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MACHINERY
SALES**

AUSTRALIA, NEW ZEALAND & SE ASIA

THOUGHT-LEADER IN STEEL PROCESSING AUTOMATION

SUPERIOR MACHINERY SYSTEMS DESLAGGING & ROBOTIC GRINDING OF OXYFUEL & PLASMA CUT PARTS BY ROBOT - WITHOUT PROGRAMMING



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INTRODUCTION

Cleaning flame-cut parts has long been a strenuous, time-consuming, and hazardous task, exposing workers to potential injuries and fatigue. The Teqram EasyGrinder transforms this challenge into an opportunity for precision, safety, and productivity by automating grinding processes. This cutting-edge robot handles everything from simple slag removal to advanced preparation grade P3, adhering to the strictest standards, including ISO 8501-3 and ISO 12944-3. With the EasyGrinder, manufacturers gain a reliable, efficient, and safer way to achieve high-quality results consistently, saving time and reducing operational risks.

Vision Technology - Revolutionising Grinding Automation

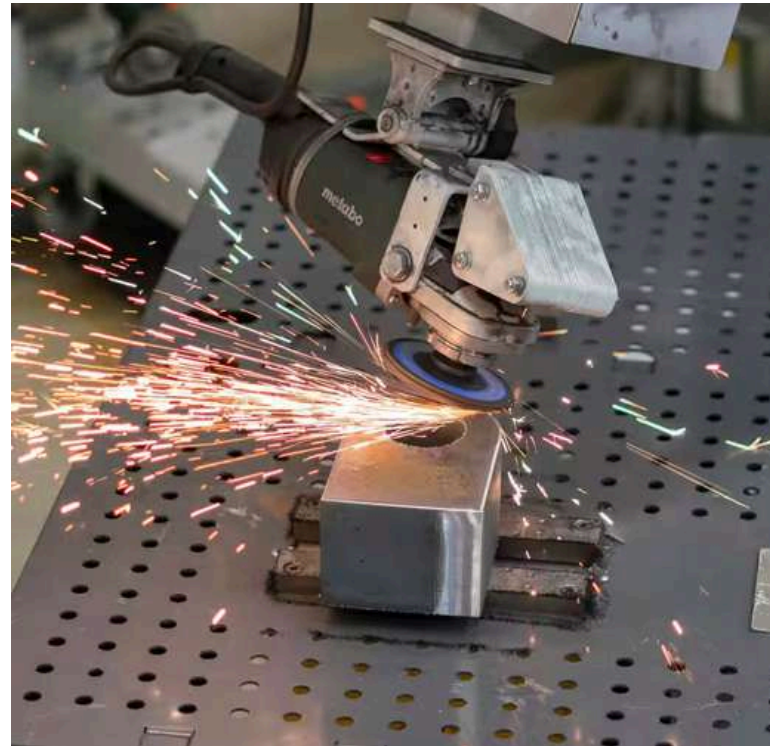
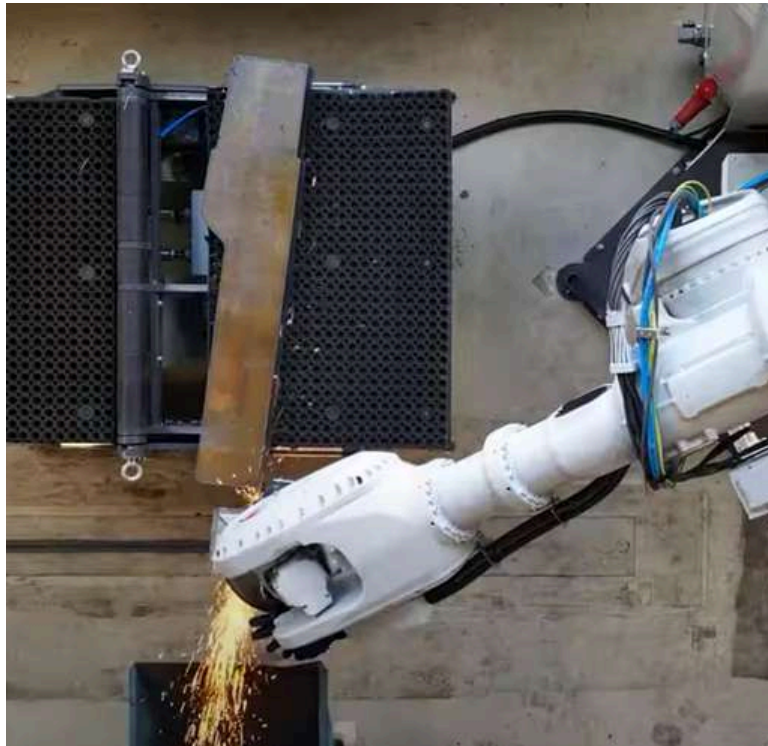
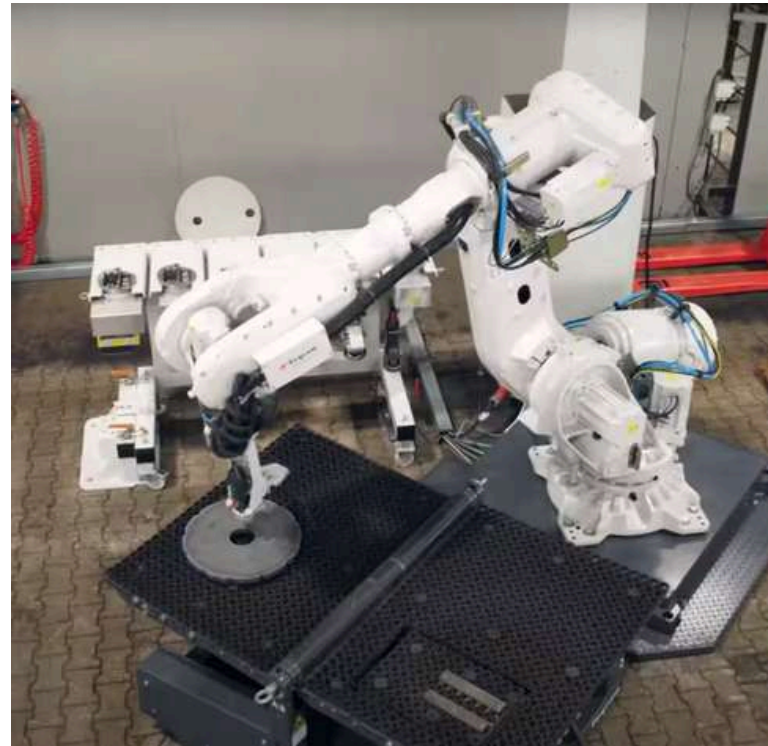
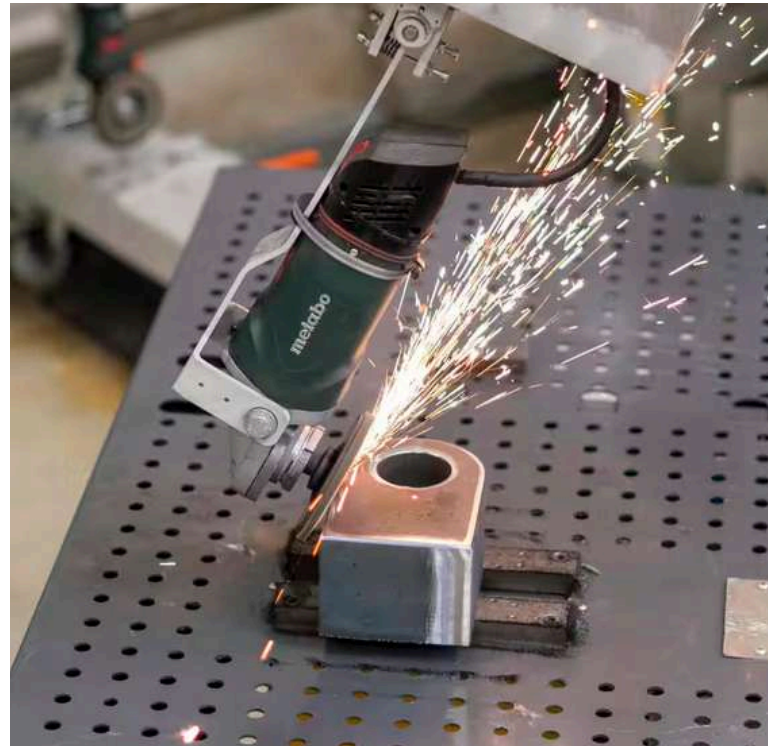
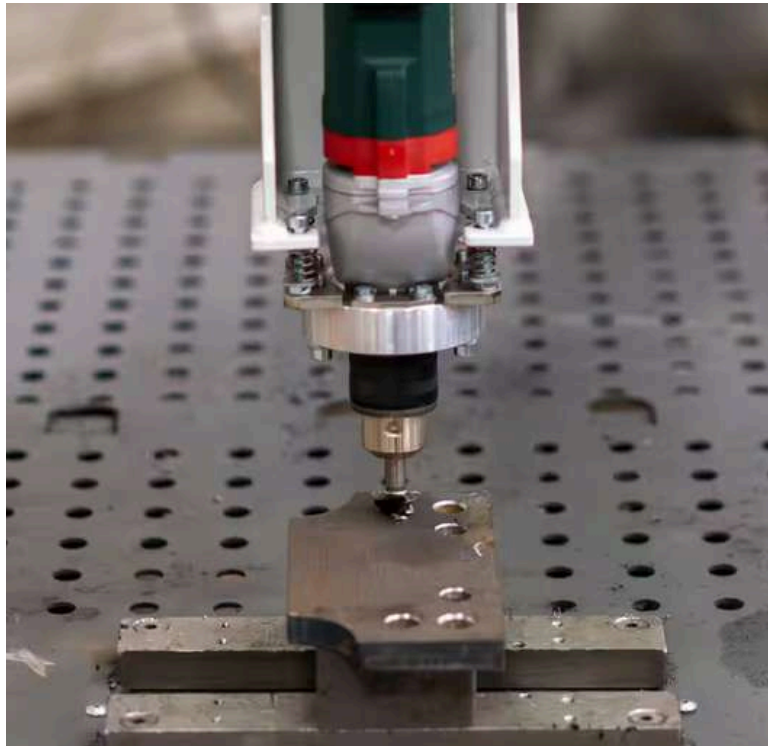
The EasyGrinder sets a new benchmark in automated grinding, thanks to its award-winning vision technology and AI-powered capabilities. Unlike traditional systems that require extensive programming or manual teaching, the EasyGrinder autonomously identifies and adapts to the unique geometry of each sheet metal part. By combining advanced imaging processes—such as time-of-flight sensors, high-definition cameras, and 3D vision technology—it accurately generates precise grinding programs for tasks like deslagging, edge rounding, and more. This innovative approach delivers unparalleled flexibility and precision, making it an ideal solution for modern manufacturers.

