







*profifeed
technologies*

***S400
Fully Automatic
Steel Saw***

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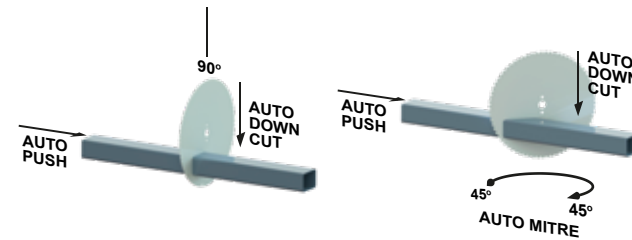
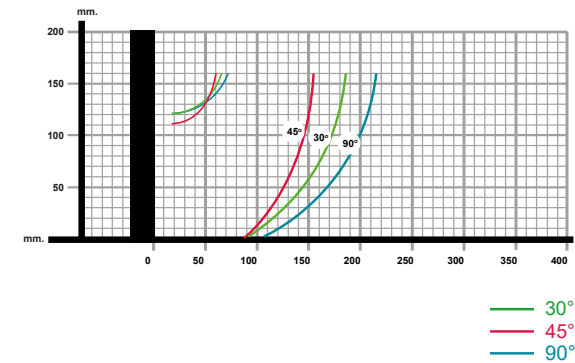
Simple Fully Automated Cutting

Fully automatic cutting of small-to-medium size steel with simple-to-use automation. Put down any steel to cut, the machine will automatically detect it and cut it into jobs tasked with high-accuracy servo motor material positioning. Excel job lists WIFI input for streamlined input of large cutting lists.

Servo motor saw actuation with industrial ball-screw actuator. Automatic detection of the steel present with the machine then setting its cut start point for minimum stroke and cutting time. No limit sensors or any operator action required.

Optional fully automatic inline optimiser. Automatic measuring of steel lengths using a laser sensor and on-the-fly job list optimisation against the length measured for minimised wastage in offcuts. Automatic printing of job / part number labels for each part produced (optional).

- Fully-automatic cutting operation with bar feeding and cutting to length.
- Simple user interface for automatic operation, enter job and cut in seconds.
- Simplified part, batch, or large excel lists job cutting.
- Remote WIFI excel job lists input with extensive data mapping capabilities.
- Automatic optimiser operation with input material laser length measure and auto-optimisation for minimum waste (optional).
- Automatic labels printing for parts using data from the job list (manual label application, optional).
- In-line direct-to-material printing with no operator action required (optional).
- Bar codes or QR codes printing or scanning for jobs input (optional).
- Fully adjustable saw cutting and material feeding rates for maximum process productivity.
- Saw auto-detect of bar size size to set minimum stroke and cut time for cutting.
- Saw blade jam detect and automatic closed-loop react to de-escalate.
- Industrial ball-screw saw actuation system with servo motor feed control.
- High-flow, high-capacity, no leaks coolant and drainage system.
- Bundled / multi-bar cutting and counting (optional).
- Automated servo positioning of the saw mitre angle up to $\pm 45^\circ$ (optional)








Safety-Focussed Design

Machine design as per CE and AS / NZS 4024:2014 safety standards. Full saw guarding, including 1.8 m tunnels, with automated lifting of the guard up / down with a press of a button. Safety switch detecting the guard in the up position and disabling all machine operation.

Category 1 control / monitoring of the machine safety systems with a safety relay, suitable for light curtain integration. Mushroom and rope-pull emergency stops with a reset button press to re-enable the machine after e-stop.

High-Performance Cooling

High-Performance Cooling High-performance cooling system with high-flow electric pump. Greatly increased flow rate and dedicated flow lines to each side of the blade. High capacity 50 L tank greatly reduces water topping up and large water capacity and flow dissipates cutting heat to atmosphere at a much higher rate. No leak or drip flow and drainage design under all pumping conditions.

