

# Solutions for the Staircaseproduction





## vision

The proven VISION machining centre already has an impressive track record of success in many demanding applications around the world. And, like all Reichenbacher Hamuel machines, the VISION

features outstanding machine rigidity – the basis for precision machining. These models have been designed to further reduce production costs whilst maximising throughput, delivering high

**Workpieces show  
what the machine  
can do**

performance at an affordable price. It is therefore that these machining centres are suitable for customised component production with short runs. And it has an outstanding cost-performance ratio.



## vision-L

The machine types VISION-L and-U complete the reliable VISION series. A major feature of these machines is that they can be supplied with a choice of

table dimensions and a wide variety of different heads. These features can be combined for single and parallel machining with up to two independent

**All round performance  
by Design**

Y-slides. It is possible to use different working heads next to each other or one behind the other, thanks to the extremely rigid machine construction.

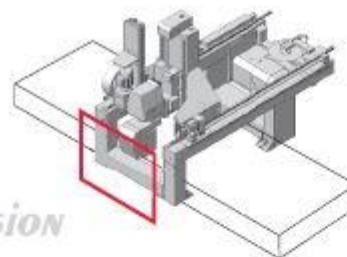


## vision-U

### The system VISION:

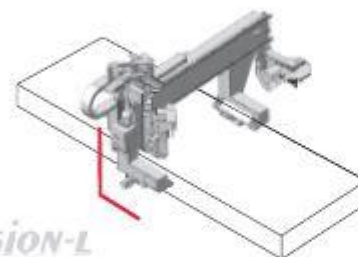
- Leading safety concept of gantry machines still market-leading after 15 years
- Enclosed gantry made of sheet steel with safety bumpers  
→ no pressure sensitive mats  
→ no safety barriers
- One-dimensional safety curtain  
→ Maximum holding capacity by linear alignment
- Safe view to the working process by generously dimensioned windows

# vision



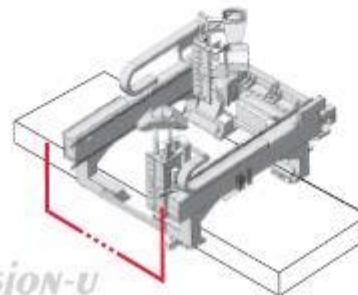
vision

Machines of the VISION series have a machine substructure with a fixed table. The gantry is mounted upon the machine table and carries out the longitudinal motions (X-motions). All head motions are carried out within the enclosed gantry which is equipped with safety bumpers. The main machine components consist of ripped weldments which have an optimal rigidity and/or weight ratio. This allows very high acceleration values.



vision-L

With the VISION-L up to two independent Y-slides for the heads can be mounted one behind the other. This allows a parallel tool change from two tool magazines and synchronous machining of two workpieces one behind the other – for example when 5-axis fork heads are used. The independent heads are mounted on an L-support in Y-direction and guarantee high availability.



vision-U

The VISION-U offers a lot of variants for parallel and single machining thanks to the U-shaped gantry. Thus a tool change parallel to machining is possible with two heads from a chain magazine for example – double tools can be omitted. The use of up to two cardanic 5-axis heads with a wide additional equipment guarantees maximum flexibility, such as synchronous machining of two workpieces which are clamped one next to the other and/or one behind the other.

# VISION II TR





## Machining examples



### String

- Tubeless pod system
- 5-axes-machining of the step slot area
- Curves routed by means of an integrated tracing device  
→ consistent radii at the component



### Steps

- Sawing speed of 40 m/min at a saw blade diameter of 350 mm
- Left-hand and right-hand step clamping device for alternate machining
- Pod system: one central pod  
→ no change required



### Rail / Wreath

- Interpolating 5-axes machining
- Rail is completely machined and separated
- Design and programme established by software companies such as Compass, Wagemeyer, AUCADetail, SEMA Software, etc.

## Table configurations



### Machine table designs

- Table for automatic setup
- Plain table with stops
- Grooved table with stops
- Automatic or manual beam table
- Nesting table
- Pin table



### Options

- Jigs for newel posts and steps
- Pneumatic clamping units
- Clamping units for semi-circular arches
- Stops
- Supporting beams
- Customised solutions



### Advantages of the automatic beam table

- Considerable reduction in setup time
- Guaranteed maximum rigidity and precision
- Fully automatic adjustment (of beams and base) to the next component within a few seconds



## Your PLUS in production

This machine provides three additional routing motors for your staircase production. These units are mounted to the Y-slide and connected to the cardanic head. Each routing motor moves downwards individually and possesses collet chucks.

