allowed Petrolvalves to acquire key international clients, such as Aramco, BP, Chevron, Conoco Phillips, ExxonMobil, NASA, Petrobras, Repsol, Shell and Statoil.

@ WWW.WWW.PETROLVALVES.IT



INSPECTION