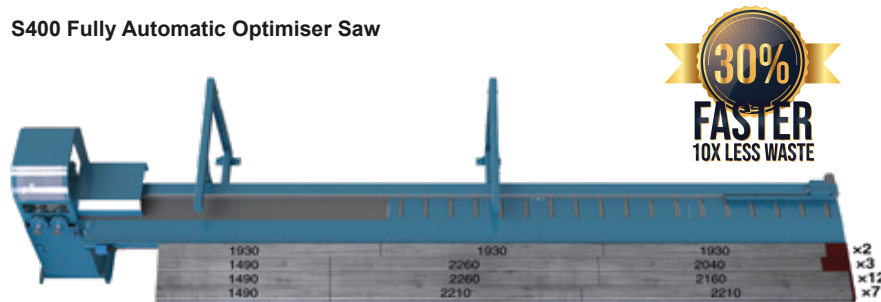
				
240V 1-phase, 15A max	2.2 kW	20-100 RPM	400 / 40 mm	0.4 - 2 m/s



Inline Optimiser Saw

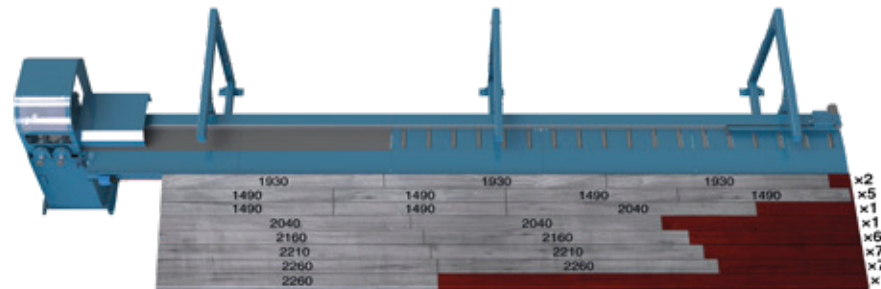
The machine automatically measures using a laser sensor the length any steel you place down to cut. Based on this measurement the powerful optimisation algorithm calculates the best part order to minimise waste material all inline with machine operation. No special job lists or any operator action required to get 98%+ material yield for almost all your jobs.

S400 Fully Automatic Optimiser Saw



- |||| Total Parts: 72
- Steel required: 144 m
- Steel waste: 2.1%
- 🕒 Cutting time: 26 mins

S400 Fully Automatic Saw with FIFO Jobbing



- |||| Total Parts: 72
- Steel required: 180 m
- Steel waste: 21.7%
- 🕒 Cutting time: 35 mins

Save \$\$

You spend a lot on steel and chances are it is the biggest expense in your production. An optimiser run production will result in significant material cost savings in comparison to typical first-in cutting.

Powerful algorithm

Our inline optimiser with a cut list containing a mix of long and short parts will produce 99%+ yield most of the runs, even with cut lists containing not many individual parts.

Zero hassle optimisation

No need to run any optimiser from the office, print dozens of pages, or pay attention to putting the profiles in the "right" order. Just send the Excel cut list to the machine, and put in your material to cut, of any length, in any order.