By integrating this advanced system, businesses not only meet but exceed production standards, achieving greater reliability, reduced downtime, and a faster return on investment. The EasyGrinder isn't just a tool—it's a game-changer for industries seeking smarter, safer, and more effective automation systems.





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The video thumbnail shows a robotic arm with a grinding wheel in operation, creating a shower of sparks. The background is a dark, perforated metal surface. The video title and share button are at the top, and the main title and subtitle are in a large orange box on the right. A 'Watch on YouTube' button is at the bottom left.

SMS EasyGrinder takes robotic grinding to the next level | Specialist Machinery Sales [Share](#)

**EASYGRINDER
TAKES ROBOTIC
GRINDING TO THE
NEXT LEVEL**

TEQRAM | VISION GUIDED ROBOTICS

Watch on YouTube

HOW EASYGRINDER WORKS



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SMS EasyGrinder Extended | Specialist Machinery Sales

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**EASYGRINDER
EXTENDED**
TEORAM | VISION GUIDED ROBOTICS

Watch on YouTube

The video thumbnail features a white robotic arm in a workshop setting, grinding a metal component. Sparks are visible at the point of contact. The background includes a black acoustic foam panel and a wooden workbench. The video player interface includes a red play button in the center, a 'Share' icon in the top right, and a 'Watch on YouTube' button in the bottom left. The SMS logo is present in the top left and a large orange overlay with the video title is on the right side.

