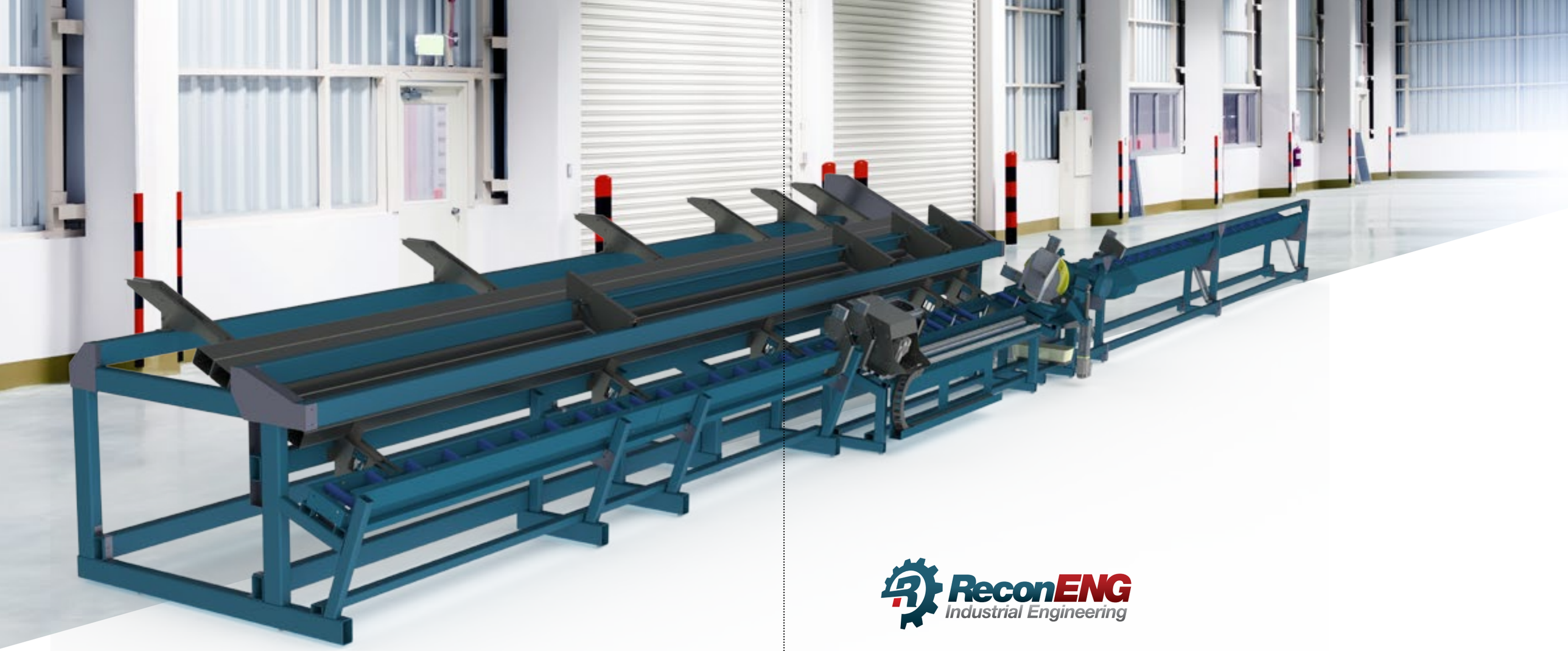
ReconENG
Industrial Engineering

design
development
implementation
innovation.



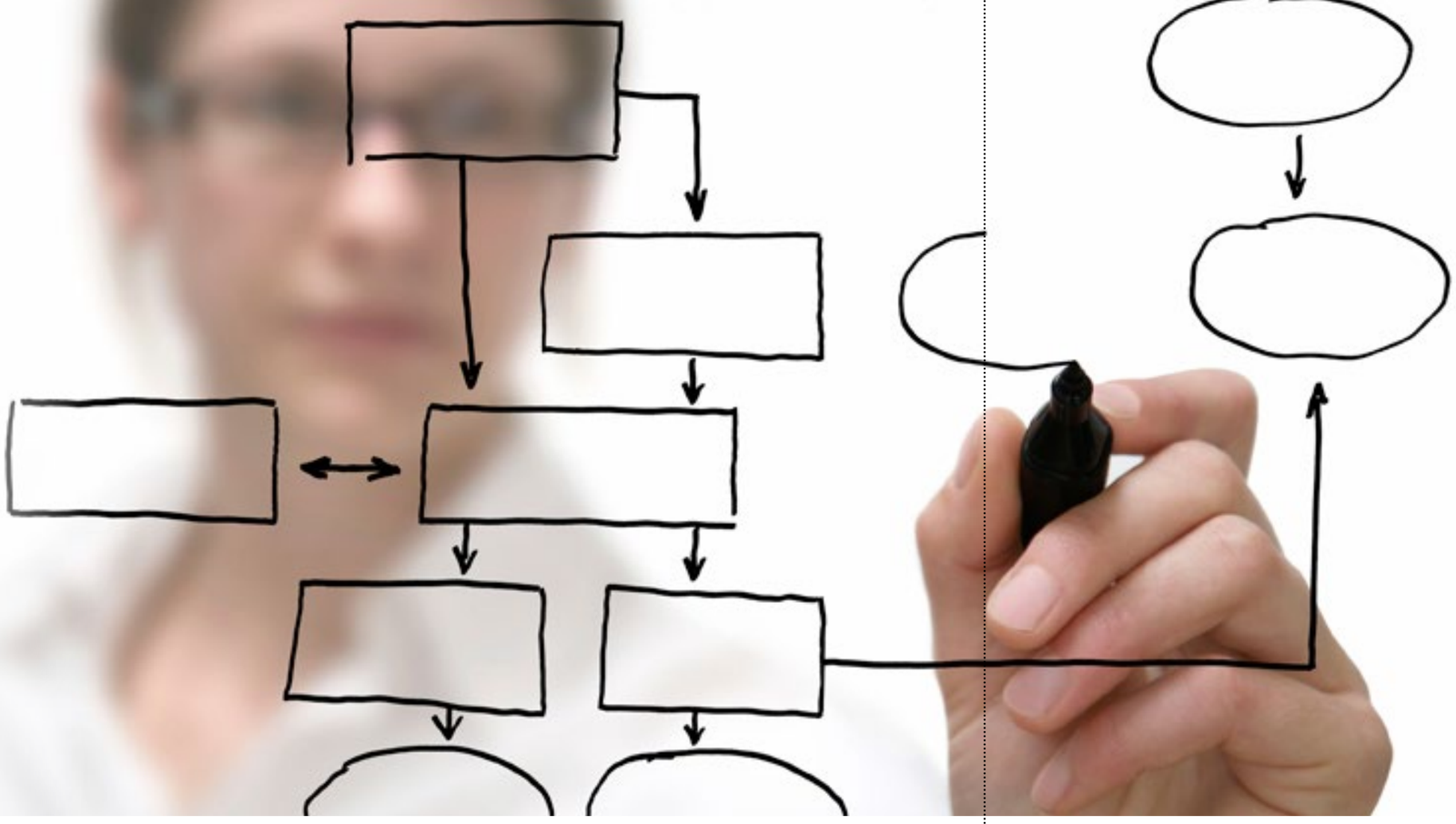
reconeng.com.au



ReconENG
Industrial Engineering

ReconEng is a multi-disciplined group providing complex Engineering solutions to International, Private and Government sector Clients.

We are a leading Australian provider of full turnkey industrial solutions including design, implementation, project management and commissioning. We are also an Australian Original Equipment Manufacturer (OEM) in high-value, technology products, distributed World-wide.