Use up offcuts easily

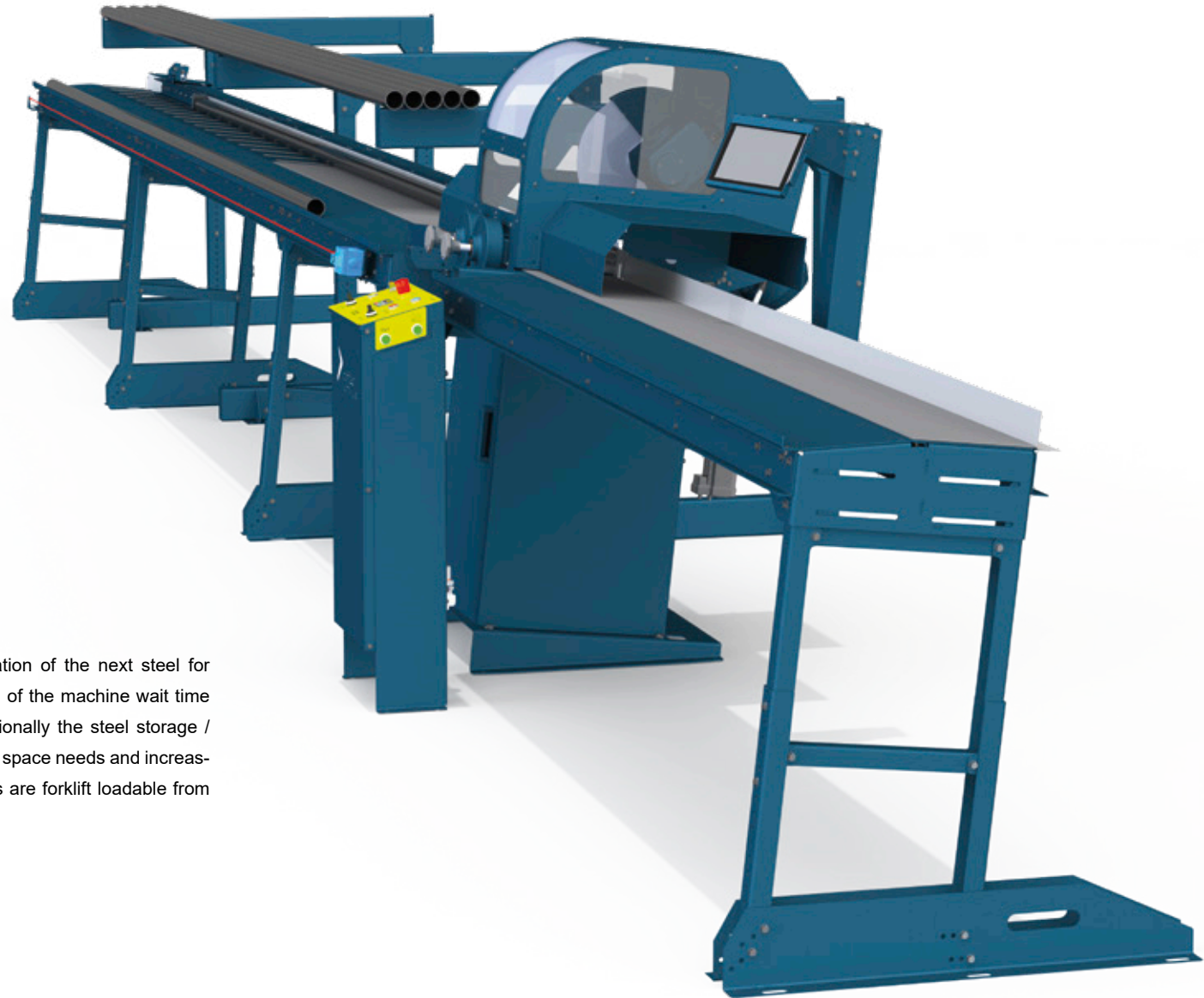
No more measuring and recording your offcuts for the office. Just return them into stock, and put them through the machine at the start of the next job.

Get something for nothing

Your steel typically comes with extra 20-60 mm on each length you buy. With inline optimiser, this will automatically be used up to produce your parts, and without you needing to do any extra work.

Optimise ad-hoc cut lists

Our system allows you to optimise both complex Excel-prepared cut lists, as well as ad-hoc cut lists you just think up, easily and quickly.



High-Productivity Material Flow

Ergonomic tables and material loading frames allow preparation of the next steel for cutting while the machine is operating. This enables reduction of the machine wait time between cycles increasing your overall production rate. Additionally the steel storage / loading area incorporated into the machine space reduces your space needs and increases your factory space utilisation efficiency. The loading frames are forklift loadable from the front or back.

