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AXIS

QUARTERLY NEWSLETTER FROM AUTOMATED SOLUTIONS AUSTRALIA

MEET THE ASA TEAM
THOMAS STIMSON

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ASA

FROM THE DIRECTOR'S DESK

"Wherever you are in the world, we look forward to continuing to share our insights and deliver cutting-edge solutions that empower your business, now and into the future."

Having just returned from EMO in Germany – Europe's largest machine tool and robotics exhibition – I'm filled with excitement for what lies ahead.

Events like EMO are great for uncovering new technologies, applications, and insights that we can bring back to our clients here in Australia. They reaffirm our commitment to being at the forefront of innovation, delivering world-class solutions to meet the evolving needs of modern manufacturing and building sovereign capability.

Over the past year, we've quietly expanded the range of robotic applications within our capability portfolio. At the same time, our partnership with Mitutoyo continues to strengthen, with their precision products being extremely well received by our customer base. Our own TeamMate solution has also gained remarkable traction, with more deliveries taking place this month and continued demand from clients seeking flexible, intelligent automation.

In this edition of Axis, we put a spotlight on Thomas Stimson, one of our newest graduate engineers. I strongly believe our people are our point of difference, and Thomas exemplifies that. We also explore our recent installation at QMN, including some great feedback from Peter Jerkic, Workshop Manager, on the successful delivery of a new painting system for their hydraulic cylinders.

In this edition, you'll also find features on FANUC's collaborative robots, showcasing how they're helping manufacturers unlock the future of safe, efficient automation, as well as the highly anticipated FANUC R-50iA controller, which redefines precision, efficiency, and security for the next generation of smart factories. We also dive into the impressive FANUC M-950iA, a 500 kg payload powerhouse. Rounding out this issue, we introduce the Mitutoyo MiStar 555 CNC CMM, highlighting its role in precise measurement and quality assurance for Australian manufacturers.

On behalf of the team at ASA, thank you choosing to partner with us. Wherever you are in the world, we look forward to continuing to share our insights and deliver cutting-edge solutions that empower your business, now and into the future.

Pat Green,
Director, Automated Solutions Australia (ASA)

DELIVERING TOMORROW'S SOLUTIONS, TODAY

MEET THE **ASA TEAM** - THOMAS STIMSON

For Thomas Stimson, being an Automation Engineer at ASA is all about the challenge. Each day brings a new set of problems to solve, and he finds genuine satisfaction in working through them, step by step, until the solution clicks into place.

He's not one to boast about achievements, but Thomas is looking forward to the completion of the offline work for an upcoming automation project. If his contributions play even a small part in its success, he'll count that as a win.

Life at ASA keeps him on his toes. Some mornings begin in the office, others on site, but one thing is certain, it's always an early start, with a clear list of tasks to see through. That steady rhythm gives him the structure he needs to focus on what matters most, moving projects forward.

Ask him about his favourite robot, and he doesn't hesitate. "The FANUC P-700 paint robot on a rail," he says. "It's just very cool." It's a straightforward answer that says a lot about what drives him: an appreciation for the blend of power, precision, and smart engineering that robotics makes possible.

Thomas is also energised by the future. He talks about automation's growing ability to take on increasingly complex tasks, producing components that are more sophisticated than ever before. In his view, technology is set to push past its current limits — and he's keen to be part of that journey.

Of course, it's not always about the big, headline-grabbing projects. Sometimes it's the smaller contributions that make the difference, like the time he re-calibrated vision for a plug cell, freeing up senior engineers to tackle critical priorities. Those moments may not sound glamorous, but they're the backbone of real progress.

When asked what advice he'd give someone starting out in the industry, Thomas doesn't overcomplicate it: "Become a sponge and be prepared to learn." University gives you a foundation, but it can't capture the nuances of the role. The real growth happens on the job.

MAXIMISE PERFORMANCE: SERVICE YOUR ROBOTS TODAY!