ReconENG
Industrial Engineering

> ReconEng is Australia's global small business, combining local ingenuity with resources of the World.

Key Competencies

- Australian OEM in high-value technology products
- Turnkey projects from concept to operational asset
- Complex mechanical, electrical, control and software systems design
- Complex manufacture, rapid prototyping, implementation, commissioning
- All-in-one complex industrial solutions provider



Key Achievements

- Tier-one Government and big business supplier
- Extensive complex project and product experience
- Australian OEM with World-wide distribution
- ISO 9001:2008 certified quality management system
- ISO 14001:2004 environmental management system
- AS / NZS 4801:2001 OHS system
- Preferred supplier for all key Clients

Mega Projects

AutoHaul Project



ReconENG Industrial Engineering

Client:
Ansaldo-STS

Location:
Pilbara, WA

Services:
Engineering Design and Manufacturing

Sector:
Iron Ore

Rio Tinto Railway Expansion Projects

AutoHaul (2013-2016) is a project implementing driverless train capability on the Rio Tinto heavy-haul rail network. AutoHaul, currently in the installation/ commissioning phase, is a significant, high profile project; World-first on a heavy haul railway.

ReconEng was the project tier-one contractor for complex mechanical sub-systems design and components supply, as well as the lead Engineering consultant for the project. The project design phase lasted two years and during the installation phase ReconEng supplied more than 6000 parts, approximately 3 tonnes of material per week for six months.





Mega Projects

ECP / DA Project



ReconENG
Industrial Engineering

Client:
Ansaldo-STS

Location:
Pilbara, WA

Services:
Engineering Design and Manufacturing

Sector:
Iron Ore

Rio Tinto Railway Expansion Projects

ECP / DA (2011-2013) was the project implementing electronic braking control on the Rio Tinto heavy-haul trains. This project was amongst the first in the World to implement this system. ReconEng was the tier-one contractor for complex mechanical sub-systems design and components supply, as well as the lead Engineering consultant for the project.

During the design phase ReconEng was tasked with systems installation design and components supply, including fiberglass OEM consoles re-design and supply, as well as of all control systems installation components. For the installation phase of the project doubling of the contract supply rate was successfully achieved at a late stage of the project.





Mega Projects

ECP Driver's Consoles



ReconENG Industrial Engineering

Client:
Ansaldo-STS

Location:
Pilbara, WA

Services:
Engineering Design and Manufacturing

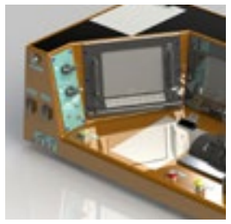
Sector:
Iron Ore

Complex, High-Value Systems Design

As part of the ECP project ReconEng was tasked with design and supply of new OEM fiberglass dashboards for GE locomotives. The design required adding a new ECP screen to the OEM console layout (which includes two existing screens), as well as several new instruments. The design allowed no increase in the existing footprint of the console. The prototype design, manufacture, onsite delivery and testing was successfully completed in only seven weeks. On successful testing of the prototype, ReconEng supplied 74 dashboards for the project.





