

# New Technology for Kitchen Cabinet Doors.

Vertongen's Kitchen Cube Work Cell.

**STILES | HC**

**YOUR SOLUTION**



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Kitchen Cabinet Doors.**  
**Vertongen's Kitchen Cube.**

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# Agenda

## Who, What, How, and Why?

- 01 **Who is Vertongen?**

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- 02 **What is the “Kitchen Cube“ Work Cell?**

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- 03 **How does it Work?**

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- 04 **What are the Benefits?**

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- 05 **Product Demonstration**

# Who is Vertongen?

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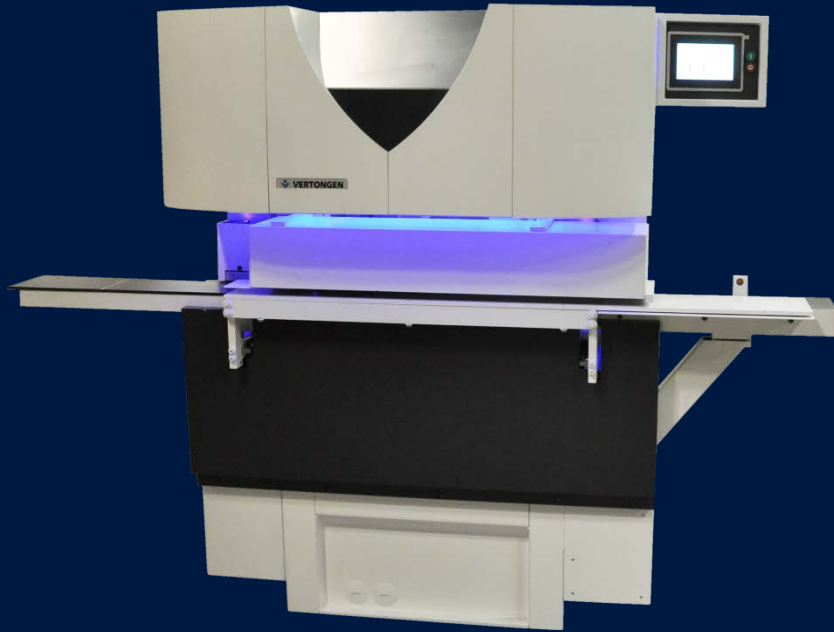
## Over 100 years of experience

- Belgian Company: Since 1900.
  - Owner: Mr. Tom De Smet
- Specialized in machinery for the window & door industry.
- Standard and custom built tenoners and profiling machines.



# What is the “Kitchen Cube” Work Cell?

# What is the “Kitchen Cube” Work Cell?



**Profil Compact Profiler.** Sizes the width so variations in the ripped width can be machined out. Multiple tools onboard allows combined with full CNC automation promotes fast and easy profile changes.



