ADM AUSTRALIAN DEFENCE MAGAZINE _(/)_
SERVING THE BUSINESS OF DEFENCE

RUAG Australia upgrades manufacturing centre to Industry 4.0 standards

30 April 2020

💬 0 Comments

RUAG Australia has implemented Industry 4.0 standards throughout their Bayswater site.

The acquisition of next generation embedded technology means RUAG has been able to transition its machine shop into a state-of-the-art interconnected, data-driven environment. The company says the upgrade improves productivity and enhances the reliability of the manufacturing process to benefit customer supply chains, including those for hydraulic components for the F-35 program.

Industry 4.0 refers to the advancement of interconnectivity between devices, equipment, tools, visualisation systems, and their human users within the manufacturing system. It is an optimisation and networking of existing computerised technologies with a central server to create cyber-to-physical systems for a smarter, more productive factory.

> " Moving to Industry 4.0 allows us to more fully realize the potential of recent workshop upgrades and investments "

The move to full interconnectivity at RUAG's Hydraulic Centre of Excellence, housed at its Bayswater facility, is reportedly generating '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, reducing 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," Terry Miles, General Manager RUAG Australia, said. "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."

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.

The company says that software integration and machine connectivity allows all manufacturing process data to be logged into a relational database management system. Teams company-wide have direct access to the system and are able to interrogate and trend machining performance in real time.