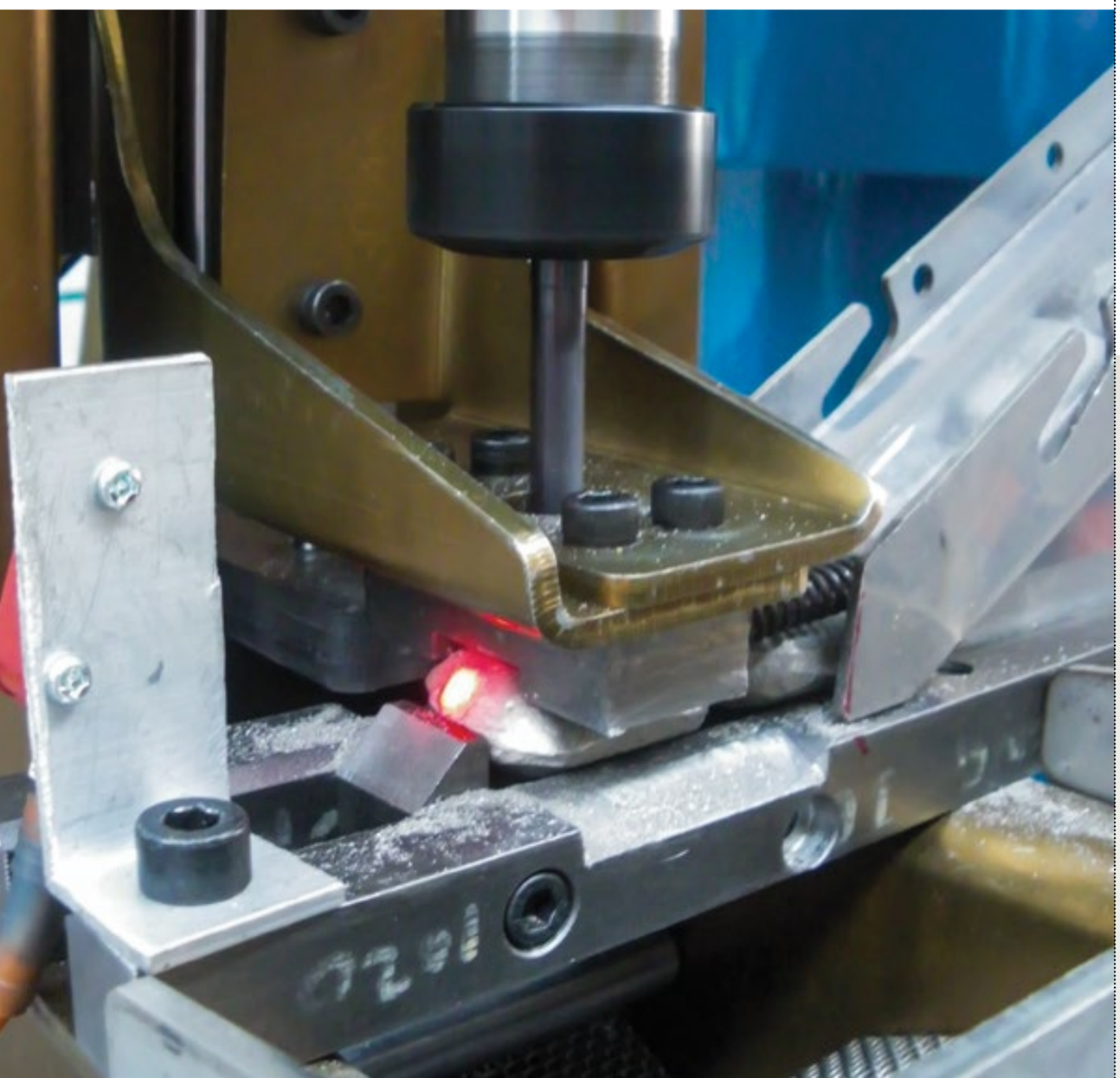






Mega Projects

SD 100L Samples Generator



ReconENG Industrial Engineering

Client:
Glencore-Xstrata

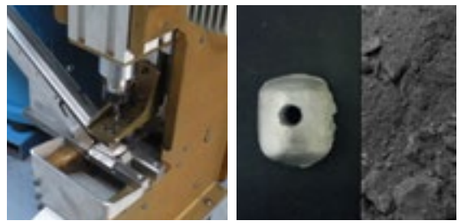
Location:
Murrin Murrin, WA

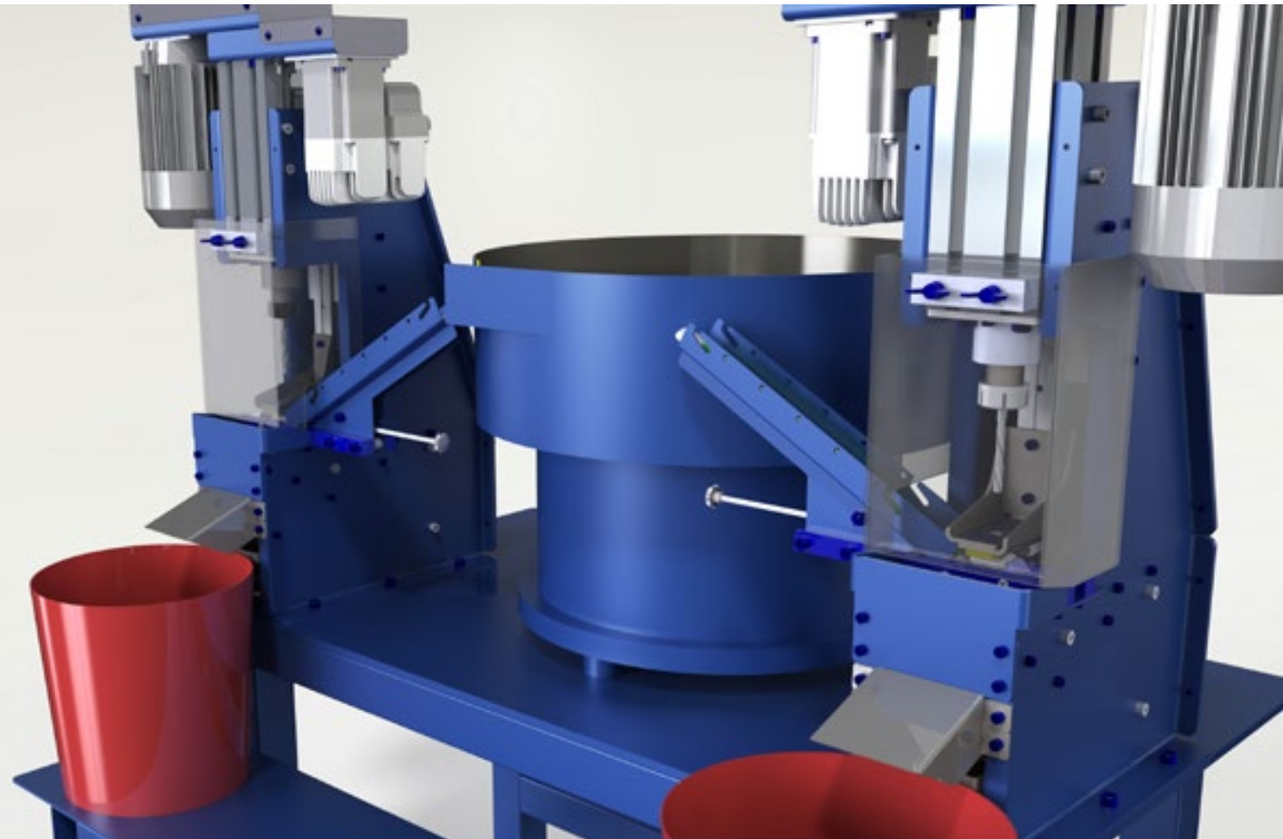
Services:
Turnkey Engineering
Systems Design

Sector:
Nickel

Automating Toxic, Unsafe Processes

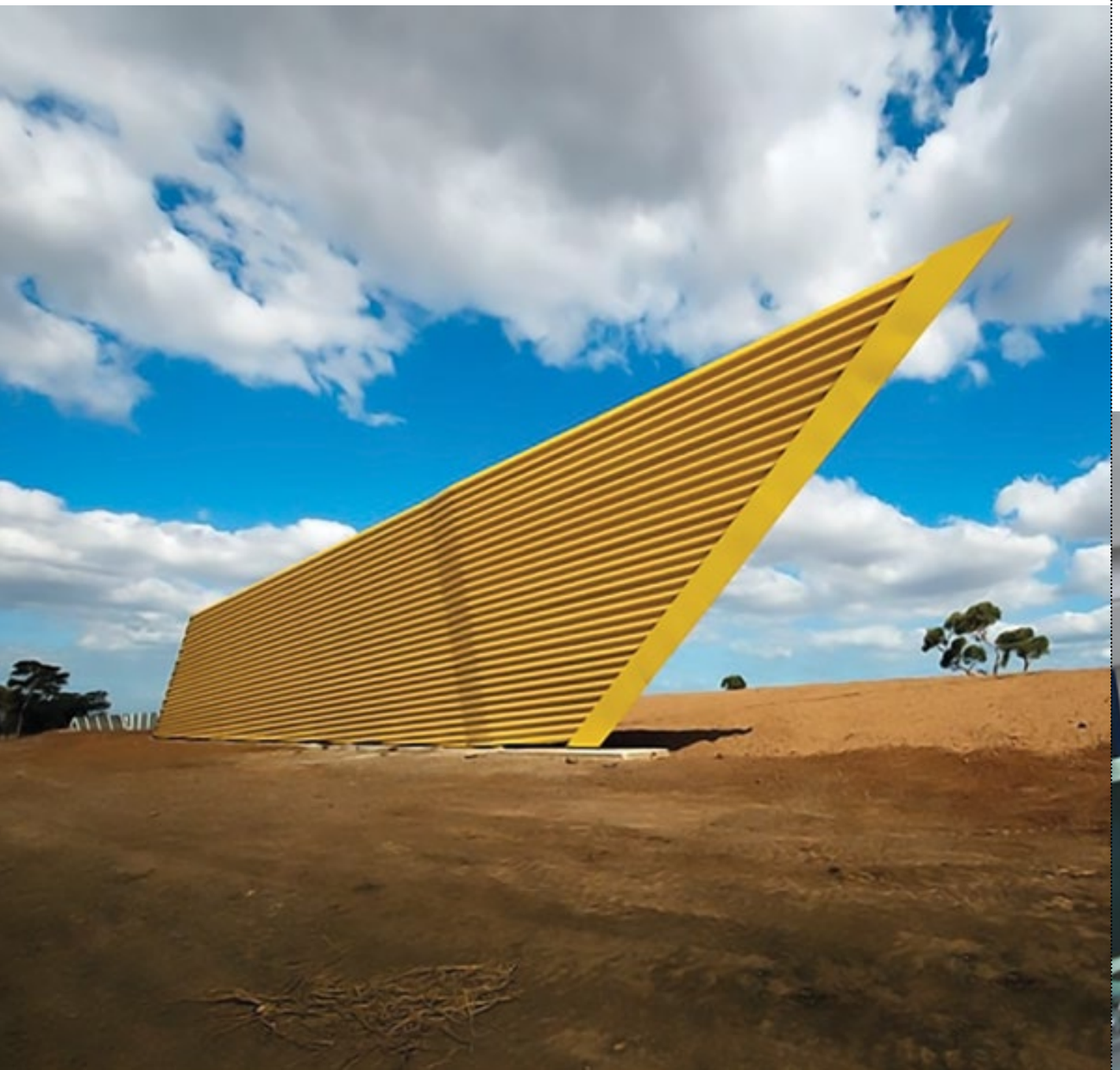
Automatic system development designed for continuous production of Nickel samples for product content analysis. The system was required to produce fine, crushed and screened samples of the plant Nickel product for chromatography. Labour-free, high safety, high productivity operation and qualified samples collection for analysis. Full project design, plant process integration, implementation and onsite commissioning at Murrin Murrin, WA. System achieved more than eight times productivity improvement with improved safety and 24/7 operation.