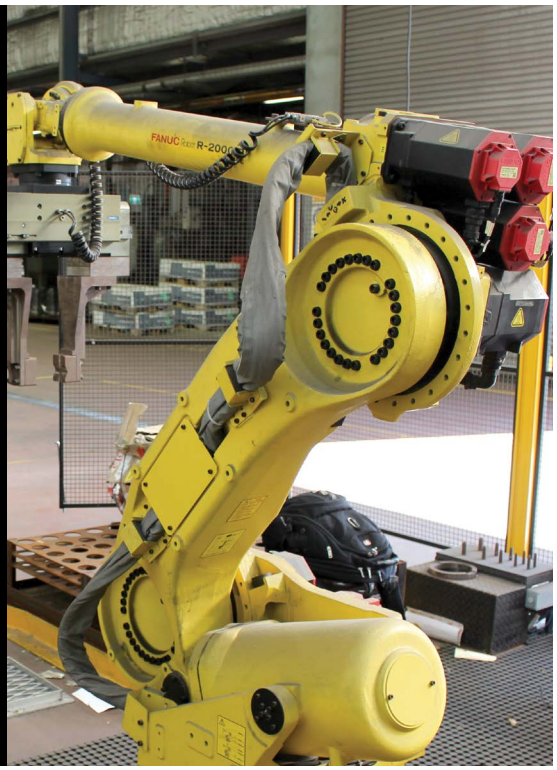
Your robots are the backbone of your manufacturing operations, tirelessly working around the clock to deliver precision, efficiency, and consistency. Like any high-performance machine—whether it's a car or a piece of advanced equipment—regular maintenance is essential to keep them running at their best.

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.

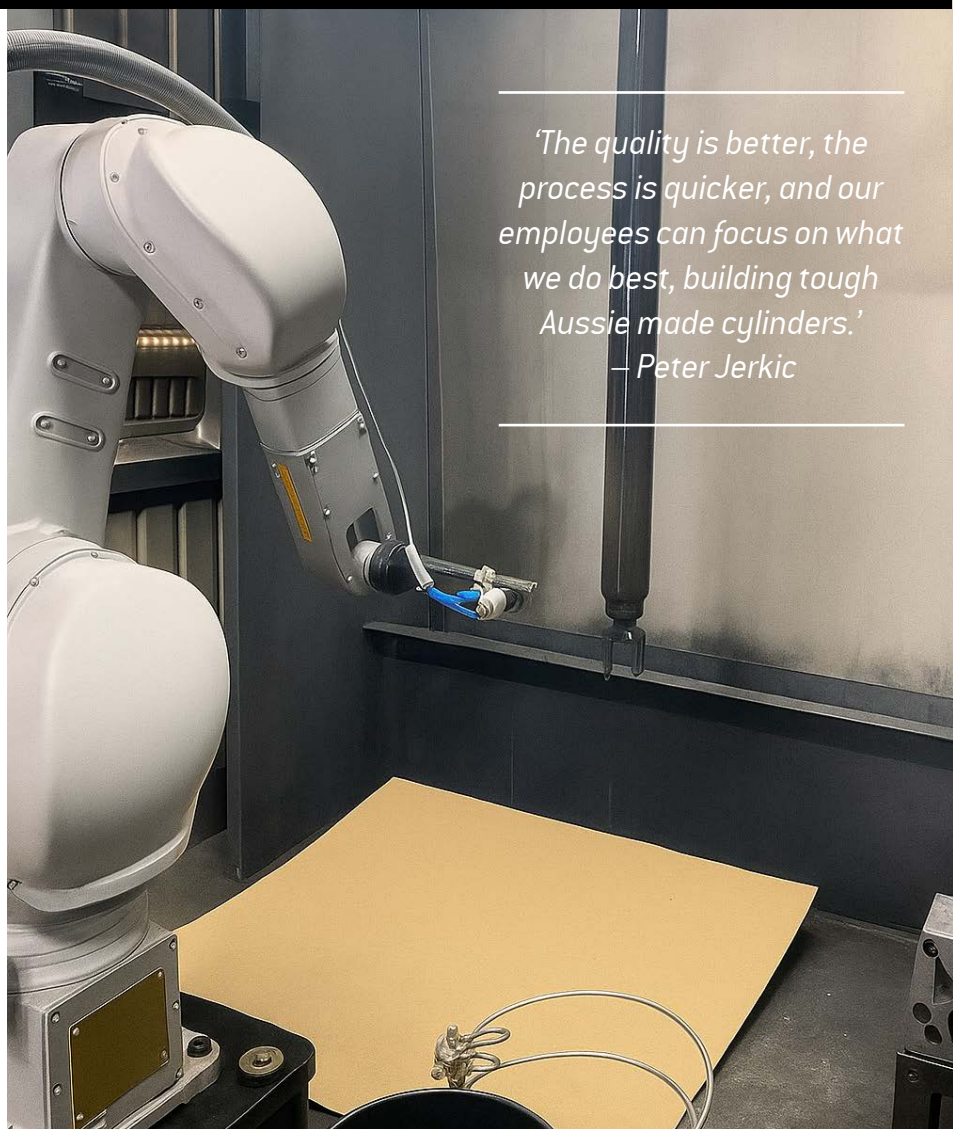
Don't wait for a breakdown to act. Protect your investment, boost productivity, and keep your robots performing at their peak — schedule your service today!

