

**PRECISION WORKHOLDING DEVICES**

**TRUMPF (India) Pvt Ltd**  
www.trumpf.com  
Hall 4, Booth 101

# Together to Win

Playing the perfect partner in mutual growth, TRUMPF (India) has displayed Forms and Gears' smarter welding jigs at its booth.

TRUMPF is the world leader for sheet metal machinery and lasers. The company has partnered with several other Indian integrators to facilitate its growth in the country. Forms and Gears, the country's oldest and largest fixture building company, is one of TRUMPF Laser integration partners.

TRUMPF has displayed, at its booth at IMTEX FORMING 2020, Forms and Gears' Virtual Reality

Laser SPMs for Railways Bogie Welding and Laser Hardening SPMs. In addition to doing laser integration with TRUMPF, Forms and Gears also specialize in welding jigs, which are the backbone of any body/sheet metal shop of an auto plant.

Forms and Gears has now come up with a revolutionary new Industry 4.0 product called Smartfix 4.0 that can be installed even on existing Welding Jigs, making them smarter, more intelligent and with the ability to communicate with the end user on a mobile platform.

### Smart Laser Welding

Smartfix 4.0 is a Precision Workholding Device with the ability to collect, transmit and analyze data in a useful format for the end-user. Developed for the first time in the world, it takes workholding

devices and fixtures into the digital and cyber space.

Data from the sensors is continuously sent to the cloud wirelessly where it is parsed and stored for analysis. The raw data is then analysed using Data Analytics and Artificial Intelligence tools and sent back to a custom-built Dashboard of the end user, which resembles their factory floor, showing the entire layout in action as well as a quick summary of the critical parameters of each welding jig.

Useful data like the number of components produced per jig per day, operator efficiency analytics, the number of cycles the jig has run, preventive maintenance schedules, cost per component analytics, consumable analytics etc. are sent to the end user's computers on their mobiles.

### Partners in innovation

Smartfix has been jointly developed by ASM, a publicly-

listed company specialising in Engineering Design and Engineering related Artificial Intelligence, Machine Learning and Analytics, and Forms and Gears, one of the pioneers of Fixture building in the country.

Reji Varghese, Managing Director, Forms and Gears, says, "ASM's strengths in electronics, AI and Analytics and our 47 years of Fixture building experience helped us in developing this product. Smartfix 4.0 is the easiest and most cost-effective way to make the whole body shop / sheet metal shop Industry 4.0 enabled. We believe this product can improve productivity, improve quality, reduce rejections and reduce downtime."

Forms and Gears has now forayed into the design and manufacture of Laser Integration using TRUMPF Laser source for Welding, Cutting and Hardening Special Machines.



Source: Magic Wand Media

(L-R): Pradeep Patil, MD, TRUMPF (India); and Reji Varghese, MD, Forms and Gears at the TRUMPF booth