Mega Projects

Deer Park Bypass Project



ReconENG Industrial Engineering

Client:
ARM Rollforming

Location:
Melbourne, VIC

Services:
Turnkey Engineering
Systems Design

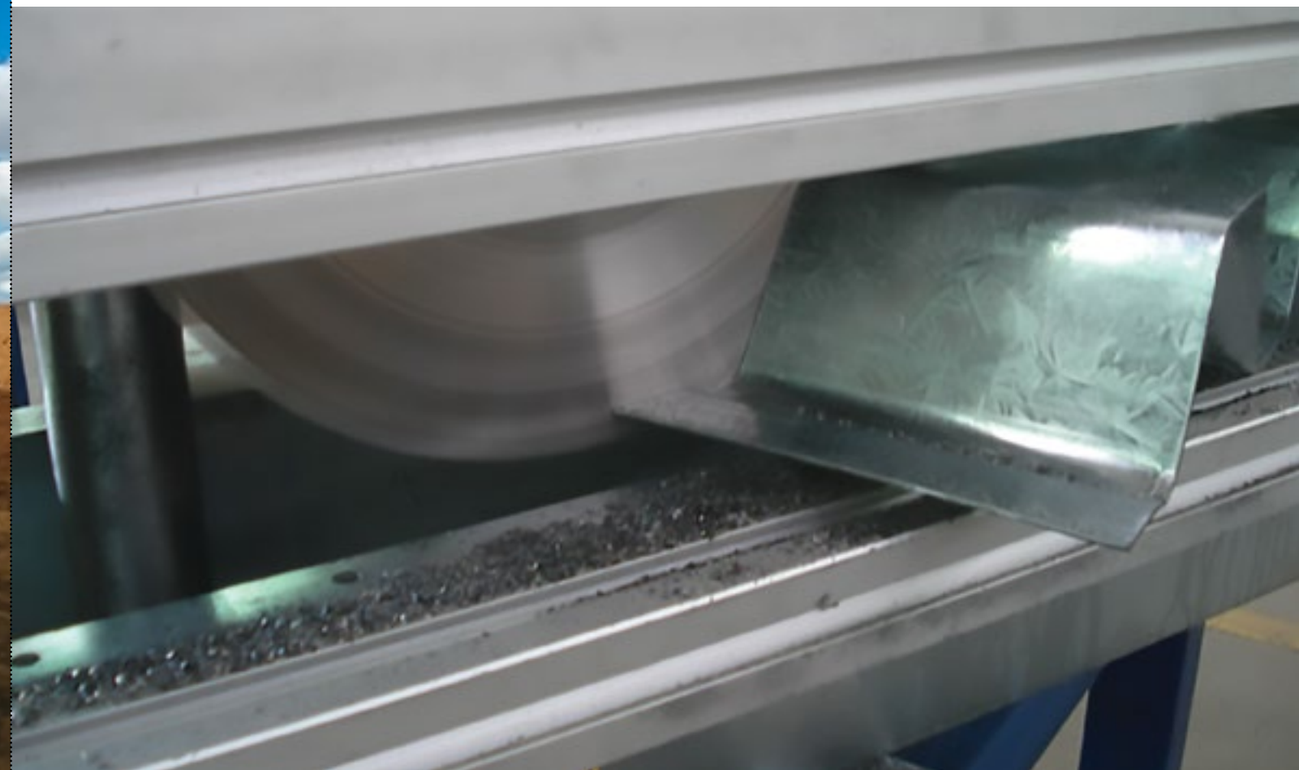
Sector:
Construction

Solutions for Applications with No Standard Solutions

Special application development designed for high capacity, high angle cutting of large roll-formed steel sheets for the construction phase of Melbourne's Western Freeway. At a late stage of the project it was identified that no solution existed for manufacturing large innovative design sound wall sections.

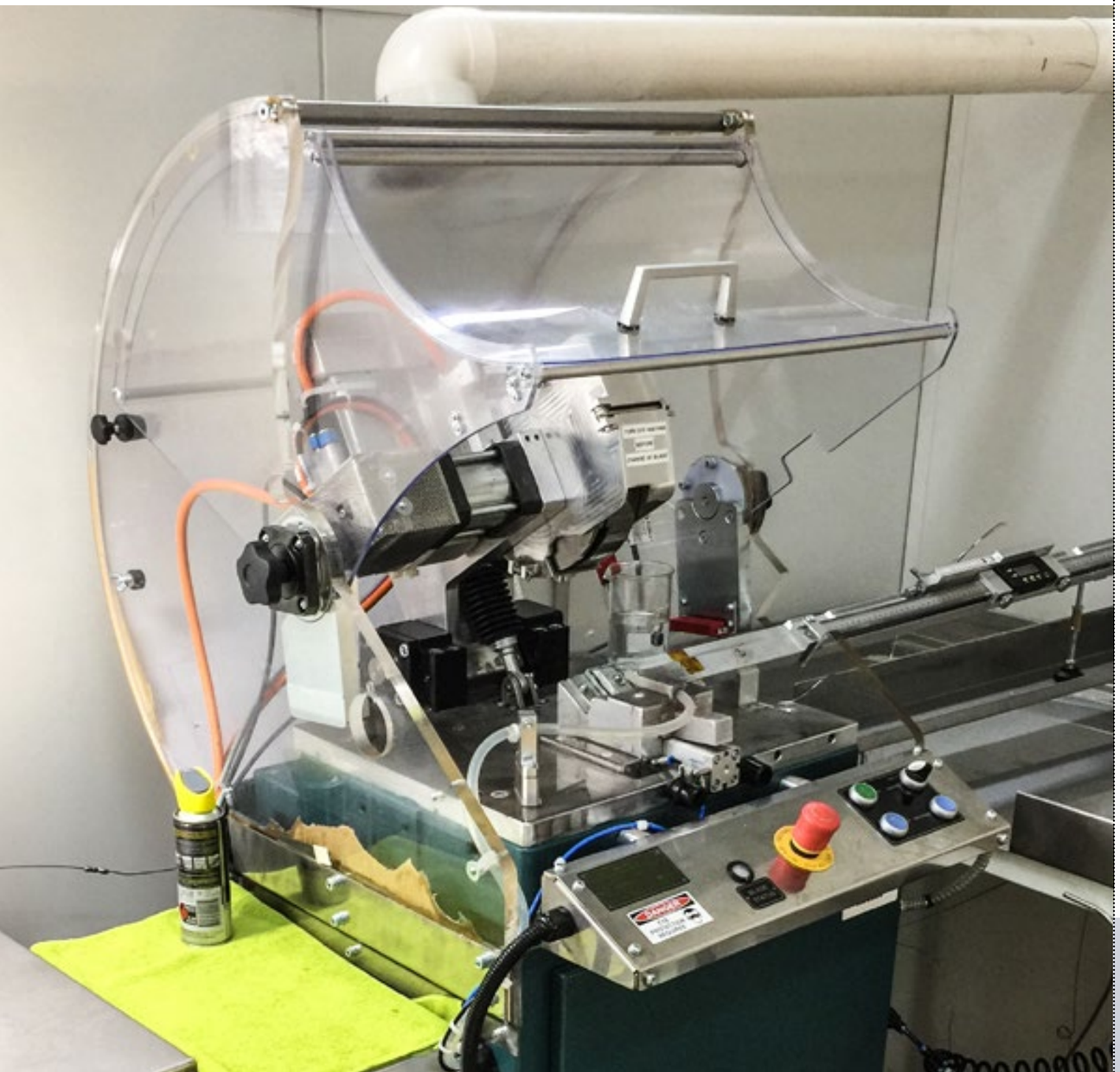
ReconEng was tasked with designing a steel cutting solution with capacity up to 2000x100 mm and ±70° angle. The design successfully achieved all production requirements and ReconEng performance on what was a project critical path item was one of the key factors which contributed to the Deer Park Bypass opening eight months ahead of schedule.