Call ASA on 1800 ROBOTS to book.



CUSTOMER IN FOCUS: **QMN MANUFACTURING**

Back in 1984, five mates in a small shed in Ayr, Queensland, kicked off what would become QMN Manufacturing. They had little more than a few machines, big ideas, and a work ethic that set the tone for the decades to come. Fast forward forty years and that shed has grown into one of the country's largest producers of hydraulic cylinders. QMN is still proudly family owned, still led by the Nucifora family with more than ninety years of combined experience, and still the name that people across Australia turn to when they need cylinders made right.



'The quality is better, the process is quicker, and our employees can focus on what we do best, building tough Aussie made cylinders.'
– Peter Jerkic

As demand grew, QMN recognised that their painting process needed to evolve. While hand painting had served them well in the past, it was increasingly difficult to achieve the consistency, efficiency, and standards they were aiming for. Variations in finish and excess paint usage were limiting productivity, and the team wanted a safer, more streamlined approach that would support both quality and growth. 'We pride ourselves on delivering excellence,' says Workshop Manager Peter Jerkic. 'Automation gave us the opportunity to improve consistency, reduce waste, and create a better environment for our employees, all while keeping pace with customer demand.'

That's when QMN turned to Automated Solutions Australia. Our team worked closely with theirs to design and install a FANUC P-40iA paint robot into their existing booth. It wasn't just about dropping in a piece of equipment, it was about understanding QMN's workflow and finding the right way to integrate robotics without disrupting production. 'At ASA, we don't just supply robots, we work with our clients to find the best solution for their specific workflow,' says Nathan Jones, General Manager Australian Domestic Unit. 'For QMN, it was about integrating the paint robot in a way that supported their employees and processes, while also lifting quality and throughput.'

Using vision technology, the robot measures each cylinder as it rolls in on the conveyor and adjusts the spray to suit, no matter the size. 'The first thing that hit us was how consistent the finish was,' Peter recalls. 'Every cylinder, no matter the size, came out looking identical. And we could switch colours without losing time. That's a game changer.'

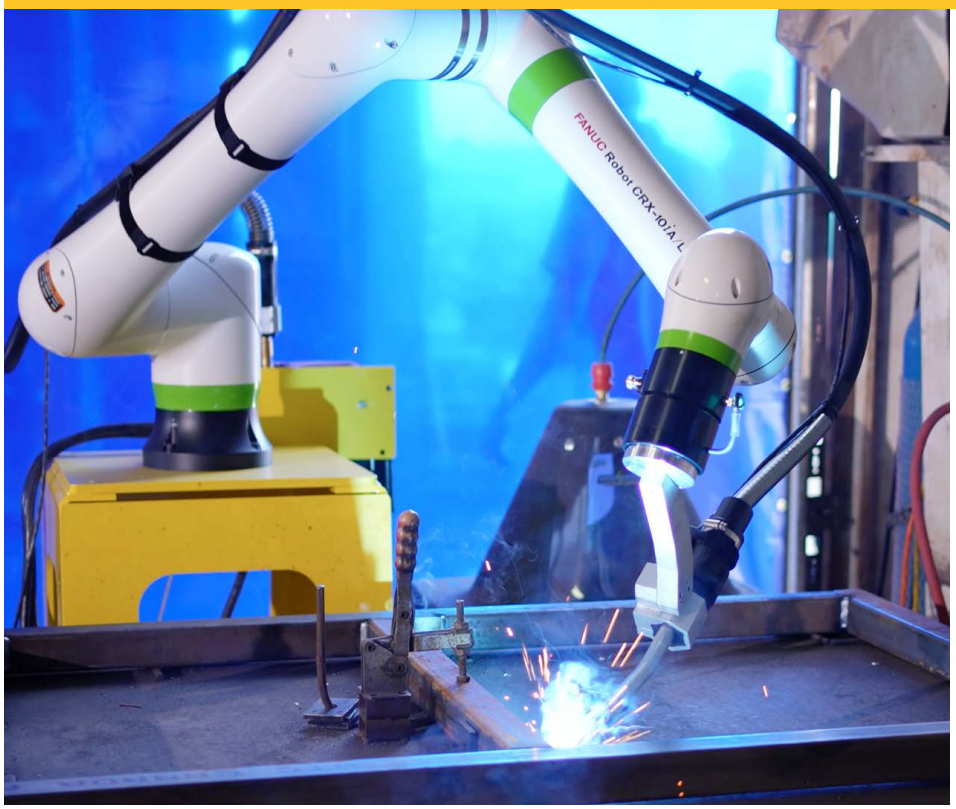
The results were immediate. Production sped up, the finish was more consistent, and waste dropped right back. Just as importantly, the team no longer had to wrestle with the repetitive manual work that had slowed things down. 'With the robot, we're working smarter, not harder,' Peter says. 'The quality is better, the process is quicker, and our employees can focus on what we do best, building tough Aussie made cylinders.'

