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QUARTERLY NEWSLETTER FROM AUTOMATED SOLUTIONS AUSTRALIA

AXIS

MEET THE ASA TEAM CURTIS FORDE

CUSTOMER IN FOCUS
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REVOLUTIONISING WELDING

CONNECTING WITH FUTURE INNOVATORS



FROM THE DIRECTOR'S DESK



"Learn how robotic welders are setting new benchmarks for accuracy, productivity, and workplace safety."

Welcome to the latest edition of Axis, Automated Solutions Australia's (ASA) newsletter!

In this issue, we're excited to showcase the innovation, collaboration, and expertise that define ASA. In our Meet the Team section, get to know Curtis Forde, a passionate mechatronics engineer whose dedication to robotics is helping us deliver transformative solutions to our clients.

Our Robot in Focus highlights the FANUC CRX-10iA/L Paint Cobot, a game-changing technology that's enhancing efficiency and precision in painting and coating applications.

We also delve into the power of partnership with our Customer in Focus, Renold Australia, showcasing how collaboration led to the creation of an advanced robotic machine-tending cell. Plus, learn how robotic welders are setting new benchmarks for accuracy, productivity, and workplace safety.

Finally, we celebrate ASA's role in nurturing the innovators of tomorrow, with Melissa Boonzaayer's inspiring contribution as a judge at the VEX Robotics State Championships.

Thank you for exploring this edition of Axis. As always, we're here to help you turn your automation aspirations into reality.

Pat Green,

Director, Automated Solutions Australia (ASA)

DELIVERING TOMORROW'S SOLUTIONS, TODAY



MEET THE **ASA TEAM** - CURTIS FORDE

"When I first joined ASA, I was amazed by how much everyone genuinely loved what they were doing," says Curtis Forde, a graduate mechatronics engineer at Automated Solutions Australia. Curtis, who completed his studies at Swinburne University, discovered his passion for electrical systems design and software programming during his academic journey. At ASA, his role involves meticulous preparation for robotic installations and hands on engagement with projects, both onsite and remotely.

"The variety of tasks is what excites me the most about robotics," Curtis explains. "One moment, I could be designing something in CAD, and the next, I'm programming PLC and HMI systems or assembling robotic components for testing. There's always something new to learn, and that's what keeps the job so dynamic."

Curtis recalls one of his most satisfying projects: the robotic installation at RMA Automotive. "After a month and a half of hard work, seeing the production running smoothly as we had designed was incredibly rewarding," he shares. Similarly, his first major robot programming task at RMA introduced a new software tool, allowing the team to program a precise glue application process. "It was challenging but exciting to see the final result—everything worked seamlessly, and the outcome was impressive."

Challenges are part of the job, but Curtis sees them as opportunities to grow. "We often work with devices we've never used before, like servo grippers," he says. "Figuring out how to integrate them into our systems involves a lot of reading, testing, and collaboration. It's both frustrating and satisfying when it all comes together."

For Curtis, the impact of ASA's solutions on



clients is deeply fulfilling. "I love hearing feedback from clients about how our automation solutions have improved their operations," he says. One notable success story involved a dual machining tending robot installation at MCHND in Adelaide. "The owners told us that before the installation, they were working six days a week, long hours, and sacrificing time with their families. Now, they have their weekends back and can stick to regular 9 to 5 hours. It's amazing to see how our work can make such a difference."

"The people at ASA make all the difference," Curtis says. "I've never worked with a group of like minded people who are as passionate about what they do. We often hang out outside of work, and that camaraderie makes the job so much more enjoyable."

"If you're thinking about getting into robotics, go for it!" Curtis encourages. "Start with small projects, like programming Arduinos or designing 3D printed gadgets. Those hands on experiences will teach you so much and prepare you for the challenges of a professional career in robotics."

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Outside of work, Curtis channels his passion into hobbyist automation projects. "I've built RC Star Wars droids, automated parts of my home, and even sell some 3D printed designs on Etsy. It's all about staying creative and continually learning," he says.

Curtis's journey at ASA reflects his dedication to innovation, problem solving, and making a tangible impact through robotics. "The possibilities in robotics are endless," he says. "At ASA, we're not afraid to take on new challenges, and that's what makes this job so exciting."

CUSTOMER IN FOCUS: RENOLD AUSTRALIA





Automated Solutions Australia (ASA) is proud to have partnered with Renold Australia, an industry leader with a long history of innovation, to develop and implement an advanced robotic machine tending solution at Renold's Melbourne facility. This partnership showcases ASA's automation expertise alongside Renold's ongoing commitment to adopting cutting edge technologies to drive manufacturing excellence. One of the key outcomes of this collaboration is a dramatic improvement in operational efficiency, with the robotic solution enabling continuous production and reducing lead times.

