

CNC-machining centres



Product overview

**HAMUEL**  
**REICHENBACHER**  
*A member of the SCHERDEL group*

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## CNC-technology at its best



### About us:

Located in Germany, Reichenbacher Hamuel offers a wide variety of all-purpose CNC-machining centres for processing timber, plastics and composites. Utilising a modular system, machines are designed to suit small, medium and large firms. Whether it's multi-channel technology for CNC control, or robotic loading of machines, Reichenbacher has the know-how for one-off or mass production.

Reichenbacher Hamuel:

- Specialists with over 50 years of expertise in customised mechanical engineering for timber, plastics, aluminium and composite processing
- Offers systems for complete machining solutions
- Has over 30 years' experience in 5-axes and multi-axes technology
- Develops individual CNC-machining centres and comprehensive solution concepts to a high level
- Strives for consistently high output and excellent availability with the highest mechanical impact on the machines
- Belongs to the SCHERDEL Group which has more than 3,600 employees worldwide

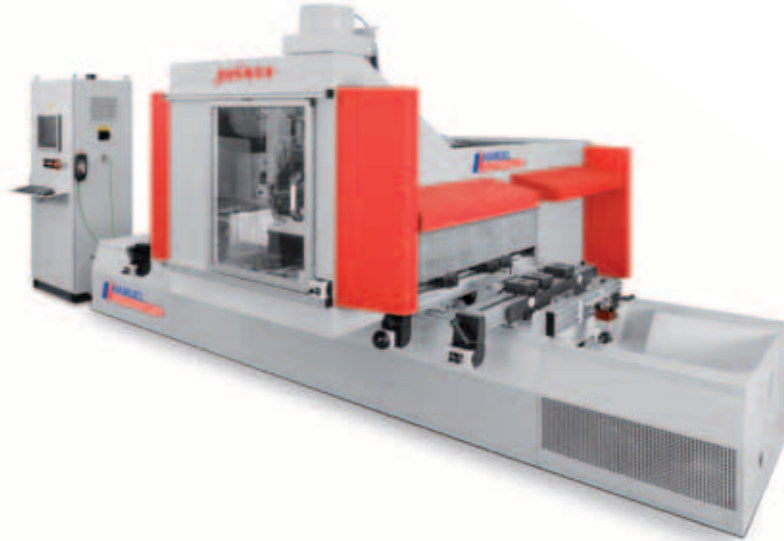
### Colour key – application focus

The colour key will help you to select the correct machining centre for your needs. Pages are marked according to the application focus of each machine.

**W**  
Woodworking

**P**  
Plastics Processing

**A**  
Aluminium Processing



## Universal machine for a small budget – PRIMUS

In its basic design the CNC-machining centre PRIMUS is a 3-axes wood machining centre with a 13-spindle drilling unit. Here, Reichenbacher Hamuel has succeeded in meeting also the requirements of smaller businesses by offering a serial machine at an economic price.

Most needs are covered by the two table designs, namely grooved table and console table. This series will in particular be used for interior fittings and in processing corpus parts, furniture fronts, room doors or plastic parts. Moreover, pneumatically extendable supports and stops are available to facilitate the loading and alignment of semi-finished products on the table.

## Technical features

- Vertical 3- / 4-axes working head
- Performance: 10 kW, 1,000 – 24,000 rpm
- Multi-spindle drilling head with 13 drilling spindles and groove saw
- Tool changer plate with 7 or 14 places (moving along)
- 2 pick-up places in the machine bed (as an option)
- Encased cantilever with safety bumper
- Machine table with HPL or aluminium plate (grooved or plain) or beam table (manual) with 4 – 6 beams
- Table partitioned into 2 vacuum sections (clamping stations)
- Working area (X, Y, Z): 2,800 x 1,100 x 150 mm
- Control Siemens Sinumerik 840D sl