For QMN, automation isn't about replacing employees. It's about making sure a family business from a large manufacturing plant in Ayr can keep leading the industry, creating safer jobs, supporting the community, and delivering the kind of quality that's made their name for more than forty years. Or as Peter puts it, 'Automation has become part of our DNA. It's not about doing less with employees, it's about doing more with the right tools.' Nathan Jones agrees, adding: 'What excites us is seeing Australian manufacturers like QMN embrace technology in a way that secures their future. It's about giving family owned businesses the tools to compete at the highest level while keeping jobs and skills here at home.'

QMN continues to prove why they are one of the most trusted names in the hydraulic cylinder industry, and we're proud to have played a role in helping them write their next chapter. If you're looking for top quality hydraulic products, you can find out more at www.qmn.com.au

To learn how automation can help transform your own operations, visit us at www.automatedsolutions.com.au

UNLOCK THE FUTURE OF MANUFACTURING WITH COLLABORATIVE ROBOTS



Since 2002, ASA has been at the forefront of robotics and automation in Australia.

At ASA, we're proud to be leading the way as an integrator of FANUC collaborative robots in Australia. As industries increasingly embrace automation, collaborative robots are becoming a crucial part of enhancing production efficiency, cutting costs, and boosting overall productivity. For engineers and manufacturers, the question is no longer whether to adopt automation, it's how quickly you can do so to gain a competitive edge.

Collaborative robots, or cobots, are revolutionising the way manufacturers operate. Unlike traditional industrial robots that work behind barriers, FANUCS CRX colloaborative robot or cobots are designed to work alongside human operators, sharing the workspace and taking on repetitive tasks in collaboration with its human colleagues. This interaction between human and machine is changing the dynamics of manufacturing, making operations safer, more efficient, and far more adaptable.

FANUC's cobots are equipped with advanced sensors that detect human contact and adjust their movements accordingly. However, cobots are not a one-size-fits-all replacement for industrial robots, as there are additional risk considerations to take into account, which is where an experienced partner like ASA can help guide you.

The benefits cobots align with traditional robots – they can operate 24/7, helping to reduce downtime, speed up production, and improve throughput. These machines are designed to adapt quickly to various tasks, meaning they can be reprogrammed as your production needs change, offering tremendous flexibility in your operations. And while they take on the repetitive tasks, they reduce reliance on manual labour, which in turn lowers labour costs and increases profit margins.

As responsible integrators, we have to stress that cobots aren't for every application - AS 4024 requires that hazards be systematically identified, risks assessed, and protective measures applied. Cobots are designed to allow human–robot interaction without full physical guarding, but only within defined safety limits. If the application involves high forces, sharp tools, hot surfaces, toxic substances, weld sparks, or flying particles, a cobot without guarding likely won't satisfy AS 4024's risk-reduction requirements. In these cases, physical guarding or interlocks may remain necessary. They're not a one-size-fits-all replacement for industrial robots.