HOW EASYGRINDER WORKS



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SMS Boost your productivity with grinding robots | Specialist Machinery Sales

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**BOOST YOUR
PRODUCTIVITY
WITH GRINDING
ROBOTS (WEBINAR)**
TEGRAM | VISION GUIDED ROBOTICS

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HOW EASYGRINDER WORKS



EASYGRINDER EXPLAINED

The EasyGrinder offers an innovative and highly efficient system for processing oxyfuel and plasma-cut parts, delivering exceptional quality and automation. This standalone system can handle parts weighing up to 200 kg, provided on pallets, and operates autonomously after selecting the desired processing parameters.

For larger parts weighing up to 750 kg, the system can be paired with the optional EasyTransfer module, enabling seamless handling and enhanced functionality.

Advanced Automation for Maximum Efficiency

With its autonomous operation and ability to adapt to various processing requirements, the EasyGrinder transforms traditional grinding into a streamlined, hands-free operation. By integrating this system, manufacturers can improve productivity, reduce manual labor, and achieve consistent, high-quality results while minimising risks to personnel.

Whether handling small or large components, the EasyGrinder is a versatile and scalable solution for advanced material processing, making it an essential tool for modern manufacturing environments.

Capabilities and Process Steps

The EasyGrinder is designed to perform a wide array of tasks with unparalleled precision, including:

- **Robotic Deslagging:** Effortlessly removes slag from flame-cut parts.
- **Edge Breaking or Edge Rounding by Robot:** Achieves smooth, precise edges, including a radius of 2 mm, meeting demanding specifications.
- **Preparation Grade P3 Compliance (ISO 8501-3):** Ensures flame-cut parts meet stringent international quality standards.
- **Grinding of Narrow Edges:** Provides clean finishes on even the smallest areas.
- **Removal of Heat-Affected Zones:** Enhances structural integrity by eliminating heat-induced material changes.
- **Start/Stop Mark Removal:** Eliminates imperfections from cutting processes.
- **Robotic Deburring and Edge Breaking of Bore Holes:** Delivers exceptional precision and consistency in deburring and edge finishing.
- **Stamping and Part Identification:** Automates labeling for efficient traceability and organisation.



TECHNICAL SPECIFICATIONS

The EasyGrinder robotic grinding system offers an efficient solution for removing slag, deburring, edge rounding, and eliminating oxide layers.

- Parts are provided to the robot on Euro pallets for easy handling.
- The robot can pick up and handle sheet metal parts weighing up to 200 kg (in systems with high autonomy).
- For heavier parts (up to 750 kg), the EasyTransfer system is used to feed the robot.
- The user-friendly, PC-based interface simplifies operation, requiring no specialised programming knowledge.
- Automatic gripper and tool changes ensure seamless operations.
- A variety of standard EasyGrippers are available, and customised grippers can be manufactured upon request.
- The system supports a wide range of standard and cost-effective grinding tools.

Deslagging, edge breaking, edge rounding up to 3 mm, oxide layer removal, narrow edge grinding (including heat-affected zones), and lead-in removal. The desired processing quality is easily selected using pre-stored recipes. For instance, parts for one customer may only require chiseling, while others can be processed with a radius of 2 or 3 mm, tailored to specific needs.

Consistent Quality

Manual deburring is a labor-intensive, repetitive, and physically taxing task that often leads to worker fatigue, reduced quality, and overlooked edges. Over time, this process can negatively impact productivity and consistency, especially for operations requiring high precision and uniformity.

The EasyGrinder revolutionises this process by automating grinding tasks with unmatched accuracy and efficiency. By leveraging advanced robotic technology, it guarantees 100% consistent results, eliminating variability and human error. This ensures a constant, predictable output that meets the highest quality standards for every workpiece.

The EasyGrinder excels in handling demanding tasks such as achieving preparation grade P3 according to ISO 8501-3, creating a precise 2 mm radius, and grinding narrow edges with meticulous attention to detail. Designed for versatility and precision, this innovative system allows manufacturers to enhance production quality while minimising physical strain and operational downtime. With the EasyGrinder, you gain reliability, consistency, and exceptional performance for even the most challenging deburring and grinding applications.



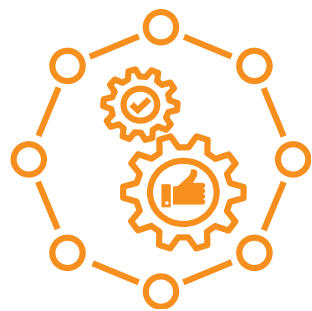
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MAIN ADVANTAGES



Increase in productivity

The EasyGrinder grinding robot utilises advanced 3D vision to identify the sheet metal parts and their contours. Upon recognition, the robot autonomously picks up the flame- or plasma-cut piece, selects the appropriate tool, and begins the processing task with precision and efficiency.