## Flexible CNC - Technology for woodworking – ARTIS

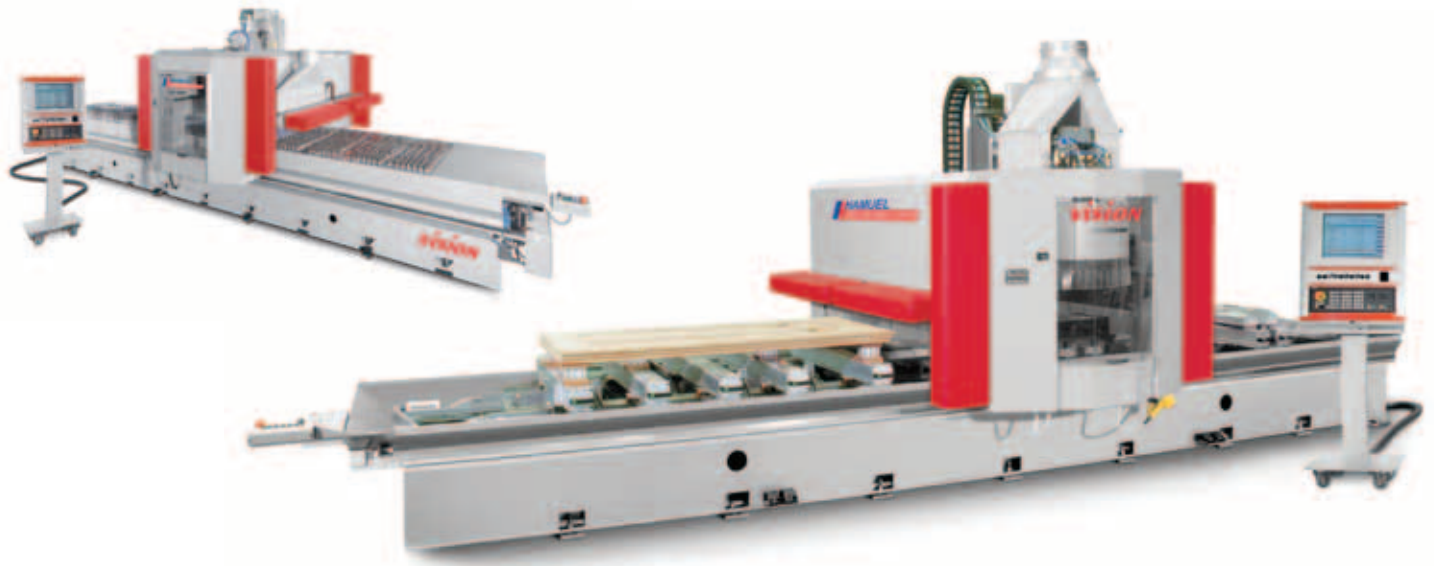
High quality, repeat production and flexibility for small quantities are the typical requirements of most small and medium-sized joinery shops. With the ARTIS X Sprint, Reichenbacher Hamuel satisfies the demand for an efficient, flexible machining centre which provides a high performance at an affordable price.

Short set-up times, a variety of machining options and ease of operation are essential requirements for increased production efficiency in businesses where investment in technology is often limited to a few important purchases.

## Technical features

- Cardanic 5-axes working head
- Performance: 14 kW, 1,000 – 24,000 rpm
- Multi-spindle drilling head with 15 or 25 drilling spindles
- Tool changer plate with 22 places or chain magazine with 36 places (moving along)
- 1 pick-up place for saw blades up to  $\varnothing = 350$  mm (moving along)
- Encased cantilever with safety bumper
- Machine table with HPL or aluminium plate (grooved or plain) or beam table (manual or automatic) with 6 – 8 beams
- Table partitioned into 1 – 4 vacuum sections (clamping stations)
- Working area ARTIS X4 (X, Y, Z): 4,000 x 1,400 x 400 mm
- Working area ARTIS X6 (X, Y, Z): 6,000 x 1,400 x 400 mm
- Control Siemens Sinumerik 840D sl





## Workpieces show what the machine can do – VISION

Equipped with a cardanic working head, the capability of the VISION is extended to provide small to medium-sized joinery companies and shop fitters with the potential for unique design diversity and a low-priced entry into three-dimensional machining.

With an excellent combination of low price and high performance, the VISION Sprint provides the opportunity to minimise production costs for high-quality workpieces – making quality affordable.