With these design considerations in mind, we don't just provide collaborative robots; we create tailored solutions that integrate seamlessly into your operations. Our team works closely with you to understand your processes and design systems that optimise performance and efficiency. From consultation to installation and training, we offer end to end solutions, ensuring that your systems are up and running with minimal disruption.

FANUC's cobots are incredibly versatile and can be used across a variety of tasks. Whether it's welding, where cobots offer precision and consistency while reducing human exposure to hazardous environments, or in packaging, where they increase throughput and eliminate repetitive strain injuries, these robots are making a tangible difference to the workplace. Cobots are also used in machine tending, material handling, assembly, and even quality control, ensuring that the products produced are of the highest quality.

Our commitment to your success doesn't end with the installation of cobots. We provide comprehensive training and ongoing support to ensure your team is well-equipped to operate, maintain, and troubleshoot the systems. Our experts are always available to assist with system optimisations, ensuring that your robots are performing at their best.

Since 2002, ASA has been at the forefront of robotics and automation in Australia. We have a proven track record of delivering high quality solutions across industries. Our knowledge of robotics, combined with our dedication to providing ongoing support, makes ASA the ideal partner to help you harness the power of collaborative robotics.

FANUC UNVEILS **NEXT GENERATION ROBOT CONTROLLER: R-50iA**

FANUC has introduced its latest robot controller, the R-50iA, the first major update to its platform in over a decade. The R-50iA sets a new benchmark as the world's first robot controller to achieve internationally recognised cyber security certification, while also delivering a suite of performance, efficiency, and usability improvements.

The **R-50iA** doubles the accuracy of signal output and sensor tracking, ensuring greater precision along a robot's motion path. This improvement is particularly valuable for applications like gluing, which demand fine, consistent control.

The controller incorporates a significantly upgraded vision capability, now featuring a 5-megapixel camera, four times the resolution of its predecessor. The expanded field of view and simplified Ethernet connectivity allow operators to manage the new waterproof camera with LED illumination via a single cable, eliminating the need for additional PCs.

With a redesigned amplifier and low power cooling fan, the **R-50iA** reduces overall energy use. An added eco mode enables operators to lower consumption even further with a simple selection, helping businesses achieve both performance and sustainability goals.

Security has been strengthened with built-in firewalls, secure file and web transfer functions, and password-protected user authentication. Certified to IEC62443-4-1 and 4-2 standards, the controller delivers peace of mind in an era where safeguarding production data is critical.

The **R-50iA** supports Python® scripting, enabling easy customisation and faster system integration. It also includes software PLC functions compliant with international standards and supports multiple programming languages such as ladder and structured text—streamlining communication across automation systems.

Operators can now connect a smartphone to the controller for secure, remote diagnostics and support. FANUC service teams can advise on settings, alarms, and programs while maintaining strict protection of sensitive information.

With its combination of precision, efficiency, intelligence, and security, the FANUC **R-50iA** is designed to help manufacturers embrace the next generation of smart factory operations.

ROBOT IN FOCUS: **FANUC M-950iA**

PAYLOAD: 500KG
REACH: 2830MM
AXIS: 6 AXIS

Every machine shop has that one job, the part that's just too heavy, the lift that makes you hold your breath, or the awkward reach that slows down the line. That's exactly the kind of challenge FANUC had in mind when designing the new M-950iA robot.

This heavyweight doesn't just show up to work, it takes over the toughest shifts and does them with muscle, precision, and reliability.

The **M-950iA** can hoist up to 500 kg without breaking a sweat. Think automotive components, chunky construction materials, or entire EV battery packs. What's impressive is that it doesn't just lift, it lifts with accuracy, hitting a repeatability of ±0.08 mm. That means your heavy parts aren't just moved, they're placed exactly where they need to be, every single time.

In a crowded shop, space is always at a premium. The 2,830 mm reach gives the **M-950iA** the ability to cover wide work zones without needing a sprawling setup. Add in its serial-link structure and wide J3 axis motion range, and this robot can even flip backwards, perfect for layouts where flexibility is everything.

And for those precision jobs where external forces try to throw things off, like friction stir welding, drilling, or riveting, the enhanced accuracy option keeps the robot steady and true.

Programming and operation won't slow you down. With the R-30iB Plus controller and iPendant, it's designed to be user-friendly for technicians and operators. You don't need to be a robotics expert to get it running, this is automation that plays nicely with the people who use it.