Renold Australia Pty Ltd, established in 1879, is a global leader in industrial chains and mechanical power transmission products, supplying critical components to sectors such as mining, transportation, food and energy. Known for their forward thinking approach, Renold has continuously invested in advanced manufacturing processes to meet the needs of a demanding market.

To further enhance production efficiency and maintain their unwavering commitment to quality, Renold collaborated with ASA to transform a machine previously operating for 8 hours a day into a fully automated system capable of running 24/7.

The solution features a FANUC M10iD/8L robot equipped with 2D vision and dual gripper technology. During factory acceptance testing at ASA's facility, Renold's team observed



the system's ability to detect and handle stacks of random parts with precision. This rigorous testing phase included imaging and programming paths for a variety of components, ensuring the system could seamlessly adapt to production demands.

Thanks to meticulous preparation, the system's installation process was streamlined. Initially allocated two weeks for deployment, the system was fully operational within just seven days, minimising downtime on this critical machine.

The integration of this robotic solution has significantly boosted Renold's production capacity, reducing lead times and enabling faster customer order fulfillment. This advanced technology has also enhanced workforce engagement, with staff quickly adapting to the system and taking pride in their ability to operate and program it effectively. ASA's comprehensive training facilitated this transition, empowering Renold's team to independently program parts. Starting with 5–6 parts, they have since expanded to 50–60 parts, demonstrating their adaptability and enthusiasm for new technologies.

Glynn Willett, Production Supervisor, highlighted the system's ease of use and the confidence it has inspired in the team. "There's a real sense of pride seeing the machine run continuously. Everyone has been eager to learn and contribute." This collaboration with ASA is just the latest chapter in Renold's legacy of innovation. By integrating state of the art automation, Renold continues to strengthen its position as a cornerstone of the Australian manufacturing industry, delivering quality and efficiency to its customers.

"This partnership exemplifies the power of combining ASA's automation expertise with Renold's long standing heritage of innovation," said Pat Green, Company Director. "It's a solution that raises the bar for efficiency and precision while reinforcing Renold's commitment to staying at the forefront of manufacturing."

Renold's adoption of advanced robotic technology is a natural progression in their ongoing pursuit of manufacturing excellence, solidifying their reputation as a forward thinking leader in their field. Both ASA and Renold are excited about the opportunities this system creates to better serve their customers.

For more information about ASA's advanced automation solutions, visit www.automatedsolutions.com.au.

For those in the manufacturing and engineering sectors, Renold Australia offers a wealth of expertise in industrial chains and mechanical power transmission. Visit www.renold.com.au to explore their innovative products and solutions and connect with a trusted leader committed to advancing the industry.

REVOLUTIONISING WELDING:



THE PRECISION AND POWER OF ROBOTIC WELDERS

Robotic welders have become a game-changer across industries, revolutionising how intricate welding tasks are performed. Combining precision, speed, and consistency, these automated systems deliver unmatched efficiency in manufacturing processes. In this article, we explore the transformative capabilities of robotic welders and how Automated Solutions Australia (ASA) is integrating FANUC robots to elevate welding excellence to unprecedented heights.

The Rise of Robotic Welders

Gone are the days of manual welding, often plagued by inconsistencies, higher costs, and safety hazards. Robotic welders have stepped in to redefine welding standards, offering manufacturers significant advantages, including competitive efficiency, faster production cycles, and reduced costs. At their core, robotic welders are engineered to handle even the most intricate welding tasks with unmatched accuracy. These machines operate tirelessly, following preprogrammed paths to ensure uniform welds, all while eliminating the risks of human error.

The Benefits of Robotic Welders

1. Precision and Consistency

FANUC robotic welders are the epitome of precision. With highly accurate programming, these robots deliver consistent welds throughout production runs. The result? Reduced defects, minimal rework, and flawless products every time.

2. Enhanced Productivity

Integrating FANUC robotic welders into production lines has revolutionised efficiency for ASA's clients. These robots can operate 24/7 without fatigue, dramatically cutting cycle times and boosting output. Manufacturers can meet higher demand without compromising quality.

3. Cost Efficiency

While the initial investment in robotic welders may appear substantial, the long-term benefits far outweigh the costs. Reduced material wastage, minimal labour requirements, and lower defect rates translate to faster return on investment (ROI) and improved profitability.