## Technical features

- Vertical 3- / 4-axes working head or cardanic 5-axes working head
- Performance: 15 – 55 kW, 1 – 16,000 or 24,000 rpm
- Various multi-spindle drilling heads with 5 to 21 drilling spindles
- Special units (e.g. label printer, metering of adhesives, etc.)
- Tool changer plate with 12 or 24 places or chain magazine with 40, 60 or 80 places
- 1 pick-up place for saw blades  $\varnothing = 400 - 800$  mm (moving along)
- Encased 4-column portal with safety bumper
- Machine table with HPL or aluminium plate (grooved or plain) or beam table (manual or automatic) or special table
- Table partitioned into various vacuum sections (clamping stations)
- Examples for the working areas of the different types of machinery:  
 VISION I (X, Y, Z): 3,700 x 1,500 x 400 mm  
 VISION II (X, Y, Z): 6,100 x 1,500 x 400 mm  
 VISION II-H (X, Y, Z): 6,100 x 1,500 x 700 mm
- Control Siemens Sinumerik 840D sl





## All-round performance by design – VISION-U/L

To meet the market challenges of today, and tomorrow, we have developed two new VISION models: the VISION-U and VISION-L. These highly-dynamic machining centres have been designed to further reduce production costs whilst maximising throughput. 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 Y-slides.

Thanks to the extremely rigid machine construction, it is possible to use different working heads side by side, or one behind the other. For instance, two large 5-axes heads, with comprehensive additional equipment, could perform many diverse operations.

## Technical features

- A multitude of versions for parallel and individual machining based on a U-shaped portal equipped with several independent Y-slides
- Several vertical 3- / 4-axes working heads or 2 cardanic 5-axes working heads
- Performance: 15 kW or 24 kW, 1 – 24,000 rpm
- Various multi-spindle drilling heads or special units
- Special units (e.g. label printer, metering of adhesives, etc.)
- Tool changer plate with 12 or 24 places or chain magazine with 40, 60, 80, 120 places
- 1 pick-up place for saw blades  $\varnothing = 400$  mm (moving along)
- Machine table with HPL or aluminium plate (grooved or plain) or beam table (manual or automatic) or special table
- Table partitioned into various vacuum sections (clamping stations)
- Working areas of the different machine sizes:  
see VISION (page 9)
- Control Siemens Sinumerik 840D sl





## Well prepared for the future – VISION RC

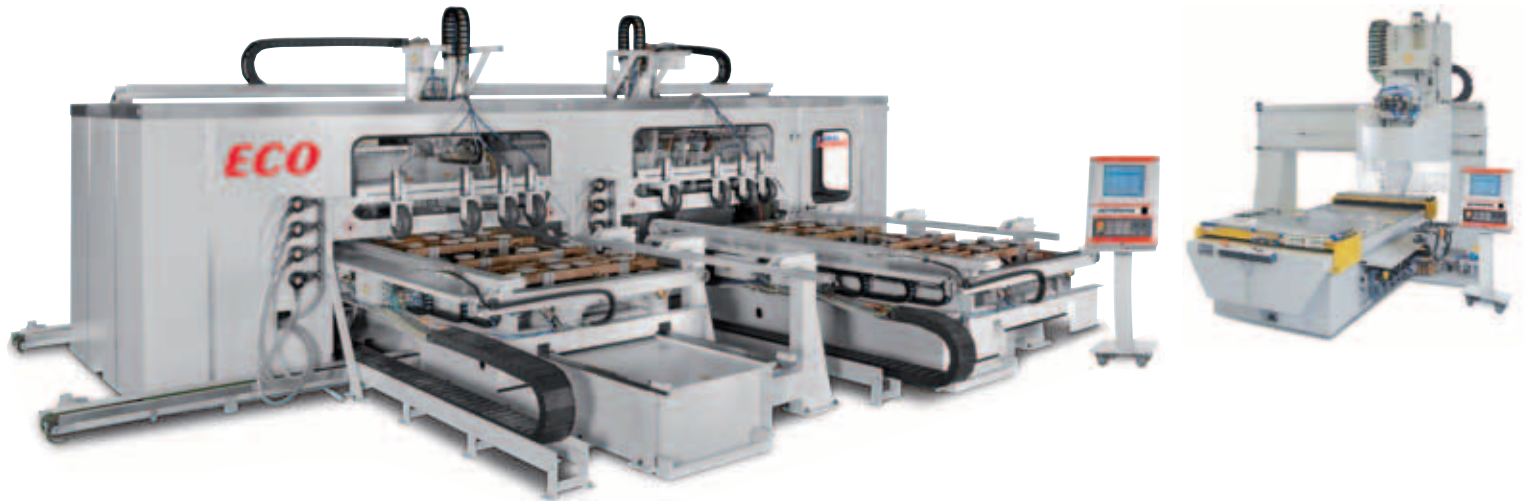
The ultramodern CNC-machining centre VISION-RC is equipped with a new kind of single-head system. The heart of this innovative system is a very stable and rigid working head. For wood machining in industrial and medium-sized companies in particular, the VISION-RC thus offers high-precision and fast component processing. Moreover, it is apt for machining aluminium, plastics and composites, and can – even after several years – be expanded and optimised to suit exactly the actual requirements and desired utilisation. This means that the machine virtually grows along with the company.