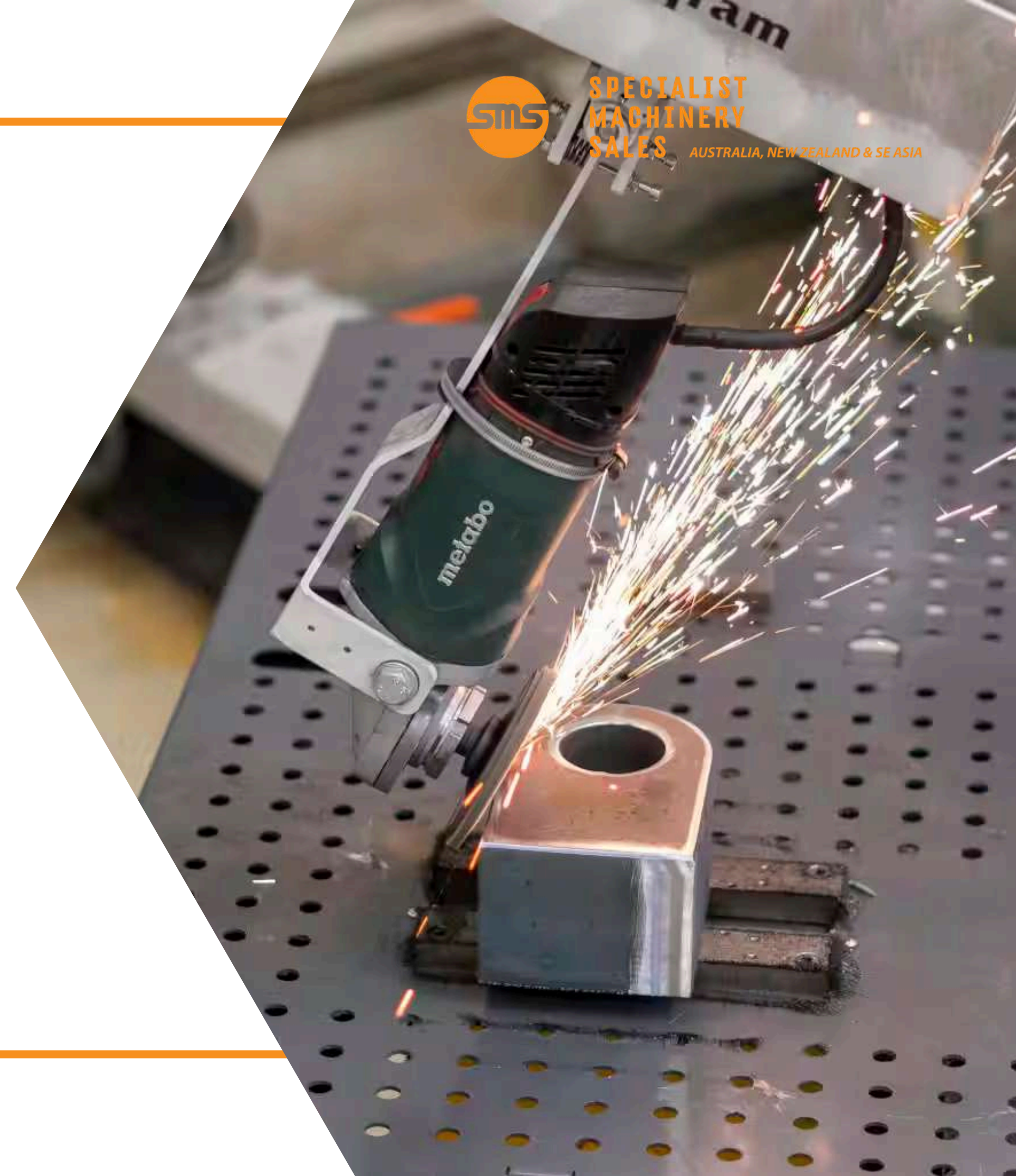
Standard-compliant preparation

Meeting the requirements for processing thermally cut edges in accordance with ISO 8501-3 and ISO 12944-3 can be a highly labor-intensive task. With mandatory minimum radii of R2 and reworking of the cut surfaces, the process can be complex and time-consuming. However, for the EasyGrinder, this is no challenge. Achieving preparation grade P3, including precise edge rounding and surface reworking, is effortless with robotic grinding.



100% consistent quality

Robotic grinding not only lowers your overall costs but also ensures higher, more consistent quality. The system automatically monitors grinding tool wear, further enhancing efficiency and reliability.