As a standard, in staircase production a motor (9.0 kW) is used for shaping the outer contours of strings and steps. Another motor (5.7 kW) processes the slots and grooves at the steps and strings. The design of the third routing motor (5.7 kW) with integrated height tracing (float-mounted) permits the manufacture of high-precision profiles at steps and strings. This conception allows for the main processes in staircase production to be attributed to several routing spindles.

Thus, tool changing time is minimised. The utilisation of the main routing motor at the cardanic working head is limited to horizontal and freeform processes, as well as to sawing processes at the steps. Moreover, the tool changing system is still moving along the X-axis next to the main routing motor. Compared to other solutions, in staircase production this machine conception provides for a savings potential of about 20 % in production time caused by a reduction in tool changing time.

## VISION-II-ST SPRINT

### BRIEF DESCRIPTION

- Machine table with 7 beams; table size 6,200 x 1,400 mm
- 2 x jigs for steps
- 12 x double-acting vacuum clamps
- 3 x jigs for newel posts
- 7 x vacuum clamps; 3 x supporting beams
- Speed:  
X = 60 m/min; Y = 60 m/min; Z = 20 m/min
- Displacement: X = 6,140 mm; Y = 1,600 mm; Z = 480 mm
- Gantry passage 400 mm
- 5-axes working unit with a power of 15 kW; 500 – 24,000 rpm
- Clamping unit; HSK-F63
- 3 x individually movable routing motors; 2 x 6.7 kW, 1 x 9.0 kW
- Height measuring by tracing ring
- Automatic plate magazine for 24 tools
- Chip removal belt
- Vacuum pump of 160 m<sup>3</sup>
- Vacuum accumulator of 250 liters
- Vacuum distribution for alternate feeding
- Movable extraction system Ø 400 mm
- Safety at the machine via bumper  
(no pressure sensitive mats required)
- Siemens control system type Sinumerik 640D all  
in a movable control panel with 17" TFT-monitor  
including tele-diagnostics
- Laser projector for positioning the vacuum pods and the  
components on the machine table