Special Application Projects

NGS 150 Nano-Glass Saw



ReconENG Industrial Engineering

Client:
Trajan Medical

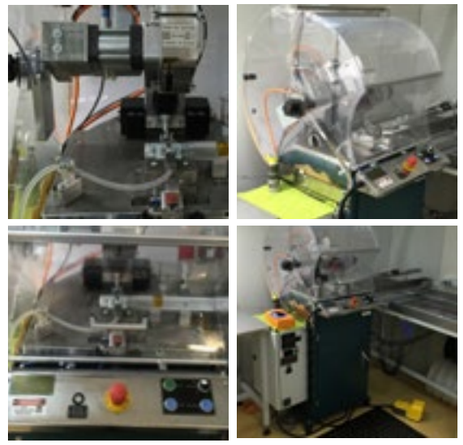
Location:
Melbourne, VIC

Services:
Turnkey Engineering Systems Design

Sector:
Medical Manufacturing

High-Precision Applications

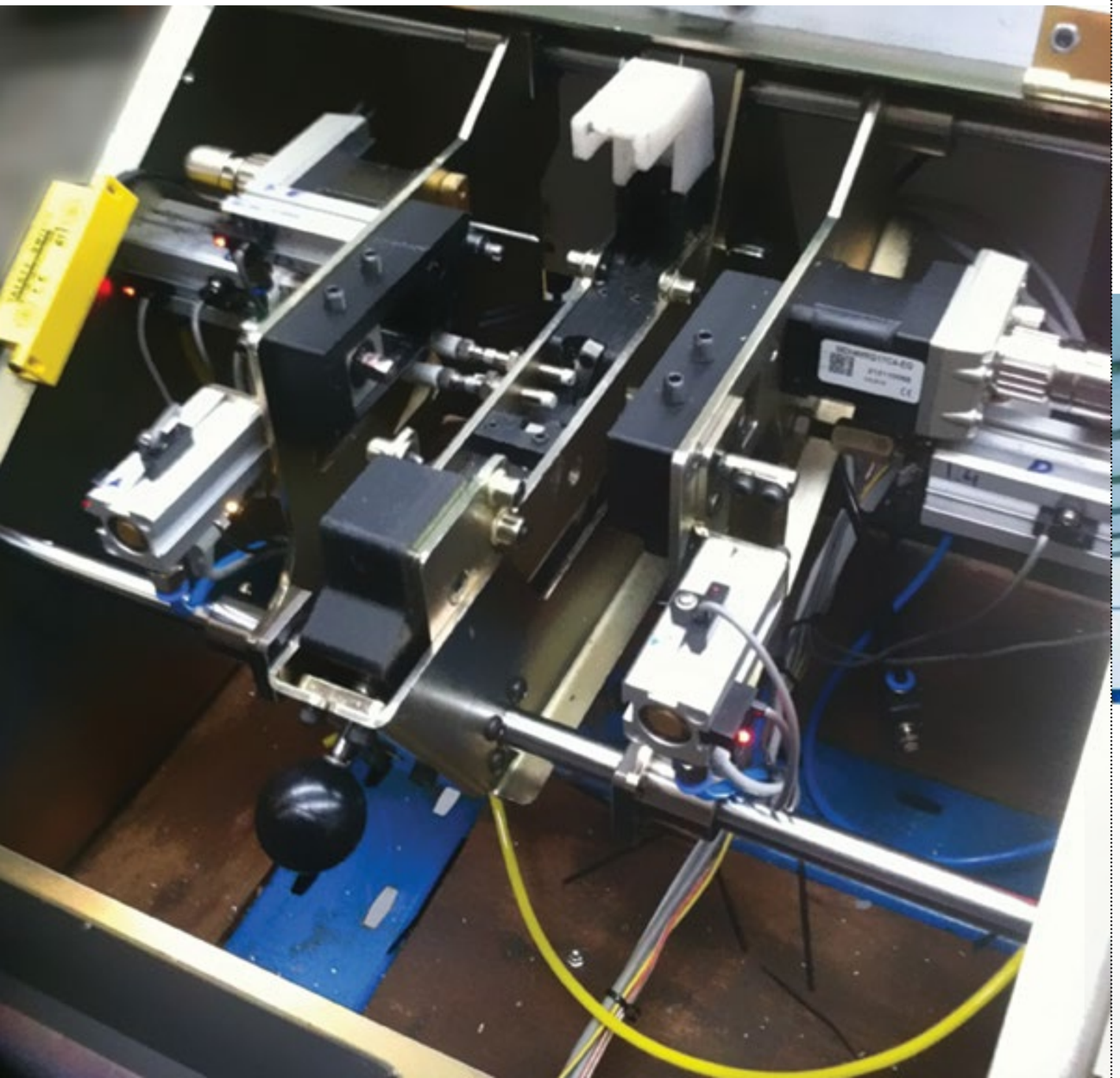
Development of a cutting solution for small diameter glass tubing requiring high-precision, fine-tolerance operation to achieve a quality pass cut. High-precision diamond-disc saw for semi-automatic cutting of nano-glass tubing with the outside diameter down to 360 micron. High-precision rotational assembly with micron concentricity, as well as high-stability cutting stroke control. The implemented solution reduced the cut reject rate by more than 90 per cent. Full project design, implementation, and on-site commissioning in Melbourne, VIC.





Special Application Projects

ATM-20 Mortice Lock Test Machine



ReconENG Industrial Engineering

Client:
Assa Abloy

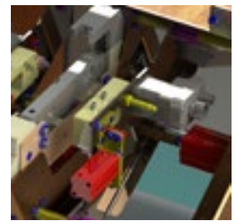
Location:
Melbourne, VIC

Services:
Turnkey Engineering
Systems Design

Sector:
Precision Manufacturing

High-Speed Precision Functionality Testing

ATM-20 is an automatic test machine designed for high-speed functionality testing of mortice locks. ATM-20 performs 13 tests with a total 54 actions and checks on each lock in 17 seconds. Typical testing throughput is 1400 locks tested per day over two shifts. Project included on-site commissioning as part of Assa Abloy mortice lock production line development.