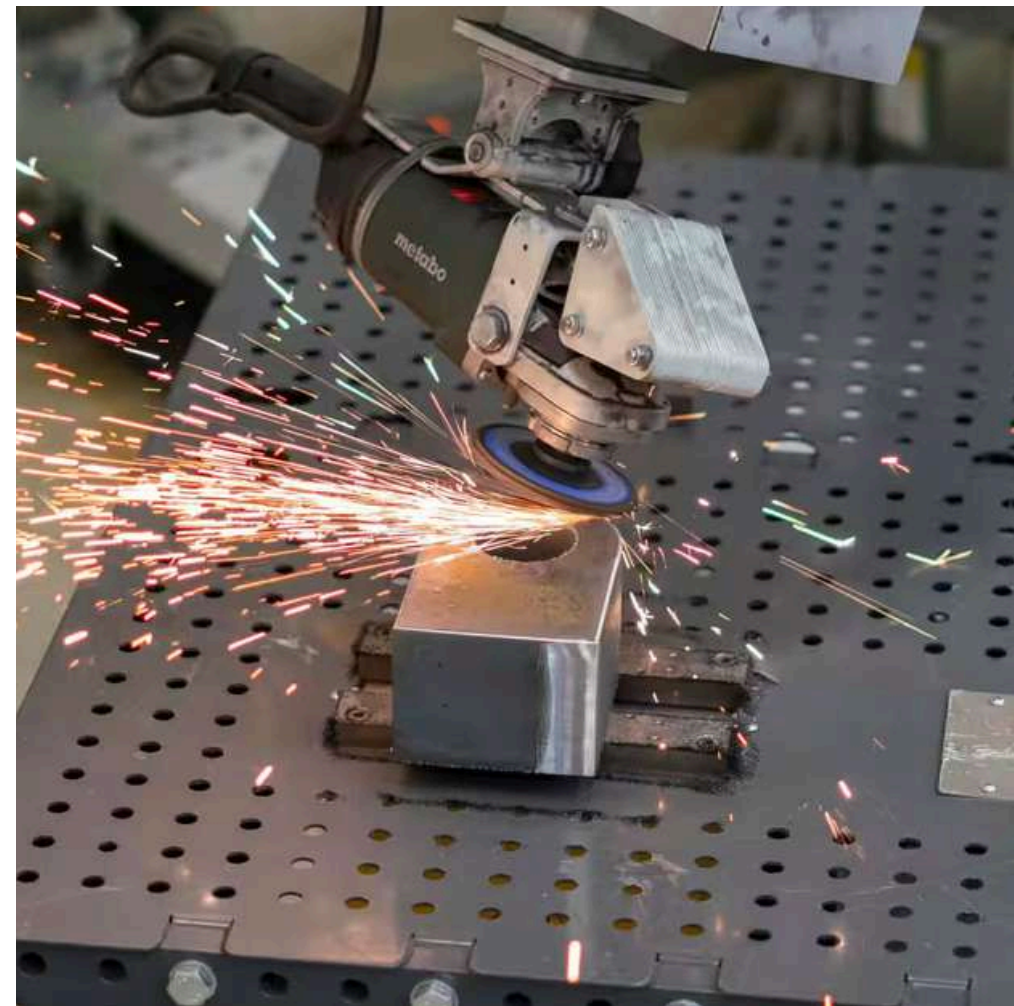




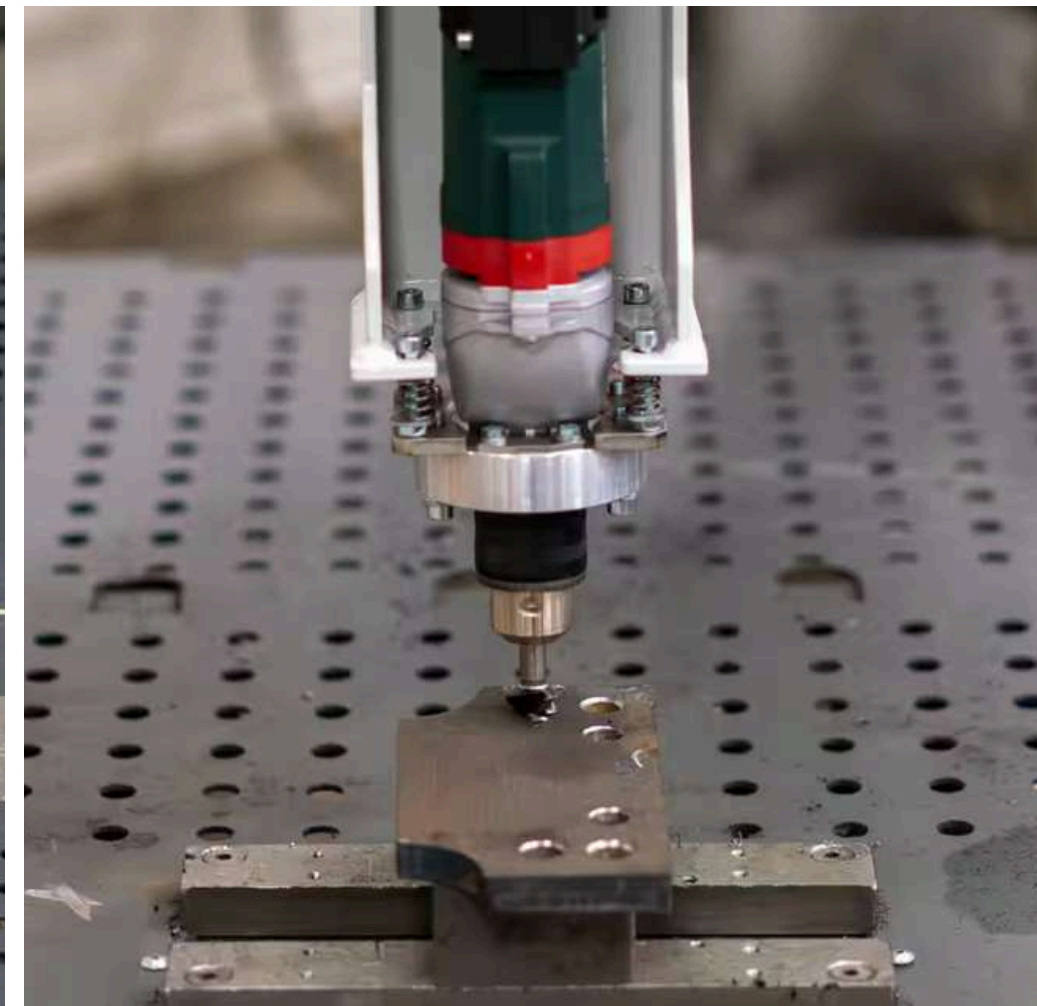
EXAMPLES OF POSSIBLE PROCESSES WITH ROBOTIC GRINDING



Robotic deslagging with chisel tool



Deburring with horizontal disk grinder



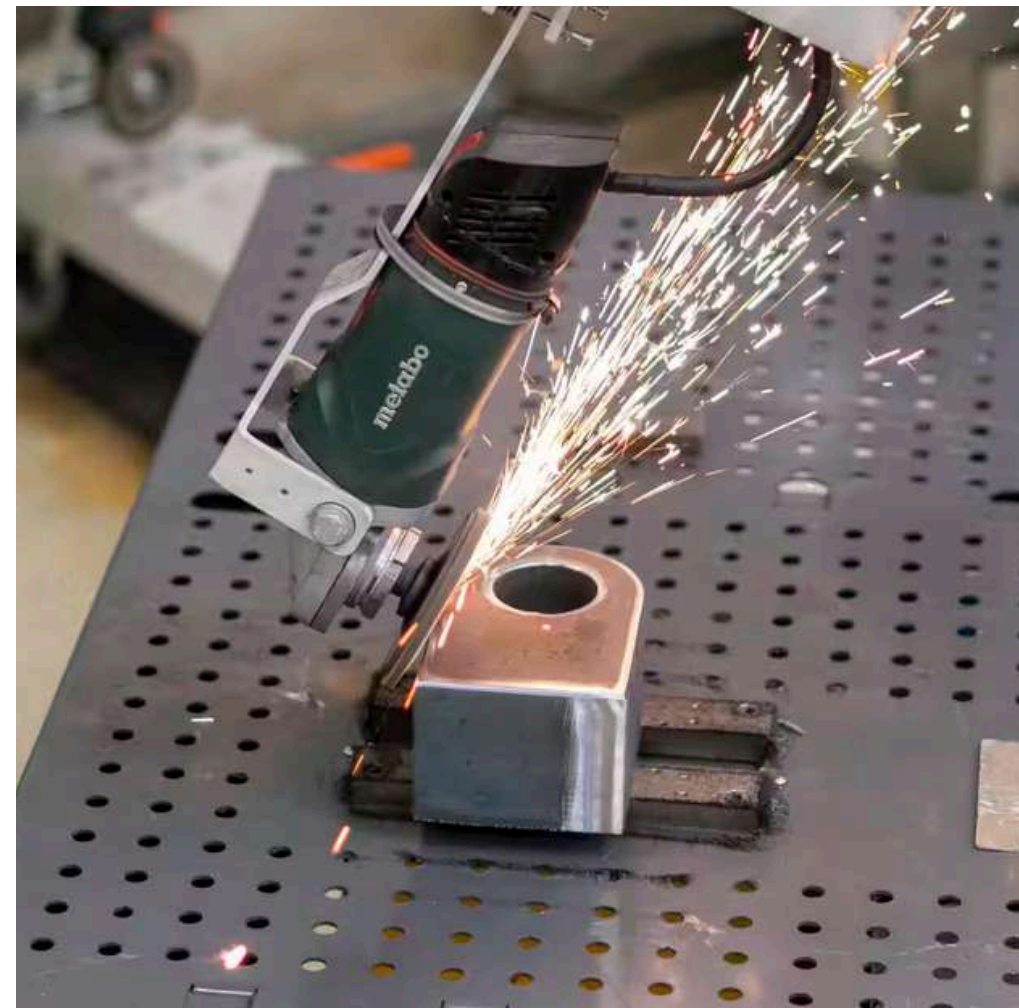
Chamfering holes with our vision guided robots