# VISION L with TWO 5axis Heads



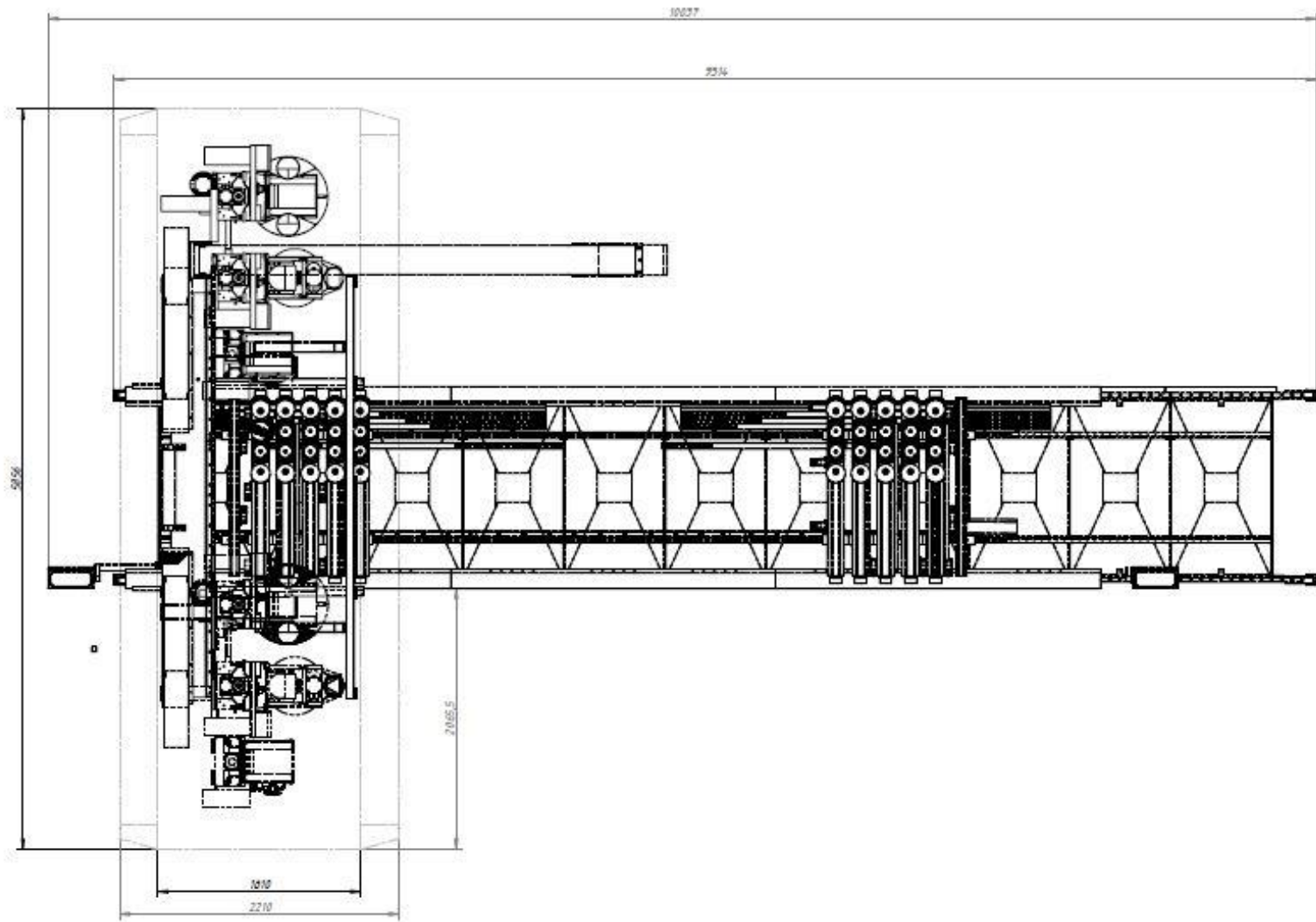




# VISION L with independent Sawing- Aggregat, 5- Axis Spindle and InkJet marking (with C-Axis)



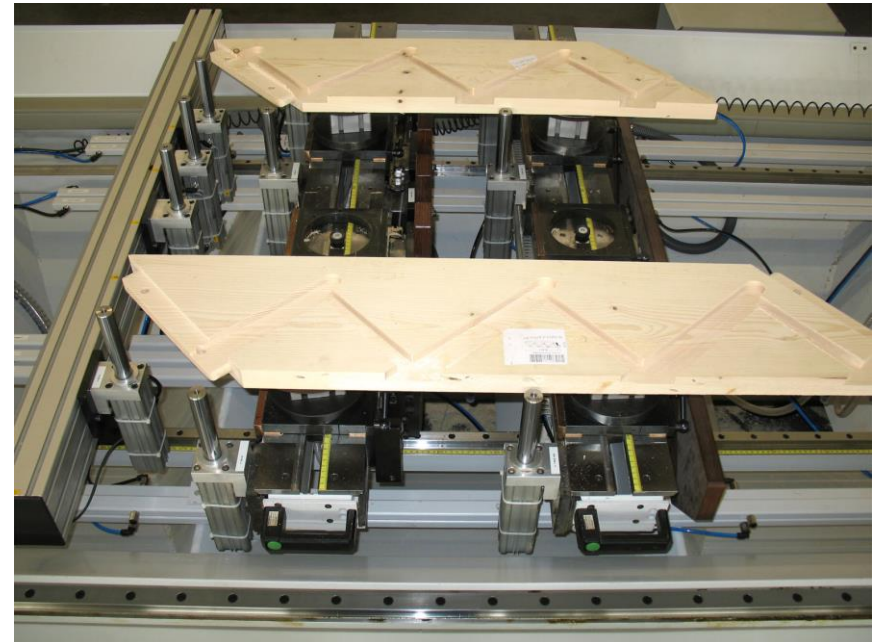




## VISION III, for reciprocally loading of Stringers (12000mm long)









# VISION II, PINTABLE

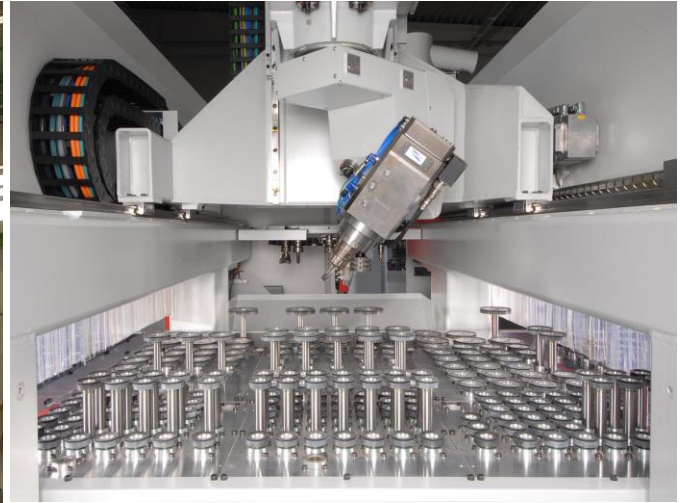