4. Workplace Safety

Safety is paramount in manufacturing environments. By taking on hazardous welding tasks, robotic welders significantly reduce workplace injuries. This shift not only enhances employee morale but also creates a safer work environment, ensuring compliance with strict safety regulations.

ASA's Integration of FANUC Robotic Welders

With years of expertise in industrial automation, Automated Solutions Australia is at the forefront of robotic welding integration. Specialising in FANUC robots, ASA delivers tailored automation solutions to a wide range of industries.

ASA's team of skilled engineers and technicians ensures seamless integration of robotic welders into existing production lines. The result? Clients unlock the full potential of automation, experiencing enhanced productivity and unparalleled precision.

Customised Solutions Across Industries

One of ASA's standout strengths is its ability to deliver customised solutions for diverse industries. From automotive and aerospace to construction and foundries, FANUC robotic welders are adaptable to meet unique sector needs. Their versatility enables manufacturers to remain competitive in ever-evolving markets, ensuring agility and sustainability in their operations.

Shaping the Future of Welding

The advent of robotic welders has reshaped the manufacturing landscape, with precision, productivity, and cost efficiency at the forefront. As technology advances, robotic welders are poised to play an even greater role in defining the future of welding.

Automated Solutions Australia invites you to embrace the power of robotic welders. Partner with ASA to elevate your manufacturing processes, achieve new levels of efficiency, and lead the charge into the future of welding.

Take the leap into the next generation of welding excellence. Contact Automated Solutions Australia today to explore how FANUC robotic welders can transform your business.

MAXIMISE PERFORMANCE: SERVICE YOUR ROBOTS TODAY!

Your robots are the backbone of your manufacturing operations, tirelessly working around the clock to deliver precision, efficiency, and consistency. Like any high-performance machine—whether it's a car or a piece of advanced equipment—regular maintenance is essential to keep them running at their best.

Annual servicing ensures your FANUC robots stay in optimal condition, helping you avoid costly downtime and maintain the high standards your business depends on. Key maintenance tasks such as greasing, battery replacements, wear inspections, and backlash measurements safeguard motion repeatability and uphold the quality of your production processes.

Routine servicing doesn't just fix problems—it prevents them. By maintaining a high Mean Time Between Failures (MTBF) and detecting potential issues early, you can save time, money, and the hassle of unexpected disruptions.

Don't wait for a breakdown to act. Protect your investment, boost productivity, and keep your robots performing at their peak — schedule your service today!

Call ASA on 1800 ROBOTS to book.



ROBOT IN FOCUS: FANUC CRX-10iA/L

With a 10 kg payload capacity and an impressive 1,418 mm reach, the CRX Paint cobot is tailor-made for high-mix, low-volume applications. But it's not just about numbers—it's about results. Here's what sets this cobot apart:

1. Safety First, Always

Built to comply with stringent explosionproof safety standards, the CRX Paint cobot ensures a secure environment, even in hazardous areas. Its force-sensing technology means it can operate safely alongside human workers, making it an excellent choice for collaborative workflows in confined spaces.

2. Simplicity in Automation

Ease of use is at the heart of this cobot's design. With intuitive drag-and-drop programming and "lead-through teach" capabilities, even operators with minimal robotics experience can set it up quickly. Its straightforward interface makes deploying automation accessible to a broader range of industries.

3. Reach, Precision, and Flexibility
With the longest reach in its class and a

unique under flip motion, the CRX Paint cobot easily handles large workpieces and hard-to-reach areas. Its lightweight design (just 45 kg) means it can be repositioned to suit evolving production needs—an essential feature for dynamic operations.

Applications That Go Beyond Painting

This cobot isn't just a one-trick robot. Its versatility makes it suitable for a wide range of coating applications, including:

- Painting: From industrial machinery to custom products, the cobot ensures consistent, high-quality finishes.
- **Powder Coating**: Ideal for creating durable, uniform surfaces on metals and plastics.
- Liquid Coating: Perfect for precision tasks, such as automotive or aerospace components.
- Fiberglass Coating & Reinforcement: Efficiently applies coatings for structural integrity in demanding industries.

Innovative Features Driving Success

The FANUC CRX Paint cobot is equipped with advanced features tailored to streamline coating tasks:

- Paint-Specific Icon Commands: Simplifies programming for unique coating applications.
- ROBOGUIDE Software Integration: Offers powerful path-editing tools to optimise



PAYLOAD: 10KG REACH: 1418MM

AXIS: 6 AXIS

efficiency.

 Small Footprint: A compact design means it fits seamlessly into existing production lines without requiring major layout changes.