Signs You Need ProfiStop Automation

- Are you so busy you have to decline work?
- Do you have two, three or five saws in your production?
- Do you find parts don't fit right on-site?
- Is your best worker occupied with cutting?
- Do you have large, complex projects with strict delivery times?
- Are you constantly working in your production but projects still come together slow?
- Do you feel your production work is like doing chores?
- Do you have a junior employee tasked with cutting out parts from offcuts?
- Do you have many productivity ideas but no time to progress them?
- Are you burned out trying to juggle many things?
- Are you constantly busy, but struggling to progress profits?



Why ProfiStop Automation?



Exceptional ROI

Most users find that their automated ProfiStop® machines pay for themselves in under a year.



High accuracy and productivity

Our machines are high-productivity automation solutions for cutting, producing the parts you need consistently, and every time.



IT focussed production

In 2023 manufacturing is about data. Our machines are designed around IT and process solutions to supercharge your productivity far beyond mechanical automation.



Industry leading support

Our technical support is regularly rated the best in the business by our Customers. We are available to assist you no matter where in the World you are 24/7.



Unmatched expertise

We can assist you with any problem effectively and in minutes. Our IT and machine expertise is high because Engineers you speak to are the same people that design and build your machines.



Get more done, with less

ProfiStop automation is the key step in transformation of your production foundations from labour reliant, to productivity based.



Big picture focus

We make the World where your people produce like machines, without working like machines.

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"We have been looking to in-source the steel cutting for a while for the cost and the accuracy control but without also insourcing all the labour associated. We purchased the S400 fully auto saw and now we cut on it all our shelving framing. It has been the perfect solution as it cuts very accurate for our welding but at the same time the productivity per operator is very, very high. It has been an excellent purchase."

Amar Singh
Production Manager
Mantova Shelving NSW
AUSTRALIA



S400 Fully Automatic Steel Saw | Technical Specifications

Linear Unit	ProfiStop Alpha					ProfiStop Omicron				
Linear Unit Length	3	4.5	6	7.5	9	4	6	8	10	12
Max Material Length (m)	1.68	3.18	4.68	6.18	8.58	3.23	5.23	7.23	9.23	11.23
Recommended Processing Material Weight (kg)	20 - 40 ¹					60 - 120 ²				
Typical Processing Rate (linear m per day)	2367 - 4019 ³					2469 - 4320 ³				
Footprint (3m out-feed table) (m)	7.25×1.7	8.75×1.7	10.25×1.7	11.75×1.7	13.25×1.7	7.79×1.6	9.79×1.6	11.79×1.6	13.79×1.6	15.79×1.6
Table Width (mm)	520	520	520	520	520	520	520	520	520	520
Roller Width	220 mm					220 mm				
Head Max Speed	1.2 m/s					1.3 m/s				
Head Acceleration	1.65 m/s ²					1.8 m/s ²				
Head Deceleration	1.35 m/s ²					1.5 m/s ²				
Job Memory	10,000+					10,000+				
Drive	belt, 30 mm, steel reinforced					rack-and-pinion				
Power input	415VAC 3-phase 20A max					415VAC 3-phase 20A max				
Positioning Accuracy	±0.1 mm @ 20 kg load / ±0.3 mm @ 40 kg load / ±1 mm @ 80 kg load					±0.25 mm				
Certifications	CE FCC					CE FCC				
Country of Manufacture	AUSTRALIA and SERBIA									

1. Material processing weight is dependent on the table configuration. Maximum processing material weight possible 80kg+ with reduced speed and positioning accuracy performance.
2. Maximum processing material weight possible 450kg+ with reduced speed performance. Max processing weight is dependent on configuration of table and drive gearing.
3. Processing rate expressed is for the speed of machine operation only. It does not include time required to unload completed parts and input new material in the machine for processing which always require additional time. The achieved processing rate will be dependent on how quickly the machine is serviced with material.