EXAMPLES OF POSSIBLE PROCESSES WITH ROBOTIC GRINDING



**Grind heat affected zone
and lead-in's with vertical disk**



**Robotic edge-breaking and
rounding of edges (radius >2mm)**



**Edge-breaking, edge-rounding and
chamfering with die-grinder**



EASYGRINDER TOOLS



Chisel tool



Horizontal disc-grinder



**Horizontal disc-grinder with
"lead-in removal tool"**



Vertical disk-grinder



EASYGRINDER TOOLS



Die-grinder



Counter-sink



Gripper-rack for robotic grippers and tools



DIFFERENT CONFIGURATIONS OF THE GRINDING ROBOT EASYGRINDER



OPTION 1
EASYGRINDER STANDARD LAYOUT



DIFFERENT CONFIGURATIONS OF THE GRINDING ROBOT EASYGRINDER

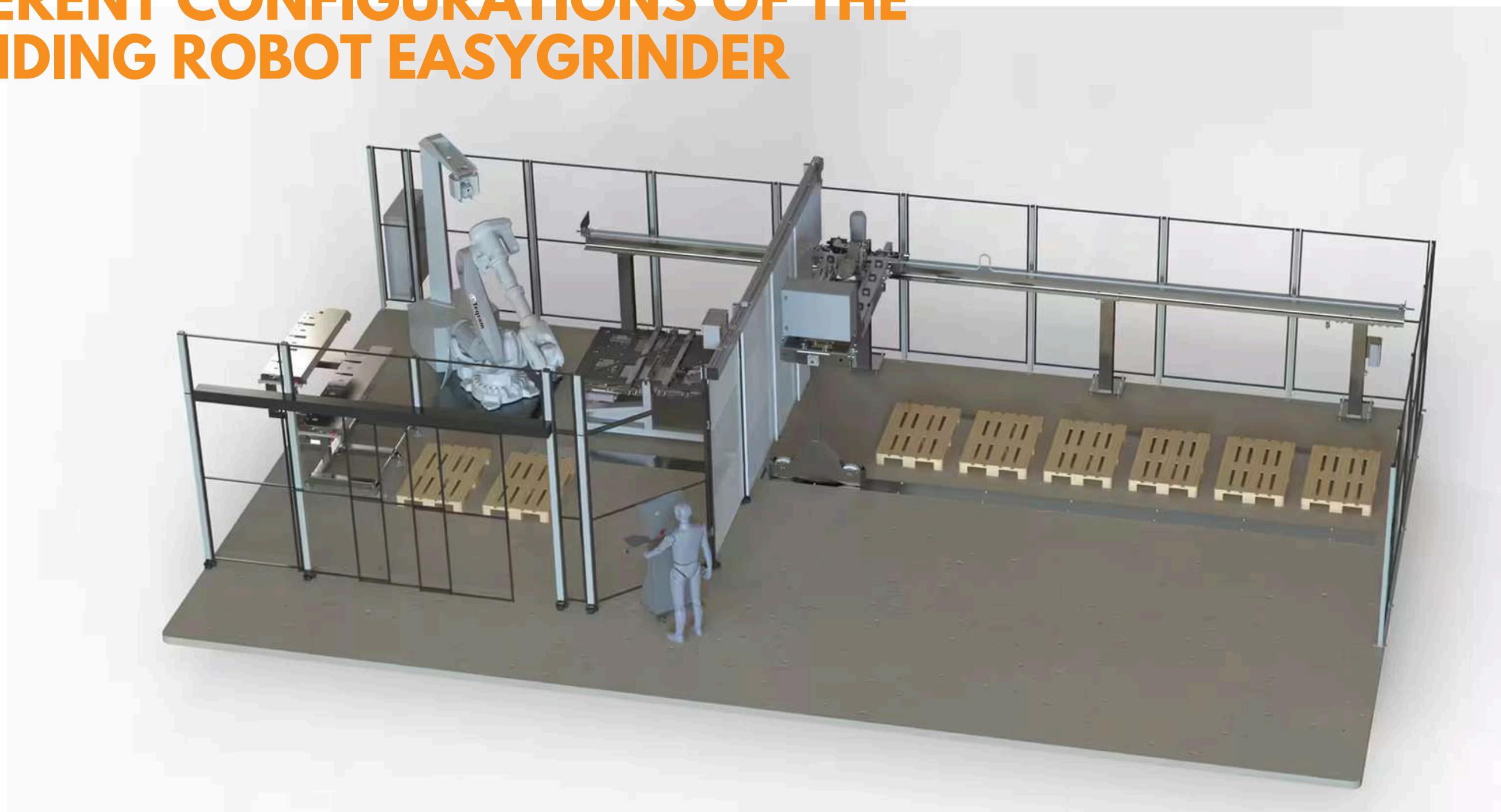


OPTION 2
EASYGRINDER STANDARD LAYOUT
WITH DRAGON RACK



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DIFFERENT CONFIGURATIONS OF THE GRINDING ROBOT EASYGRINDER



OPTION 3
EASYGRINDER WITH
EASYTRANSFER FOR PARTS UP TO
750 KG AND MORE AUTONOMY



DIFFERENT CONFIGURATIONS OF THE GRINDING ROBOT EASYGRINDER



OPTION 4
EASYGRINDER COMBINED
WITH EASYDEBUR



DIFFERENT CONFIGURATIONS OF THE GRINDING ROBOT EASYGRINDER



OPTION 5
EASYGRINDER COMBINED
WITH EASYSHOTBLAST



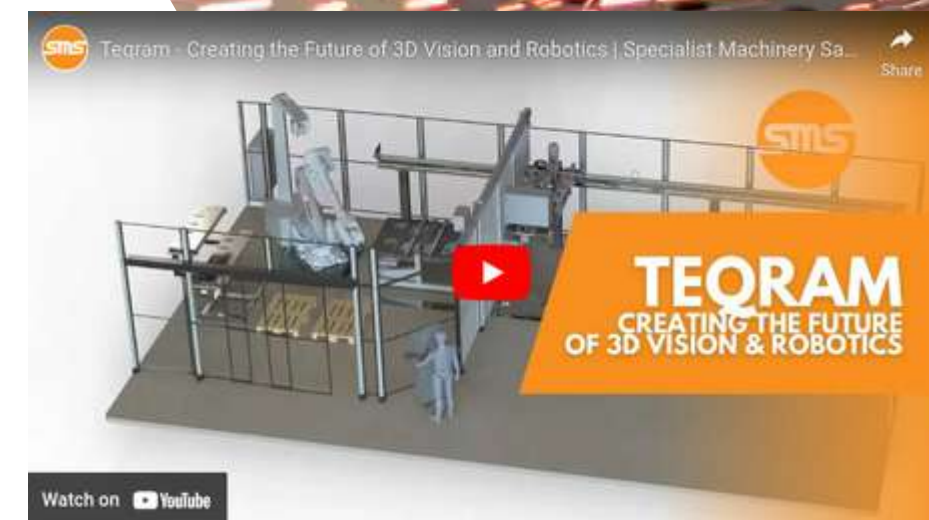
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WHY CHOOSE TEQRAM?

Teqram is revolutionising the world of industrial automation by delivering intelligent robotic systems that seamlessly blend innovation, efficiency, and ease of use. With a mission to make automation accessible to all, Teqram designs cutting-edge systems that eliminate the complex programming tasks traditionally associated with robotics. Their solutions enable businesses to enhance productivity, optimise workflows, and reduce operational costs without the need for specialised programming skills.