Collaborative Robots: The Future of Industrial Coating

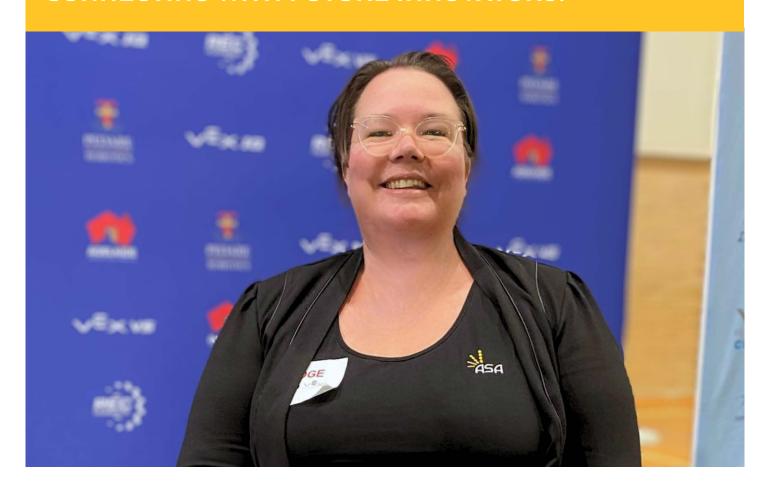
As industries pivot towards more efficient, safe, and flexible operations, the FANUC CRX-10iA/L Paint cobot sets a new benchmark in collaborative robotics. Its ability to work alongside humans, coupled with exceptional performance, empowers businesses to innovate without sacrificing quality or safety.

For those ready to enhance their operations, the FANUC CRX Paint cobot isn't just a solution—it's a game-changer.

Whether it's reducing waste, improving ergonomics, or boosting production speeds, this cobot is a reliable partner in achieving operational excellence. The future of painting and coating is here, and it's collaborative.

Ready to transform your operations? Let the FANUC CRX-10iA/L Paint cobot lead the way.

CONNECTING WITH FUTURE INNOVATORS:



MELISSA BOONZAAYER AND THE VEX ROBOTICS STATE CHAMPIONSHIPS

At Automated Solutions
Australia (ASA), we're
passionate about fostering
STEM education and
empowering the next
generation of innovators. That's
why we're thrilled to celebrate
the incredible contributions
of our team member, Melissa
Boonzaayer, who has been
making a difference by judging
VEX Robotics competitions,
including the recent State
Championships at UniSA in
South Australia.

VEX Robotics competitions bring science, technology, engineering, and mathematics (STEM) skills to life, engaging students in hands on problem solving challenges.

These events encourage students to tinker, experiment, and collaborate, helping them develop technical expertise alongside invaluable soft skills like communication, time management, and teamwork. With 95% of participants reporting an increased interest in STEM fields, these competitions are a vital stepping stone for aspiring innovators.

As a judge, Melissa played a key role in evaluating student teams' performance, reviewing engineering notebooks, and conducting interviews to understand their thought processes and problem solving approaches. Her role also included observing the action packed competition floor and presenting awards to celebrate the students' hard work and creativity.

Melissa reflects "Judging VEX Robotics competitions is a privilege that allows me to witness firsthand the creativity and talent of young minds shaping the future of STEM. It's especially rewarding to inspire young girls to explore their potential in science and technology, fostering confidence and

"By participating in initiatives
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- Melissa Boonzaayer

innovation in tomorrow's leaders."

By participating in initiatives like the VEX Robotics competitions, ASA demonstrates its commitment to supporting STEM education and the development of tomorrow's industry leaders. Events like these are more than just competitions, they're a platform for students to showcase their ingenuity, build confidence, and envision a future in STEM careers.

We're incredibly proud of Melissa and her involvement in this inspiring program. To all the participants at the State Championships, congratulations on your achievements and best of luck as you continue your STEM journeys. You are the innovators of tomorrow, and we can't wait to see what you'll achieve next!

DELIVERING TOMORROW'S SOLUTIONS, TODAY

ASA is a privately owned, wholly Australian company specialising in the design, engineering and integration of flexible automation solutions for the Australian manufacturing sector.



Whether your application is pick and place, palletising, packaging, part transfer or assembly, the development of a robotic solution offers significant benefits in almost any industry that is operating at high levels of throughput.

- Achieve uninterrupted speed, saving valuable production time.
- Achieve maximum repeatability, reliability and accuracy
- Lower costs versus manual labour
- Eliminate health and safety risks related to repetitive, tiring or dangerous operations

Contact ASA for more information or visit our website automated solutions.com.au





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