High-quality components warrant for the machine's longevity, e.g. exclusively user-friendly control systems of Siemens make are installed. A separate service module with graphical user interfaces permits a simple fault diagnosis. The manifold possibilities of combining the individual assembly groups guarantee that the respective customer requirements are met in an optimum way.

## Technical features

- Cardanic 5-axes working head
- Performance: 15 kW or 24 kW, 0 – 24,000 rpm
- Multi-spindle drilling head with 19 drilling spindles rotating around the C-axis
- Tool changer plate with 24 places or plate tower magazines with 96 places and tool shuttle for quick change (as an option)
- Efficient extraction hood that swivels relative to the spindle
- Encased 4-column portal with safety bumper
- Machine table with HPL or aluminium plate (grooved or plain) or beam table (manual or automatic) or special table
- Table partitioned into various vacuum sections (clamping stations)
- Working areas of the different machine sizes:  
see VISION (page 9)
- Control Siemens Sinumerik 840D sl





## A synonym for flexibility – ECO

With the ECO CNC-machining centre, Reichenbacher Hamuel have utilised all their know-how and experience in high performance machine construction to develop a series that offers the highest levels of flexibility and productivity. The vibration-free gantry has two or three supports, depending on table size, and two or more aggregate slides which perform the transverse and vertical movements of the working heads.

Depending on production demands, the ECO can have one or two machining units that can be controlled by separate NC-channels. The basic machine can be supplied with movable single or twin tables with the option of additional tables to enable set-up work to be carried out whilst the machine continues production.

## Technical features

- One or several vertical 3- / 4-axes working heads or cardanic or fork-shaped 5-axes working heads
- Performance: 15 – 55 kW, 1 – 16,000 or 24,000 rpm
- Various multi-spindle drilling heads
- Special units (e.g. label printer, metering of adhesives, etc.)
- Tool changer plate with 12 or 24 places (moving along or fixed)
- Machine table with HPL or aluminium plate (grooved or plain) or beam table (manual or automatic) or special table
- Table partitioned into various vacuum sections (clamping stations)
- Alternate machining on two independent tables, which can also be coupled to work synchronously
- Working areas as per customer requirements
- Multi-channel technology
- Control Siemens Sinumerik 840D sl





# ECO-NT



## Extremely easy to handle – ECO-NT

With the ECO-NT series Reichenbacher Hamuel sets new standards in the machining of plastics, aluminium and composites: Perfect 5-axes machining and universal applicability are combined with maximum operator convenience and very compact design.

Due to the fixed machining table on a solid substructure, and the very high Z-axis, all routing processes can be performed with absolute contour accuracy, highest surface quality and precision. Machining is possible from all sides, allowing the workpiece to be fully machined in a single operation. With reciprocal operation, each side can be loaded independently. If a larger working area is required, for the machining of longer parts for example, the centre partition can be removed to double the working area.