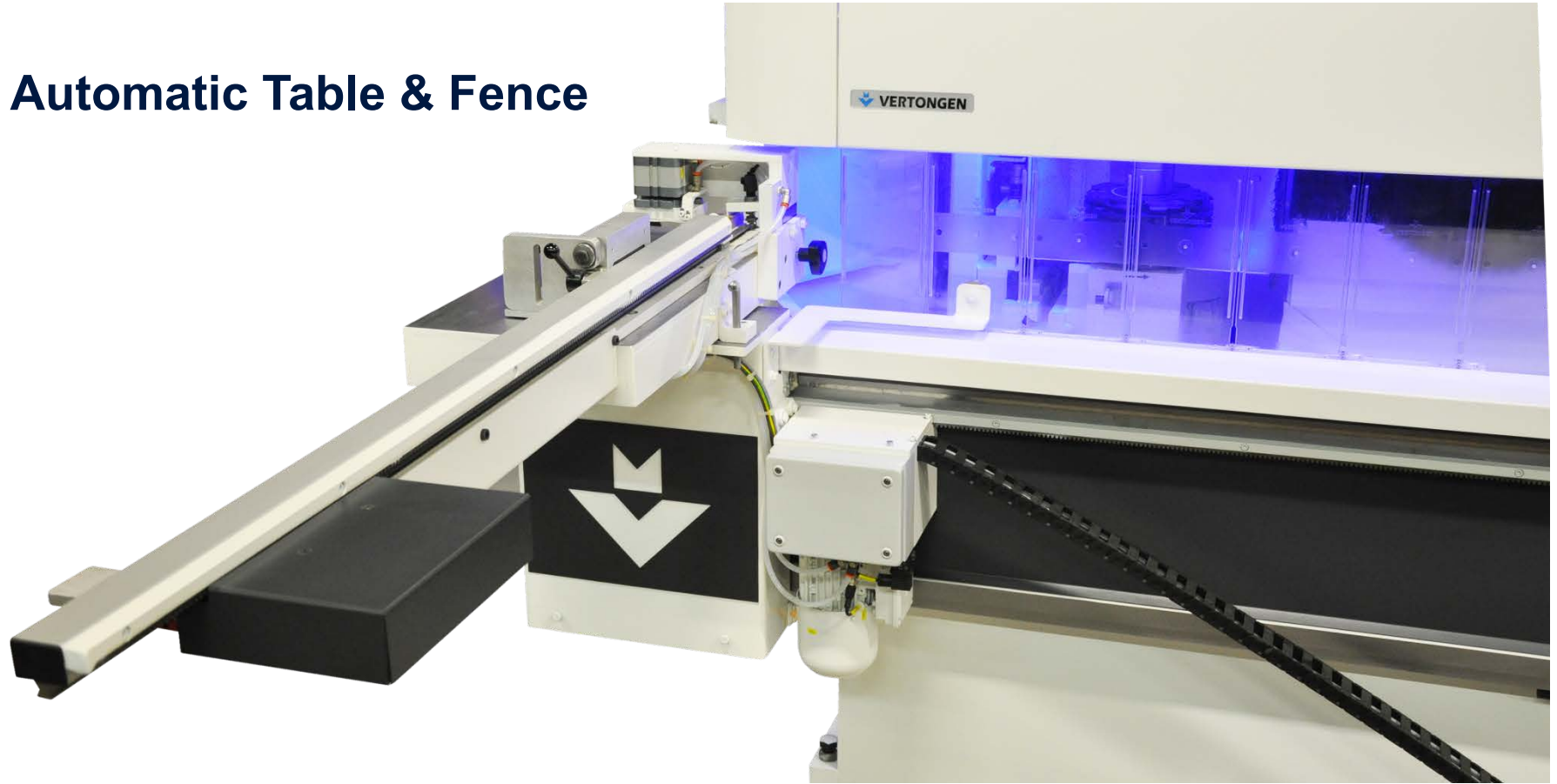
**Pentho Compact Tenoner.** Offers superior length sizing of the stiles & rails prior to coping. Promotes square doors without dependency on the accuracy of the chopsaw process.