Special Application Projects

SP 7.5IL Automatic Press System



ReconENG Industrial Engineering

Location:
Sydney, NSW

Services:
Turnkey Engineering
Systems Design

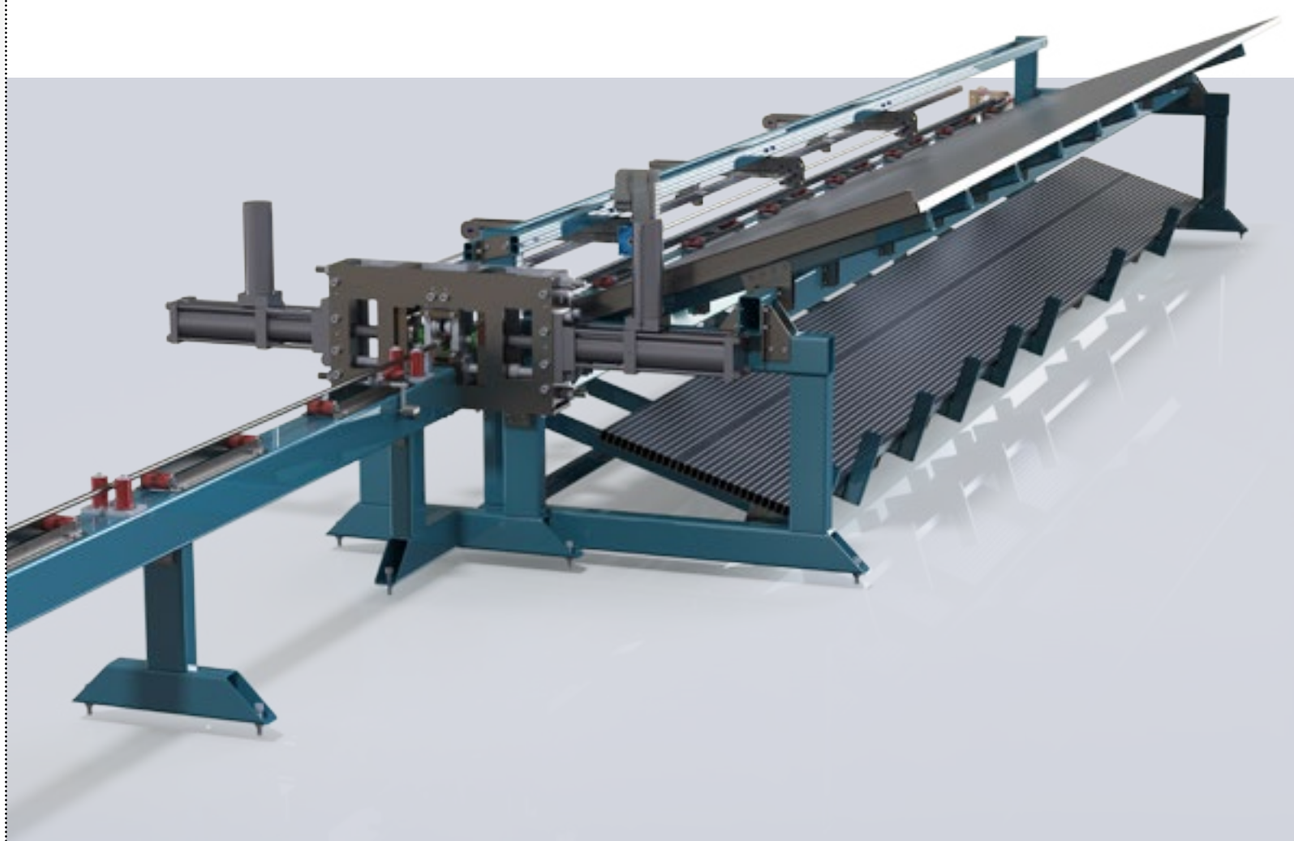
Sector:
Construction

Process and Software Solutions for Complex Jobbing Tasks

Turnkey system development designed for automatic press tube production as well as streamlining of complex jobbing and setup calculation tasks for fencing panel cross-bars. The system achieved elimination of manual labour with the key aspect the jobbing system designed to require operator only to select fence style desired.

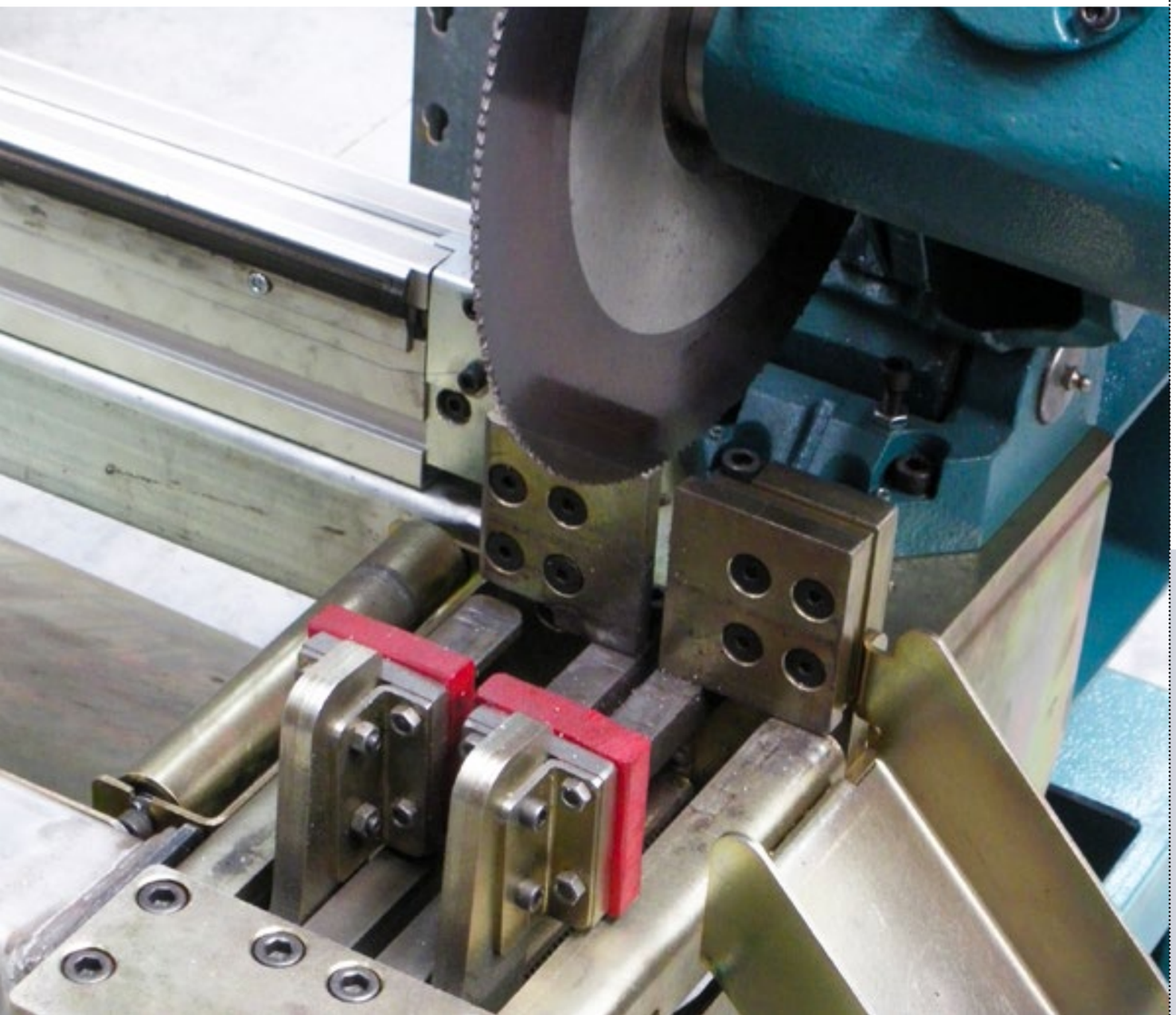
On selection the system measured the length of the tube, calculated number of holes and pattern possible to nest, and made corresponding hole patterns on up to four cross bars in a panel, in the style selected, ready for assembly. In addition to productivity benefits the system fully automated a complex jobbing system with resulting errors and material waste. Full project design, implementation and on-site commissioning in Sydney, NSW.