## Technical features

- One or two fork-shaped or cardanic 5-axes working heads for the efficient 6-side complete machining of form parts and profiles
- High-frequency spindle with 4.6 kW, 3,200 – 60,000 rpm or spindle with 15 kW, 0 – 24,000 rpm
- Tool changer plate with 8, 12 or 24 places that moves along
- Machine table with steel bars (threaded and fitted bushings) in tubular frame design
- Examples for working areas with various equipment:  
ECO-NT 1K (X, Y, Z): 3,600 x 1,000 x 700 mm  
Alternate machining (X, Y, Z): 2x 1,500 x 1,000 x 700 mm  
ECO-NT 2K (X, Y, Z): 4,800 x 1,000 x 700 mm  
Alternate machining (X, Y, Z): 2x 2,000 x 1,000 x 700 mm
- Control Siemens Sinumerik 840D sl



**NEW!**



## A completely new sensation – ECO-RS

The ECO-RS is one of the most recent machines developed at Reichenbacher Hamuel and available in two different sizes. Installation and start-up of the machining centre are as simple as never before, as almost all parts have been fixed to the machine and need not be removed for transportation or relocation.

The special feature of the new series is the way how the components are fed into the machine. The ECO-RS is of the inclined-bed type, meaning that the table is fixed to the machine in an almost vertical position and can be swivelled. The components are fed into the machine from the front, while machining takes place in the machine's interior.

As the table is inclined by 12°, the components are no longer placed and clamped horizontally, but almost vertically. Once the components are in place, the table will be swivelled by 180°. Here, safety is ensured by a scanner that covers the entire area. Thus, the operator will no longer have to wait for doors to open or similar things.

## Technical features

- One or two 5-axes working units that can be tilted by up to 44° and equipped with various head versions (star-shaped head with 3 milling spindles of 3.5 kW, each, or 3 milling / sawing spindles of 6.4 kW, each, or spindle for tool change with HSK-E32)
- Tool changer plate with 12 places moving along the X, Y and Z axes
- Integrated chip conception with chip removal belt and ascending conveyor
- Fully encased milling machine with rotary table and inclined machine bed (thus maximum working area at minimum base area)
- Working area ECO-RS 1 (X, Y, Z): 1,750 x 1,000 x 400 (550) mm
- Working area ECO-RS 2 (X, Y, Z): 2,150 x 1,500 x 600 (750) mm
- Space requirements ECO-RS 1 (X, Y, Z): 5,700 x 2,300 x 2,700 mm
- Space requirements ECO-RS 2 (X, Y, Z): 6,700 x 3,000 x 3,600 mm
- Control Siemens Sinumerik 840D sl with operator surface HMI Operate



## Customised solutions



### High-tech machining centre for efficient door production from one-off to mass production

The nucleus of the production cell is a VISION II U T-Sprint with two 5-axes machining heads, a 60 place chain magazine and two automatic lifting portals. Workpieces are machined on a through-flow machining table.

The process operation is facilitated by a twin channel control system which ensures that whilst working head 1 is machining, working head 2 is simultaneously selecting the next tool, and vice versa.



### Four machines in one – no downtime for the automotive industry

The ECO 2830 C, with a three-sided gantry, has two independently moving machining tables on a solid substructure. Multi-channel technology allows different machining groups to be individually combined.

Four routing spindles, with a 12 place tool magazine, are mounted at the front of the gantry. At the rear the machining group consists of two 14 kW 5-axes working heads with a lateral multi-spindle drilling head with 25 drilling spindles.



### Machining centre with linear drive for the highest precision and dynamics for machining composites

The rugged construction of the ECO 3117 A is undeniable. The bridge gantry and the machine bed are filled with special concrete for vibration absorption.

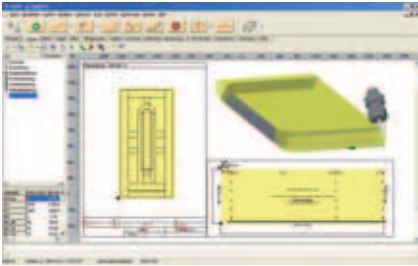
The X-axis achieves a feed rate of 120 m/min – a revolution in dynamics and precision. The position of the routing spindle, calibration of the clamping device position, and measuring of parts, and their position on the machine, are ensured by a Renishaw tracing head with IR-transmission.