# How does it **Work?**

# Tenoner



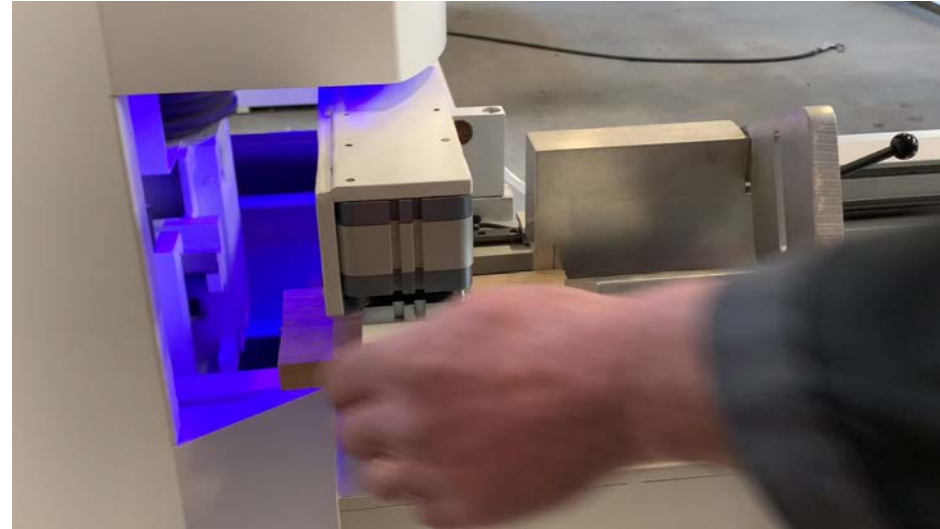
# Automatic Table & Fence



# Pentho Compact 2 tenoner

## Automatic Table

- Left to Right **AUTOMATIC** table movement. Keeping operator in center of work cell.
- **ADAPTIVE** speed. Speeds up when not cutting, slows to ideal cutting speed when processing.
- Pneumatic clamping of **BOTH** work pieces.



# Pentho Compact 2 tenoner

## Automatic Fence

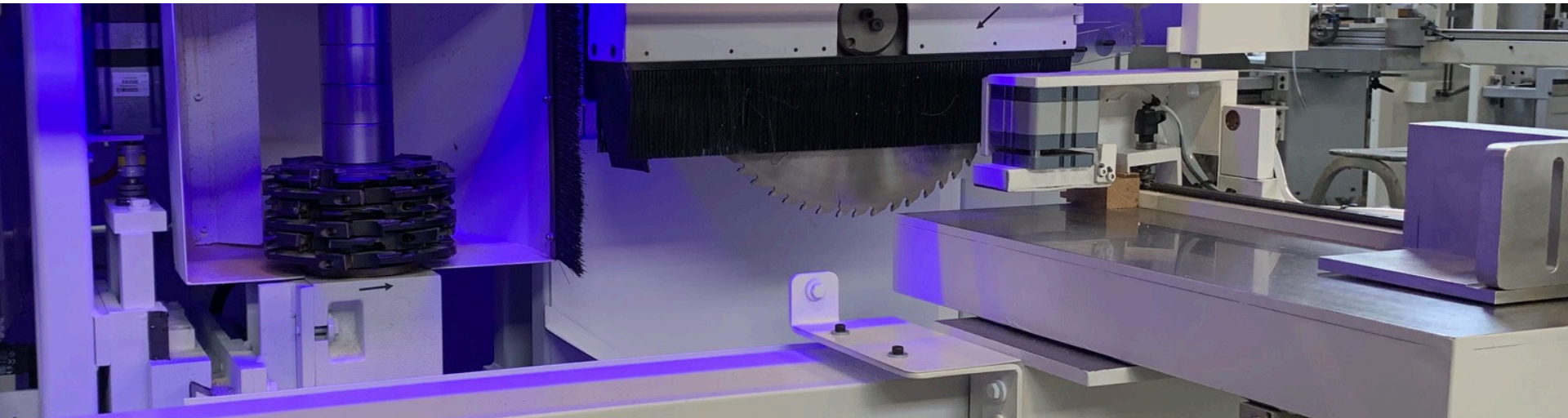
- Automatic Back Stop Fence positioning
  - Min: 100mm (4" inches)
  - Max: 2438mm (96" inches)