Teqram's focus on automation and improved working conditions sets them apart. Their advanced systems utilise 3D vision sensors and intelligent AI-driven controllers to eliminate the complexities of traditional robot programming. This innovation enables businesses to produce small series or even single parts in a cost-effective manner, all without human intervention. Skilled technicians can focus on optimising process parameters while the autonomous robot handles heavy lifting and parts processing, streamlining operations and increasing efficiency.

By choosing Teqram, you gain a partner committed to your success. With a team of experienced engineers and a strong commitment to innovation, Teqram guarantees reliable systems that improve accuracy, enhance safety, and deliver a measurable return on investment. Their systems empower businesses to stay competitive in an increasingly automated world, making Teqram the ideal choice for forward-thinking organisations ready to embrace the future.





LOOKING TO BUY PRE-LOVED MACHINERY?

Specialist Machinery Sales offer second-hand or used structural steel processing machinery from Kaltenbach, Gietart, Haeusler, SLF and more.

Generally, the machines that SMS has access to are from trading for new machines offered from the machine tool builders to clients of SMS in Australia and New Zealand. Most machines are between 5 and 15 years of age with full-service history available. Some machines can be inspected under power or in their shipping packing ready for immediate delivery to Australasia.



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READY TO SELL YOUR PRE-LOVED MACHINERY?

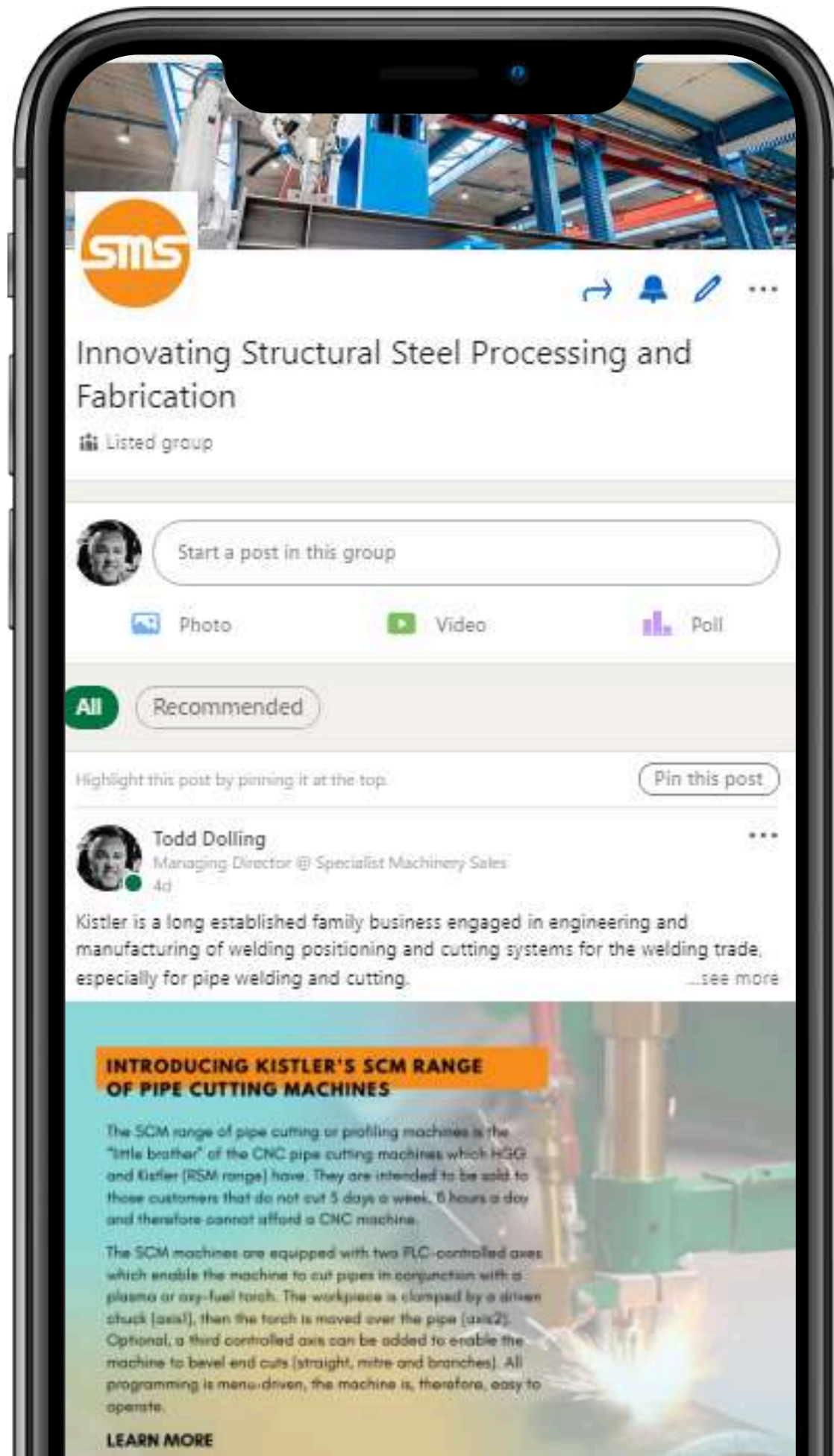
Selling your pre-loved machinery may appear to be a simple process but it might be more complicated than you think. Selling pre-loved machinery involves equipment liens, resale certificates and financing a buyer. BUT DO NOT WORRY!