OEM Products

ProfiFeed® Cutting Line



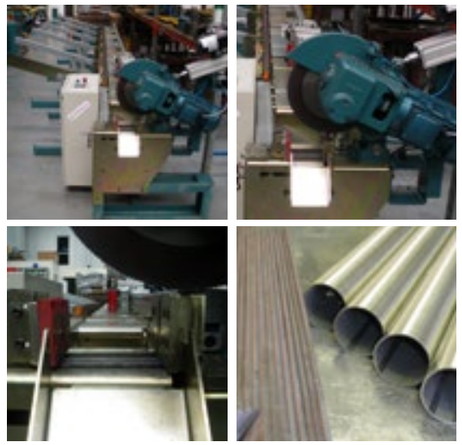
profifeed technologies

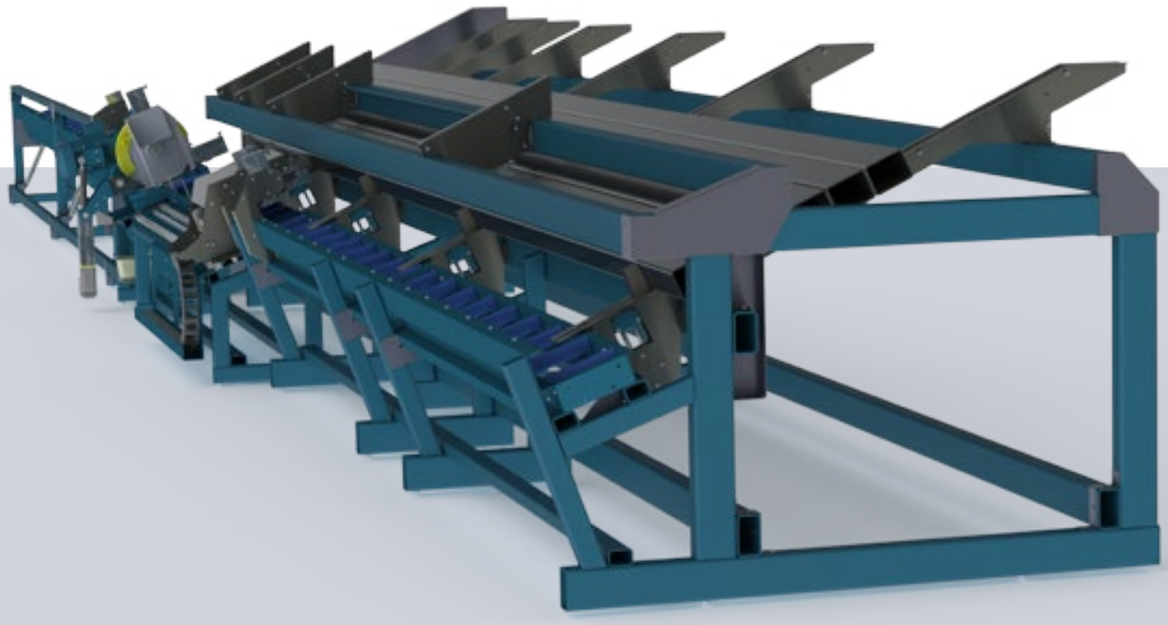
Set-And-Forget Continuous Cutting

ProfiFeed® Cutting Line is an automated high-speed cutting solution for all small size structural RHS, SHS and round steel stock. Continuous bar stock loading, feeding, cutting to length, and parts collection, with no operator required.

The system is designed to cut any profile shape that you can cut on a manual cold saw with little or no mechanical setup. Cut lengths from 25 to 8000 mm, with 10 mm minimum off-cut length, a World leading performance. Simply input bar stock, and pick up cut pieces. Intelligent user interface with many production intuitive features designed to be simple to run for the operator while flexible and powerful in job management methods.

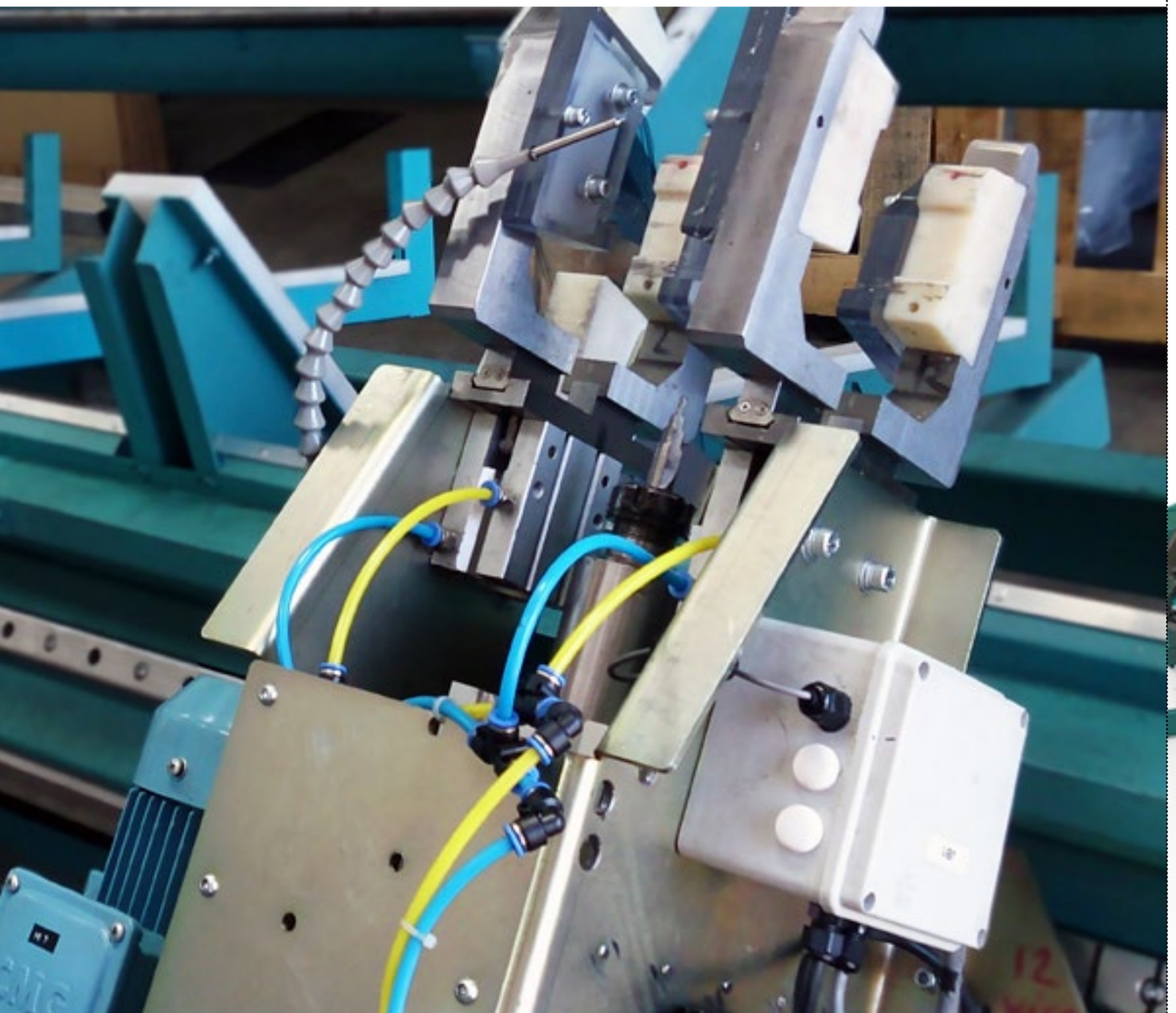
Multi system, high-productivity, intelligent, process and software solution.