# Pentho Compact 2 tenoner

## Sizing and Coping

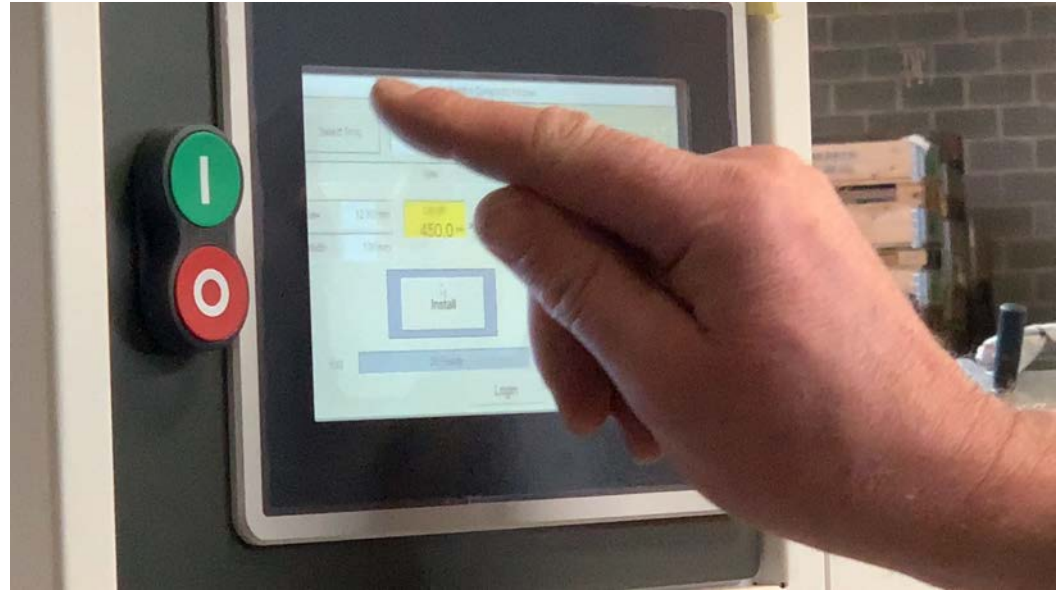
- Saw sizes single or **PAIRED** components to Precise Length.
- Coping Spindle is **ONLY** after Sizing. One tool pass accuracy, longer tool life.
- 300mm (12" inches) of usable spindle to allow **10-12 TOOLS** depending on design.



