



FARO Enables 60% Time-Savings for Sheet Metal Fabricator

India is fast rising as a manufacturing powerhouse. With Prime Minister Modi's "Make in India" programme, the manufacturing industry in India is set to become the fifth-largest in the world by 2020, worth an expected US\$1 trillion by 2025. Therefore, against the backdrop of an increasingly crowded playing field for suppliers, quality and prompt service are more important than ever in setting companies apart from their rivals.

Veer-O-Metals Pvt Ltd has long since been aware of this. The company was founded in 1965 and is a leading manufacturer and exporter of precision sheet metal fabrication parts and assemblies. With reputed clients in diverse verticals, Veer-O-Metals has established itself in industrial circles as a trustworthy provider.

Industry

 Precision sheet metal Fabrication

Applications

 Dimensional Analysis & Inspection

Benefits

- Complete GD&T inspections quickly
- Generate reports with 3D data points
- Enable better project management & on-time delivery

The Search for Quality and Efficiency

Veer-O-Metals's first encounter with FARO was in 2005. With clients in fields such as medical electronics, aerospace, and automotive manufacturing, there was little margin for error allowed in Veer-O-Metal's production processes.

At that time, the Veer-O-Metals team depended on vernier calipers and micrometers for the bulk of their measurements. However, these manual tools had their limitations. The metal parts ranged from small components that are around $10 \times 10 \text{cm}$ in size, to larger structures of $3 \times 3 \text{m}$ dimensions. Technicians tasked with measuring large structures such as door frames would typically take an entire day to complete the job. Even then, the accuracy of measurements depended heavily on each technician's competency. Even with the most skilful operators, there were times when measurements were still inaccurate, forcing the team to push back project timelines.

"It became clear that something had to change," recalled Mr. Shambhu Saran, General Manager of Operations at Veer-O-Metals. "That's when we decided to invest in the FaroArm, in hopes of bumping up productivity and accuracy."

FaroArm: A Trusted Solution

Veer-O-Metals's first purchase was the 6-ft Titanium FaroArm, a solution that offered measurement accuracy of up to 25 microns. Company technicians immediately saw an improvement in production quality.

Most important to the team at Veer-O-Metals was the FaroArm's ability to complete geometric dimensioning and tolerancing (GD&T) inspections swiftly. Mr. Saran commented: "It used to be difficult to even measure flatness tolerance, but the FaroArm automatically generates reports based on 3D data points. The CAM2 metrology software even maps out a visual of our products, allowing us to pinpoint and correct problem areas in our products more quickly."



An operator uses the FaroArm's contact probe to inspect a sheet metal product for accuracy.

The ease of operating the FaroArm also greatly improved Veer-O-Metals's work productivity. With six axes of rotation and the option to quickly switch out probe heads, the FaroArm's

intuitive design is easy for technicians to use, and reduces the need to change between several traditional tools. The accuracy of measurements has also become more consistent across the board, reducing precious time spent on training new technicians. This has cut Veer-O-Metals's inspection time by 60%.

FARO's proven efficacy led Veer-O-Metals to purchase the FARO Quantum^S and Quantum^E measurement arms in 2017 and 2018 respectively. By then, Veer-O-Metals had expanded – with four plants in Bangalore - and the portability of the FaroArm became even more of a boon. "When necessary, we transport our measurement arms between plants," noted Mr. Saran. "As the devices are battery-powered, it was never a concern to have them plugged into a power source, and the Universal Quick Mount base allows it to be conveniently placed on any metal and granite surface. This has enabled us to maximise our usage of the arms."

Satisfaction All Around

The team at Veer-O-Metals now use the three FaroArm units for four to five hours every day, proving an excellent return on investment. With improved efficiency and reliable accuracy, Veer-O-Metals has been able to speed up the production process, delivering products to clients in a much timelier manner.

"By consistently upgrading production processes and technology, we are confident of retaining customer loyalty," Mr. Ranjith Kumar, Assistant Manager - Qualification, concluded. "Our fourth plant is scheduled to open in mid-2019 and we project a 30% increase in export sales. FARO technology will be instrumental in helping us keep up with new orders, and we will definitely consider purchasing other solutions when the need arises in future."

About FARO

FARO is the world's most trusted source for 3D measurement, imaging and realization technology. The Company develops and markets computer-aided measurement and imaging devices and software for the following vertical markets:

- 3D Manufacturing High-precision 3D measurement, imaging and comparison of parts and complex structures within production and quality assurance processes
- Construction BIM 3D capture of as-built construction projects and factories to document complex structures and perform quality control, planning and preservation
- Public Safety Forensics Capture and analysis of on-site real world data to investigate crash, crime and fire, plan security activities and provide virtual reality training for public safety personnel
- 3D Design Capture and edit part geometries or environments for design purposes in product development, computer graphics and dental and medical applications
- Photonics Develop and market galvanometer-based laser measurement products and solutions

FARO's global headquarters is located in Lake Mary, Florida. The Company's European regional headquarters is located in Stuttgart, Germany and its Asia-Pacific regional headquarters is located in Singapore. FARO has other offices in the United States, Canada, Mexico, Brazil, Germany, the United Kingdom, France, Spain, Italy, Poland, Turkey, the Netherlands, Switzerland, India, China, Malaysia, Thailand, South Korea, Japan, and Australia.

Featured Product



FARO 8-Axis Quantum FaroArm

The 8-Axis Quantum FaroArm seamlessly integrates the portable Quantum FaroArm with an eighth-axis, enabling the part to be rotated in real-time relative to the Arm – meaning no difficult reaching around the object and no need to move the Arm into different locations during the process.

For more information www.faro.com/FaroArm/sg

FARO Singapore Pte Ltd

No. 3 Changi South Street 2, #01-01 Xilin Districentre Building B, Singapore 486548

Tel: +65.65111350 Fax: +65.65430111 Email: asia@faro.com URL: www.faro.com/sg

To find out more, visit www.faro.com

© 2019 FARO Technologies Inc. FARO and the FARO logo are registered trademarks and trademarks of FARO Technologies Inc. All Rights Reserved. This customer's results depend upon its unique business and environment, the way it used FARO products and services and other factors. These results that you read from the article may not be typical; your results may vary.