Image 090



Image 115



Image 117



Image 093





Image 105



Image 106

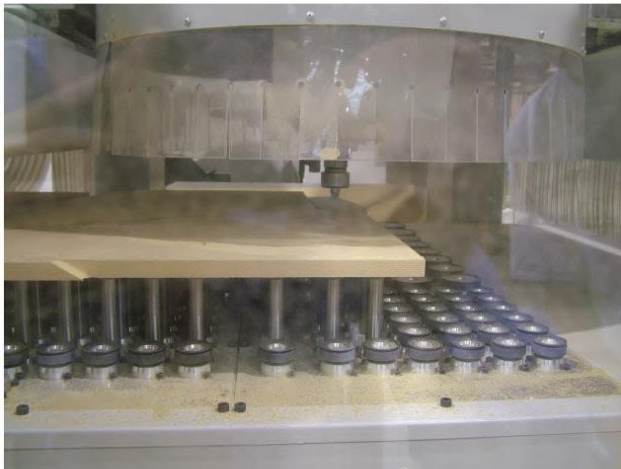
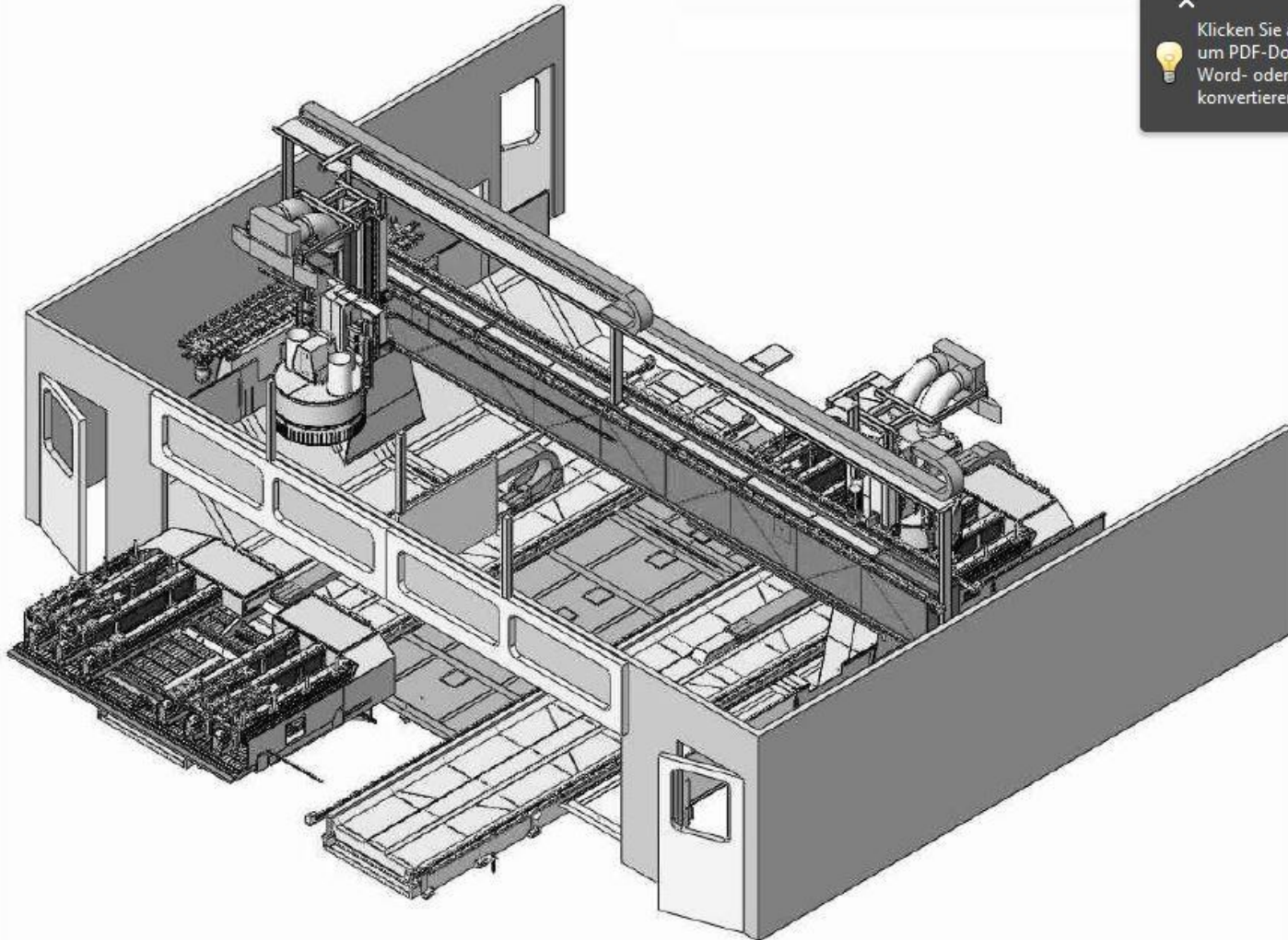


Image 096



Image 097

# ECO



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Klicken Sie auf "W" um PDF-Dokumente Word- oder Excel-konvertieren.