# Pentho Compact 2 tenoner

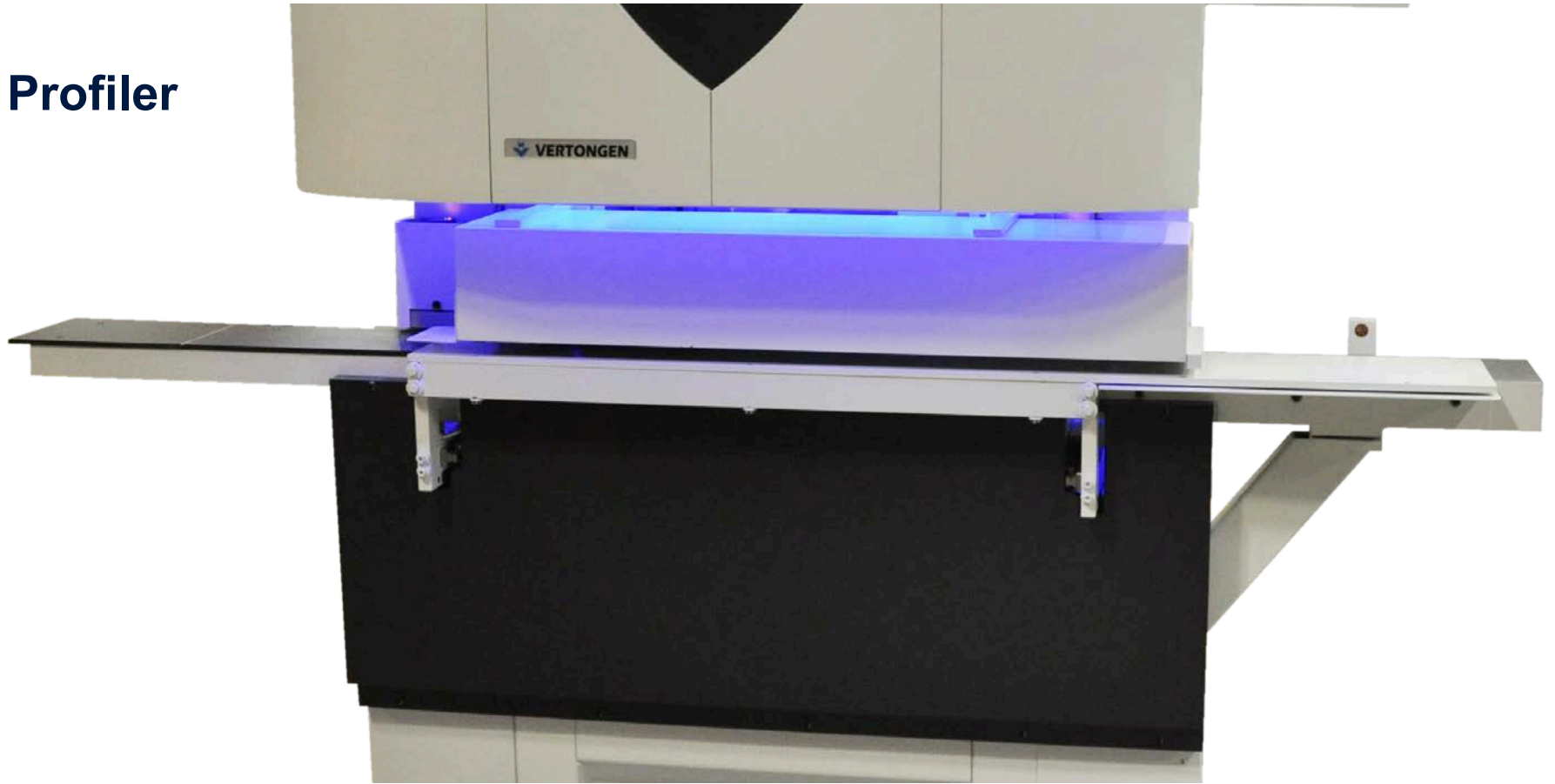
## Fully Automatic

- Profiles settings are save in the PowerControl **TOUCH SCREEN** device
- **ALL** adjustments are CNC, no manual adjustments required.
- **Fast, Easy, Accurate** production of one frame is possible, no more batching is needed.



