

JAG Process Solutions Pty Ltd:

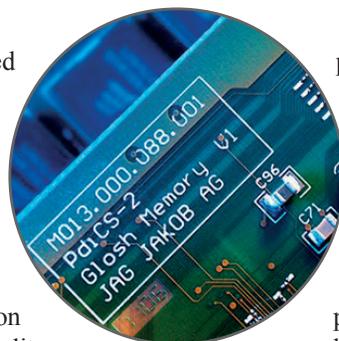
Automation Fuelled Process Engineering

Automation has significantly transformed the dynamics of process engineering in the pharmaceutical and biotech industry by unravelling new realms of efficiency standards. Leveraging cutting-edge research and development and state-of-the-art equipment, the automated production environments of the pharma and biotech companies are highly focused on maintaining the optimum levels of process quality. While fostering innovation and credibility throughout the production pipelines, a significant part of ensuring the quality and production standards for a successful process engineering entity is often determined on the grounds of the very foundation of a processing plant's establishment. This is where JAG comes into the picture with its unique and holistic approach of evaluating the factors such as feasibility, risks, efficiencies, and process quality, controlling the interdependencies within a plant, right at the design phase of the process plant. Through this approach, the company delivers optimally synchronized planning and implementation of process plants and automation solutions to pharmaceutical and biotech companies. Andrew Sia, Managing Director of Melbourne based JAG Process Solutions Pty Ltd says, "Our JAG project management services provide a 'Specialist one stop shop' to our clients offering them planning, design, construction, implementation, qualification, and acceptance for pharmaceutical/biotech processes."

Bringing decades worth of process engineering experience to the table, JAG provides complete turn-key process plants, encompassing a robust range of services in process analysis, plant engineering, basic engineering, plant construction, qualification, commissioning, maintenance, and system support.

It was in 1988 that JAG's parent company headquartered in Bruegg, Switzerland commenced its first contractual engagement for engineering, construction, automatization, and qualification of a large turn-key process plant. The company has since evolved tremendously and developed its own proprietary JAG PdiCS automation and system solution, a full-blown MES and SCADA (HMI-Visualization) system, as well as a full range of specific and complementary software applications.

According to Andrew Sia, the JAG PdiCS automation solution is tailored to align with the specific needs of the



pharmaceutical and biotech industries. The solution seamlessly aligns with the client's system through its unique recipe-based approach complied with ANSI/ISA-88, while providing them with system-based operator guidance and operation support at each step. Developed with a powerful, simple, and process-oriented programming language and equipped with just three flexible control modules, the JAG PdiCS comprises decentralized (localized) functions that collectively enable the clients with complete retrace-ability and reduction of downtime to a minimum. Apart from empowering its clients with high degrees of operational efficiency and productivity, the JAG PdiCS ensures shortest time periods for carrying out implementations, system upgrades, and construction of greenfield as well as brownfield plants. The JAG PdiCS automation solution allows fully paperless production with help of the EBR (electronic batch recording) functionality of the MES, a completely paperless plant management (inventory) and plant maintenance with help of the JAG MMS (Maintenance Management System), a stand-alone application which is a seamless and ideal system extension to the JAG MES.

Elaborating on one of JAG automation's successful endeavors, Andrew Sia shares the case study of CSL Behring which produces immunoglobulin. Being one of its kind, high-efficiency, multi-batch production plants, CSL Behring needed simultaneous streamlining of multiple production batches. JAG stepped in with its automation solutions providing automatic system controls and systematic guidance for operators of the control system. This enabled CSL with maximum utilization of its plants at its Bern and Melbourne sites while significantly eliminating process-related downtimes.

As JAG garners traction within the process engineering domain, Andrew Sia attributes the 'process-oriented' staff at JAG as the company's principle differentiating factor. With an exceptional blend of specialized professionals, all of JAG's workforce view themselves as process specialists with a profound knowledge of pharmaceutical and biotech production processes. "This particular aspect of our culture empowers us to establish strong communication with our process and plant engineers and also with our clients," concludes Sia. **ACO**