Used Structural Machinery (USM) is here to partner with you. At USM, we are your ideal channel to take your equipment and place it in the right hands, with the security and confidence that characterises us. Review our checklist below to help you understand when to retire your machine and how USM can help you sell it off efficiently and effectively.



[LEARN MORE HERE ▶](#)





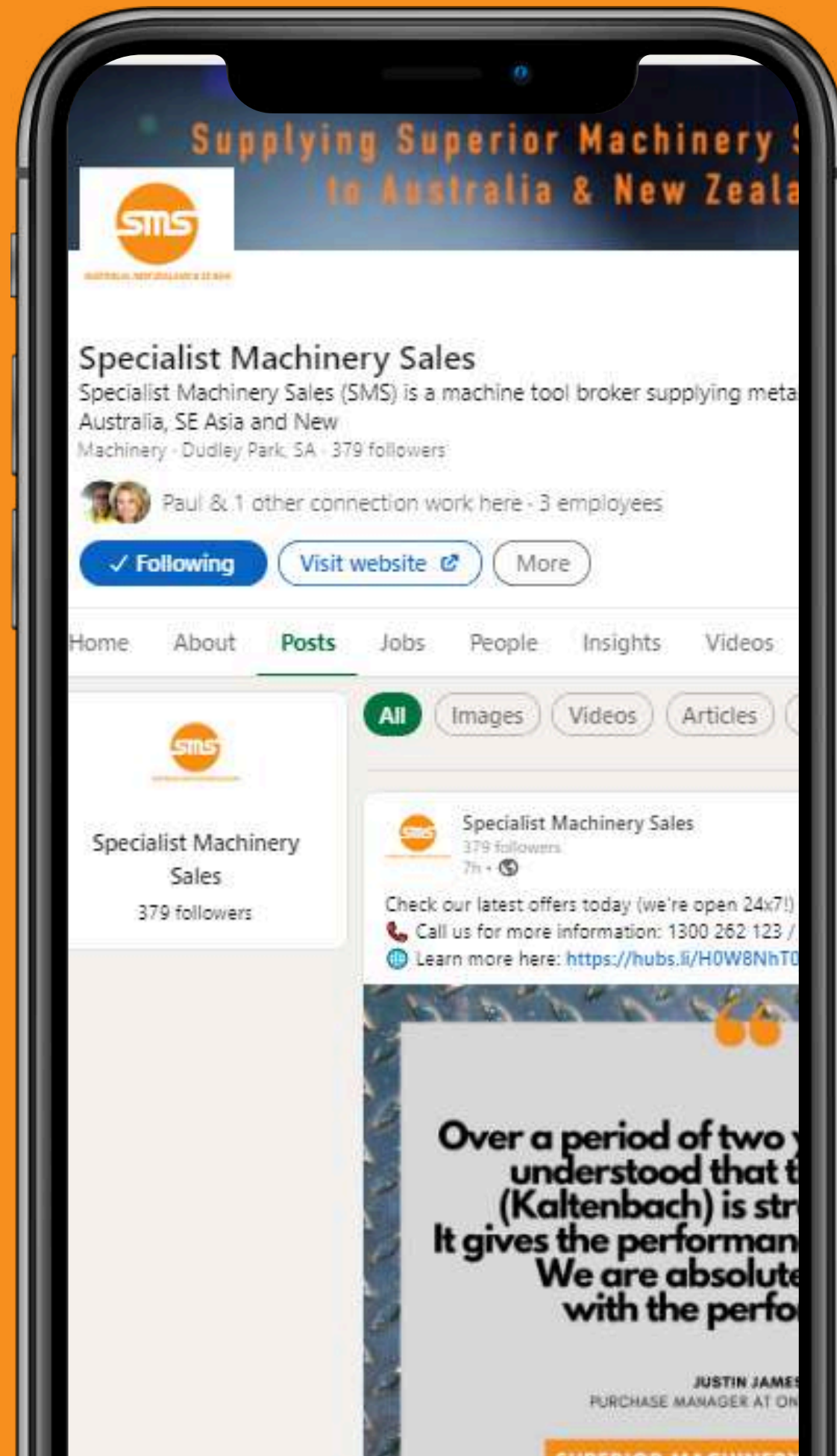
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Join our growing and exclusive LinkedIn Group - [Innovating Structural Steel Processing and Fabrication Group](#).

In this group, we bring in thought leadership content, topics, trends and challenges within the steel industry and steel processing automation. We encourage everyone to share your business challenges and solutions that you have encountered and how steel processing automation had helped achieved your business objectives.

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