

RUAG Australia upgrades Victorian F-35 component manufacturing facility

By **Mike Yeo** - April 21, 2020



RUAG Australia's facility in Bayswater in Victoria, which manufactures components for the global Lockheed-Martin F-35 Lightning II Joint Strike Fighter (JSF) supply chain, has implemented Industry 4.0 standards throughout the site, transitioning its machine shop into an interconnected, data-driven environment

RUAG Australia says that the upgrade improves productivity and enhances the reliability of the manufacturing process to benefit customer supply chains, including those for hydraulic components for the JSF program.



Photo: RUAG Australia

"Industry 4.0 advanced interconnectivity between devices, equipment, tools, visualisation systems, and their human users within the manufacturing system. It is an optimization and networking of existing computerized technologies with a central server to create cyber-to-physical systems for ensuring a smarter, more productive factory", says the company in a news release.

It adds that the move to full interconnectivity at RUAG's Hydraulic Centre of Excellence, housed at its Bayswater facility, generates significantly improved efficiencies as it creates a new human-to machine interface. Real-time performance data is immediately available at any given moment throughout the manufacturing system thus safeguarding reduced manufacturing lead times and securing a more efficient and reliable supply chain.

"Moving to Industry 4.0 allows us to more fully realize the potential of recent workshop upgrades and investments in manufacturing capabilities and in so doing ensure we deliver high performance for our customers," states Terry Miles, General Manager RUAG Australia. "Exploiting the equipment's ability to be networked, we are able to generate a full array of visual performance indicators on demand that report on overall equipment effectiveness. Our process reviews are granular, where we trend uptime, identify otherwise-hidden process bottle-necks, and provide visual management controls within each work cell," he adds.

The transition of the Bayswater facility to Industry 4.0 standards included the integration of a dedicated server capable of interfacing with manufacturing tools running dated software platforms



as well as those featuring state-of-the-art data interfaces. Software integration and machine connectivity ensures all manufacturing process data is logged into a relational database management system (RDBMS). Teams company-wide have direct access to the intuitive and straightforward system of representing data and are able to interrogate and trend machining performance in real time.

RUAG Australia is an independent supplier and life-cycle support provider of systems and components on behalf of the RAAF and other international air forces, as well as civil aviation, worldwide. The company combines engineering expertise with landing gear hydraulic actuator manufacture, maintenance, repair and overhaul (MRO), and metal treatment and finishing in their role as a DASR Part 145, DASR Part 21J, EASA Part 145, CASA Part 145, NADCAP, and AS9100D approved organization.

To download the latest issue of Asia-Pacific Defence Reporter, click [here](#)