**SELECT PROFILE – ENTER WIDTH – ENTER LENGTH - GO**

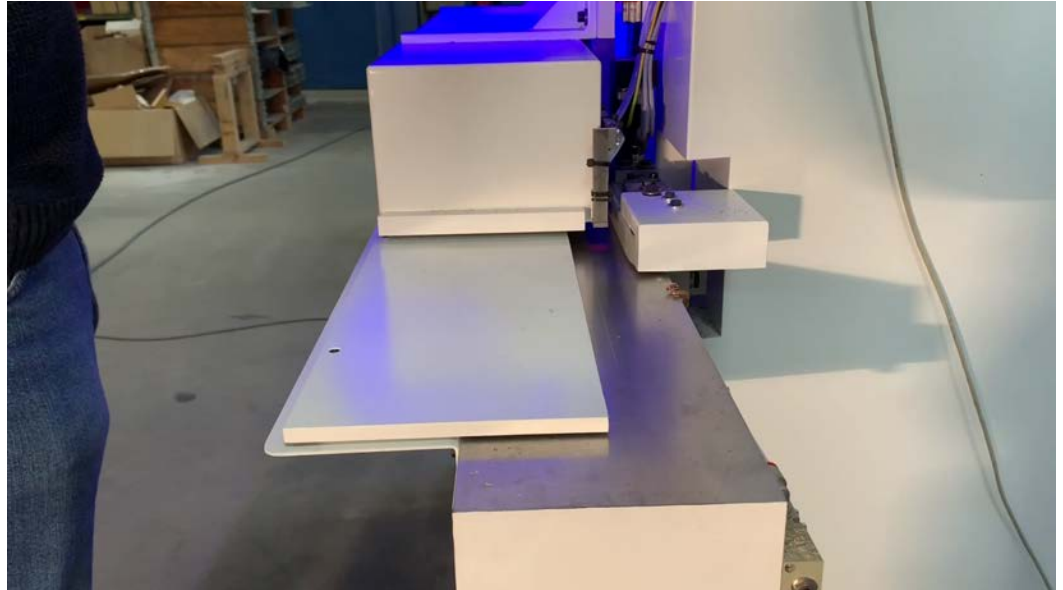
# Profiler



# Profil Compact 1 profiler

## Automatic Outside Fence

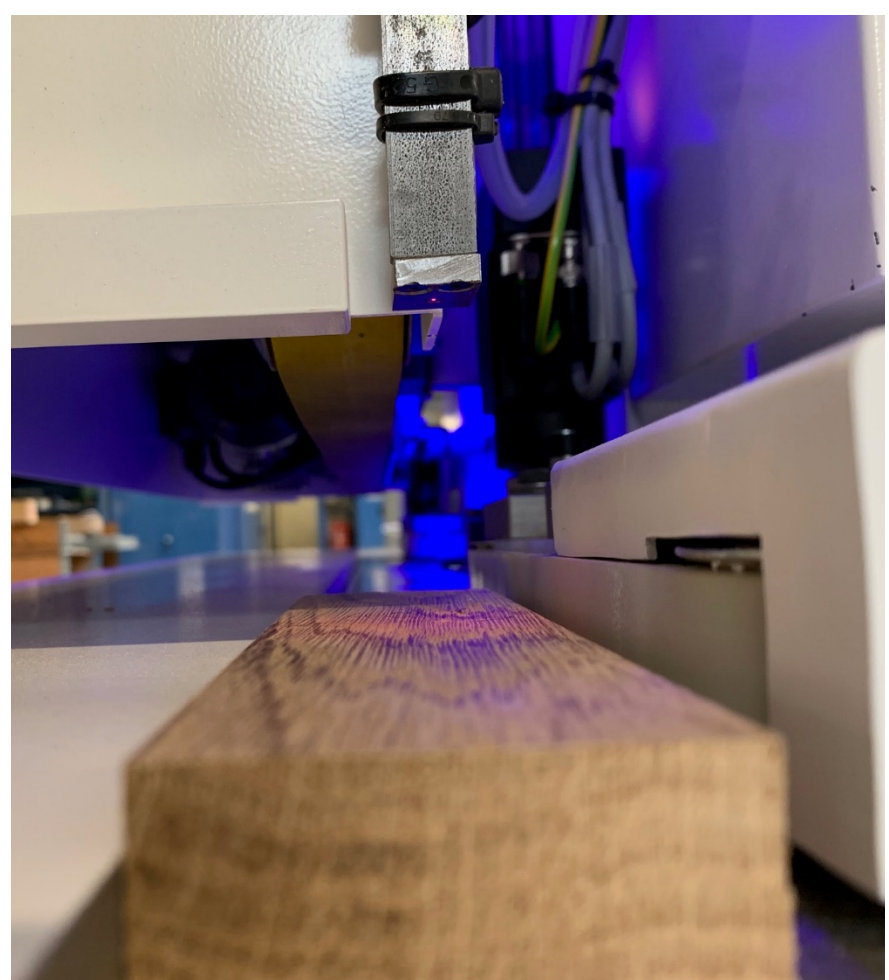
- Automatic adjusting outside fence sets width of product.
- Min Width: 31.7mm (1.25“ inches)
- Max Width: 230mm (9“ inches)



# Profil Compact 1 profiler

## Top Feed Belt

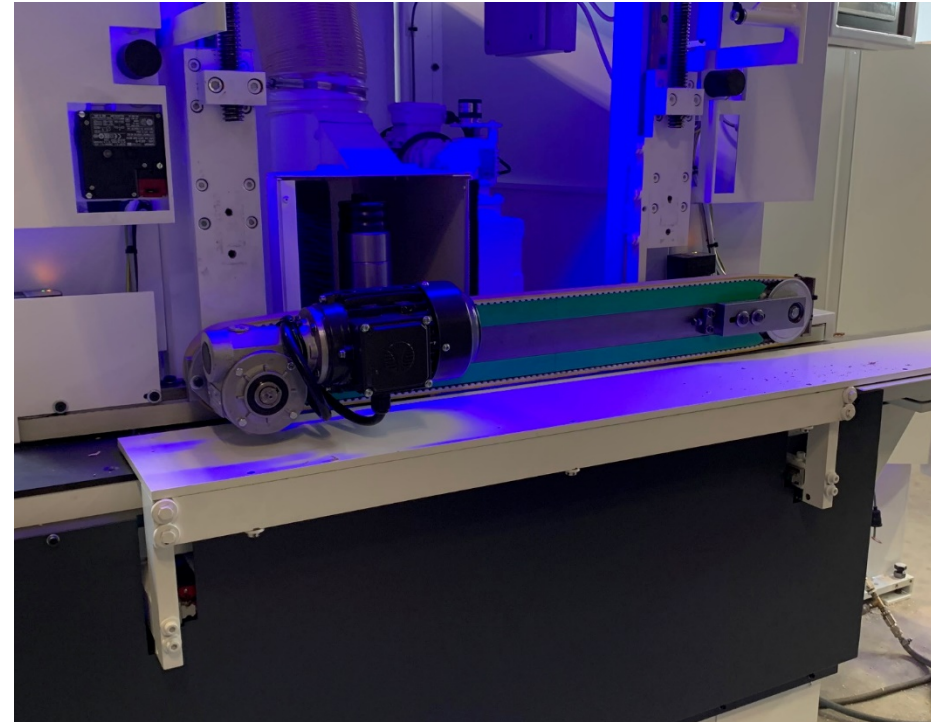
- Side pressure belts **BEFORE** and **AFTER** the main belt.
- Keeps work piece properly aligned to the fence.
- Top pressure belt receives work piece from infeed belt and transports work piece through the machine with excellent control.