Whether it's:

- Lifting oversized parts
- Palletising bulk materials
- Handling heavy loads
- Performing precision welding and drilling

Ɛthe **M-950iA** has the range and resilience to keep your line moving. It bridges the gap between FANUC's M-900iB and M-1000iA, giving you heavyweight power with extra motion flexibility.

At Automated Solutions Australia (ASA), we know what it takes to make automation work on the ground in real Australian shops. We integrate FANUC systems like the **M-950iA** to help businesses move heavy parts safely, increase throughput, and cut downtime. From design to installation and long-term service, ASA is your partner in making robots work hard for you.

MISTAR 555 CNC CMM

Discover the MiSTAR 555 CNC CMM with ASA – offering precision, speed, and automation-ready features for seamless shop floor integration.

Shop Floor Precision Measurement Like Never Before

Introducing the MiSTAR 555 CNC CMM, designed to revolutionise precision measurement on the shop floor. Combining versatility, ease of operation, and a compact design, this shop floor type CNC CMM delivers exceptional performance, even under the toughest conditions. With best-in-class drive speed and acceleration, the MiSTAR 555 provides fast, accurate measurements, boosting both efficiency and productivity. The MiSTAR 555 is automation-ready, making it the ideal choice for businesses seeking to integrate advanced automation solutions into their manufacturing processes.

Why Choose the MiSTAR 555 CNC CMM for Your Shop Floor?

The MiSTAR 555 CNC CMM is built for seamless shop floor integration, offering the widest temperature accuracy guarantee and exceptional contamination resistance. It can perform reliably in even the most challenging environments. Whether you're working with large or small workpieces, the MiSTAR 555 offers unprecedented versatility and a space-saving design, enabling you to measure almost anywhere. With a measuring range of X: 570mm, Y: 500mm, and Z: 500mm, this CNC CMM is the perfect solution for precision measurement in a variety of manufacturing environments.

Key Features of the MiSTAR 555 CNC CMM

Best-in-Class Drive Speed & Acceleration: The MiSTAR 555 features a drive speed of 606mm/s in CNC mode and a 2695 mm/s^2 drive acceleration, which allows for faster and more accurate measurements, thus improving productivity on the shop floor.

Exceptional Contamination Resistance:

In addition, Mitutoyo's MiSTAR CMMs offer twice the contamination resistance of conventional models, thanks to the newly developed Mitutoyo absolute scale. This technology makes the MiSTAR 555 highly resistant to the challenging production line environment, always ensuring consistent and reliable performance.

Compact and Efficient Design:

The MiSTAR 555 boasts a reduced footprint, occupying around 70% less space than traditional moving bridge models. It also features a single support moving bridge and a storage cabinet for machine controllers, saving valuable installation space without compromising performance.

Temperature Accuracy Guarantee:

With a temperature accuracy range of 10 to 40°C, the MiSTAR 555 ensures precise measurements, even in demanding environments. The combination of symmetric structure, uniform materials, and temperature compensation guarantees accurate results every time.

User-Friendly Three-Sided Open Architecture:

The MiSTAR 555 features an intuitive, three-sided open architecture, which makes it easier to move workpieces on and off the measuring table. As a result, this design reduces the operator's workload and enhances usability.

Automation-Ready:

Finally, the MiSTAR 555 integrates seamlessly with automation systems, enabling full automation of your measurement routines. This integration enhances high-throughput, ensures consistent quality control, and boosts operational efficiency, ultimately streamlining your production processes.

The MiSTAR 555 CNC CMM... is the ultimate solution for manufacturers seeking high precision, durability, and efficiency in shop floor measurement.

MiSTAR 555 Specifications

Measuring Range:

X: 570mm
Y: 500mm
Z: 500mm

Drive Speed: 606mm/s (in CNC mode)

Drive Acceleration: 2695 mm/s^2

Measuring Table Capacity: Max workpiece height: 660mm, Max loading: 120kg

Elevate Your Shop Floor Measurement with MiSTAR 555

The MiSTAR 555 CNC CMM from Mitutoyo is the ultimate solution for manufacturers seeking high precision, durability, and efficiency in shop floor measurement. Whether you're measuring large components or smaller parts, the MiSTAR 555 guarantees exceptional accuracy and performance, improving product quality and streamlining manufacturing processes.

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 automatedsolutions.com.au

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ASA

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