OEM Products

ProfiFeed® Drilling Line

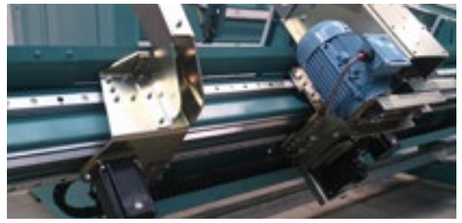


profifeed technologies

From CAD to Finished Piece, Streamlined Production



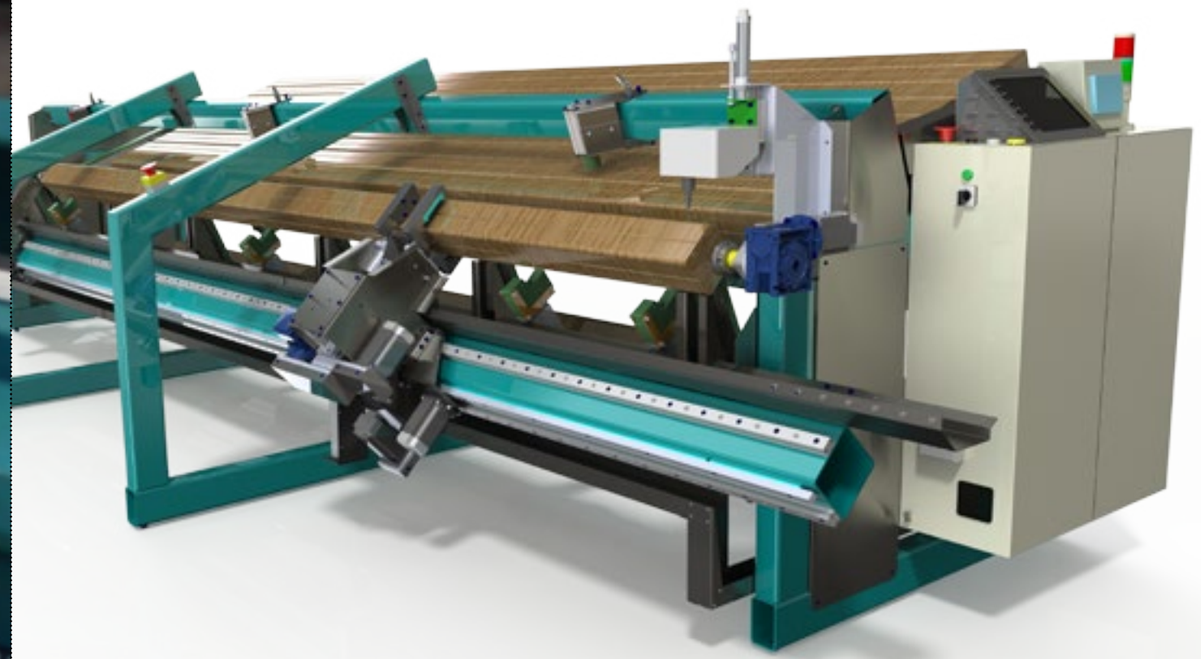




ProfiFeed® Drilling Line is an automated high-speed drilling solution for all small size structural RHS, SHS and round steel stock. Continuous bar stock loading, drilling of any hole patterns on all sides, and finished parts collection, with no operator required.

ProfiFeed system streamlines hole dimensional information from design to completed part. We develop an app for your CAD software which extracts the hole data direct from the design, and inputs into the machine. This results in elimination of human data manipulation and the possibility of jobbing errors, from CAD to finished piece. Simply input correct bar stock, and pick up the drilled piece.

Intelligent user interface with many production intuitive features designed to be simple to run for the operator while flexible and powerful in job management methods. Multi system, high-productivity, intelligent, process and software solution.



OEM Products

ProfiFeed® Fully Automatic Saw



profifeed technologies

High Value, High Speed Automation

ProfiFeed® Fully Automatic saw has most of the features of the full Cutting Line minus the automatic loading. This results is a more compact automatic cutting solution which retains almost all high-productivity, and intelligent process benefits in a much smaller, high-value package.

The FA saw system additionally achieves full ability to cut any profile shape that you can cut on a manual saw (SHS, RHS, round, etc) with no mechanical setup required. Cut lengths 25 to 8000 mm, with 10 mm minimum off-cut length, a World leading performance.

Multi system, high-productivity, intelligent, process and software solution.











OEM Products

ProfiFeed® Semi-Automatic Saw



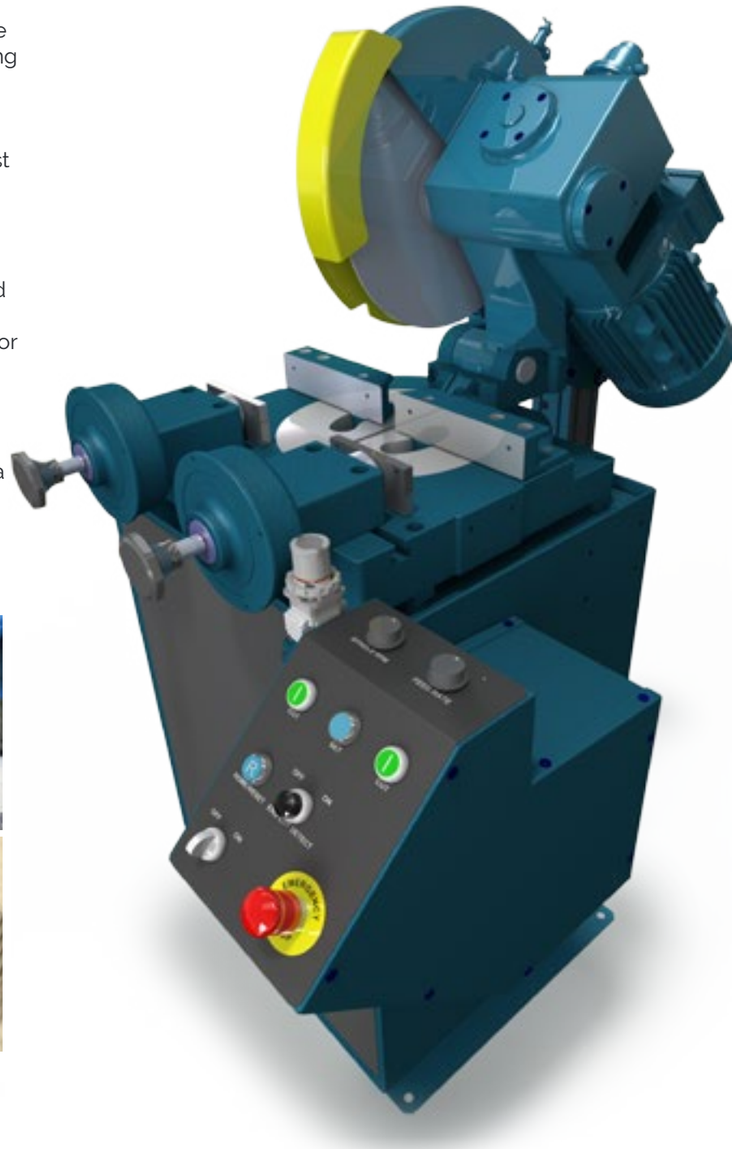
profifeed technologies

High-Productivity, Low Cost Automation

Semi-automatic steel saw designed to alleviate repetitious cutting process tasks while capturing high speed, low setup benefits of manual cutting. Intelligent process control system features automatic detection of cutting piece size, automatically adjusting to achieve shortest stroke possible for a full cut.

High speed operation with automatic feed modulation logic, taking account of multiple sensor inputs to produce highest cutting speed possible, for minimum blade wear, and with operation equal or faster than a manual operator can safely achieve. Active system overload monitoring with safe feed management logic.

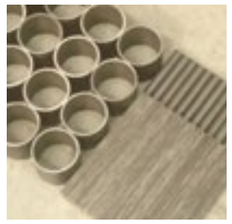
Multi system, high-productivity, intelligent, process and software solution. Sold in Australia and Overseas under Brobo-Waldown brand.











OEM Products

ProfiStop®
Length Stop



profifeed technologies

High Value, Low Cost Automation

ProfiStop is an automated length stop and feeding system suitable for automating simply all repetitive production positioning tasks. In addition to mechanical automation ProfiStop streamlines workflow management in most intuitive way possible from your order to finished parts, using technology to make cumbersome jobbing processes simple.

ProfiStop has the most sophisticated positioning system on the market designed for high position accuracy, time after time, even years after new. Mechanically and ergonomically it is also designed as a bolt-on, plug-and-play system, simple to implement even for the most sophisticated automation tasks.

High-productivity, intelligent, process and software solution.





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