# Profil Compact 1 profiler

## Top Feed Belt

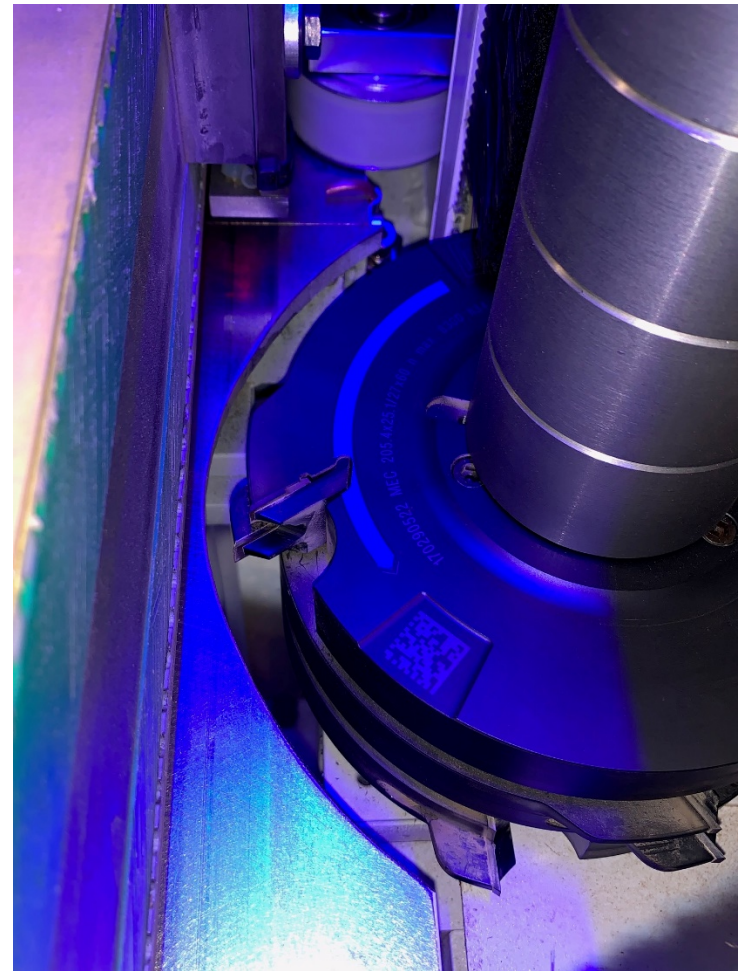
- Top drive **BELT** to allow for superior work piece control while profiling, even with short work pieces.
- Min Length: **100mm (4")**



# Profil Compact 1 profiler

## Profile Spindle

- Table cut out to allow profiling **CLOSER** to the work piece. Allowing 1.25" widths to be possible.
- 300mm (12" inches) of usable spindle to allow **10-12 TOOLS** depending on design.



# Profil Compact 1 profiler

## Fully Automatic

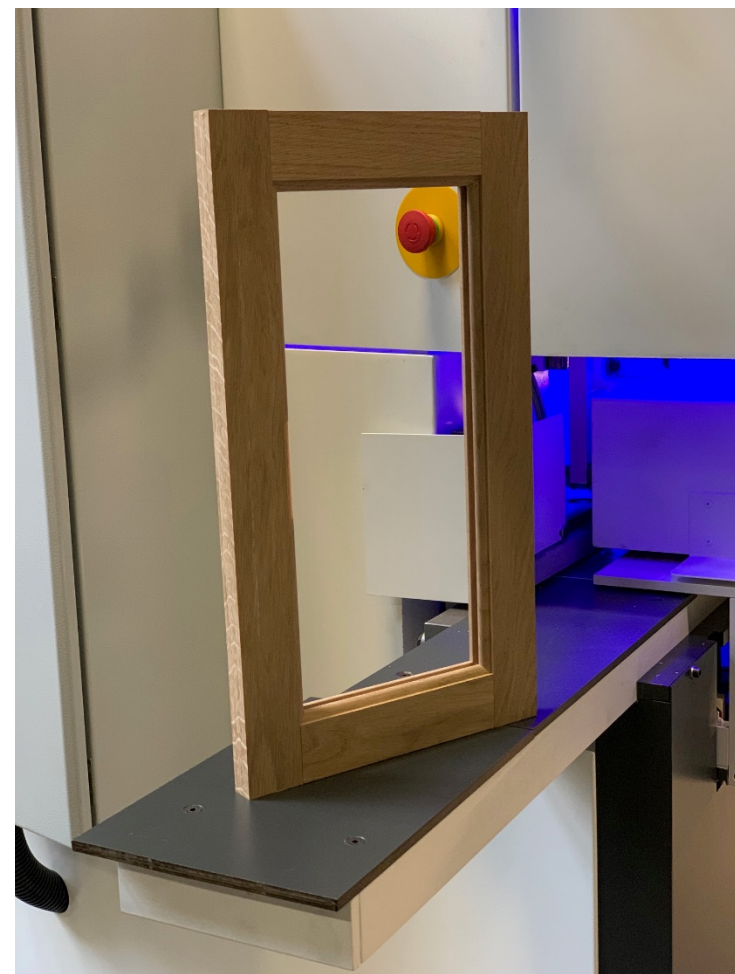
- Profiles settings are save in the PowerControl **TOUCH SCREEN** device
- **ALL** adjustments are CNC, no manual adjustments required.
- **Fast, Easy, Accurate** production of one frame, no batching is needed.



# What are the **BENEFITS?**

## Benefits

- 1) Only requires S4S components. The Profiler takes away any width variations. Therefore a 4-sided moulder is not required.
- 2) Reduces rework and squaring as the accuracy of the length of the stile & rail components is not dependent on the chopsaw's tolerance.
- 3) Small work pieces can be processed accurately and quickly, 1.25" inches wide by 4" inches in length.



## Benefits

- 4) Large onboard tool capacity, holds 10 – 12 tools in one machine. No more need for multiple machines.
- 5) Fully CNC automation means batch size one processing is easy and fast.
- 6) Cost of ownership is less, less electricity, less dust, less floor space required.

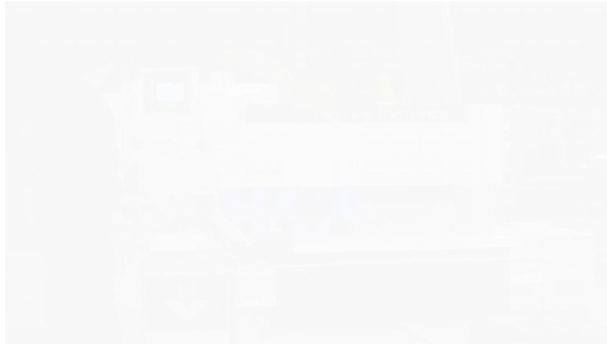


## Benefits

7) Tenoner Processing/Cycle Time: 30 seconds

8) Tenoner Profile change Time: 15 seconds

***Total processing time allows for ONE DOOR every minute.***



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