## NC-HOPS

Using NC-HOPS as a CAD/CAM solution allows fast visual development of dynamic parts. Thanks to the machine neutral workpiece description, time-consuming movements, positioning processes and special functions do not need to be programmed at the machine.

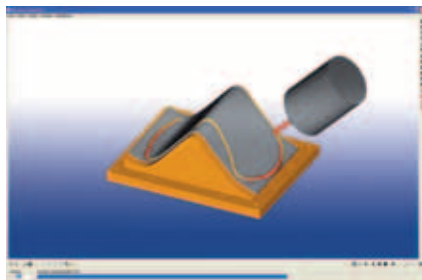
Tool specific safety clearances, movement clearances and feed rates guarantee a high level of safety. The integrated 3D-view shows running movements, tool position and displays the workpiece clearly. With its flexible software architecture, NC-HOPS offers optimum solutions for craft and industry.



Door frame elements with 5-axes machining and layout, programmed in NC-HOPS

## Licom AlphaCAM

is a modular CAD/CAM system for timber and plastics processing. The emphasis lies on programming on solid models, graphic parametric, excellent nesting solutions and much more, from the 2.5D up to 5-axes routing.



5-axes trimming with the tool edge, programmed in AlphaCAM



## Our application technology – your management consultant

The market is our customer. Customer service is crucial to our success. Only customer contact provides feedback about the success of our products. This is an extremely important incentive for our development and production team. Our application engineers are the interface between software and machine.

- Which unit matches your needs?
- Which tools are suitable?
- How can you increase quality and speed up your processes?
- Which system will provide the best result?

We will be pleased to advise you on the appropriate, efficient and safe use of our CNC-machining centres.

## The customer is our centre point:



# Service



## Professional all-round CNC service

Our machining centres are well-known for high capacity and availability, long life and outstanding ease of operation, installation and service. To help you make the most of all these benefits our service centre is available to you. This service centre provides a worldwide after sales service for Reichenbacher Hamuel machines.

### After sales service:

You can contact our after sales service from

**7:00 am to 17:00 pm on:**  
**+49 (0)9561-599-300**



### Premium Service:

Hotline available:

**Mon – Fri from 5.00 pm to 10.00 pm and**  
**Sat – Sun from 8.00 am till 4.00 pm**

- Guaranteed response within 24 hours
- Free-of-charge Tele-service via modem
- Technicians also available on weekends
- Guaranteed spare parts and immediate dispatch

You will receive an authorisation number for the Premium Service together with your service contract.

### Preventive maintenance

There is nothing worse than a machine breakdown – which always happens when everything is urgent!

In order to prevent this, we offer our customers fixed price maintenance at specified intervals. The intervals are individually determined depending on machine use. Machines are checked and evaluated by a specialist and the results are documented. This way the current state of wear can be determined and a breakdown avoided by taking specific measures.

## Tele-service

The service centre and the machine, or production main computer, are connected via modem.

- Faults can be found quickly and unnecessary service operations avoided
- Programming or operating errors can be eliminated immediately
- The correct spare parts can be ordered
- If mechanics or electrics/electronics are affected, precise steps for the error correction are started

## Customer training

It is in your own interest to have qualified operators for your high-tech machines. Thorough training helps to motivate staff and also delivers a number of other advantages:

- Better skilled operating staff
- Shortened commissioning time for the machine
- No downtime due to improper operation
- Full production output as soon as possible
- No unnecessary tests with expensive material

## Retrofit

Modernisation, or retrofit, of machines is the solution for many users to give their machines a “second life”. In order to find a cost-effective solution for our customers we have investigated the possibilities of replacing the old control technology separately, or together with the drive system. In cooperation with Siemens AG, our service and development department has found several cost-saving and practical solutions.

Modernisation of the machine brings significant advantages:

- Increased availability and productivity
- Easier operation and programming
- Fast machining cycles for complex parts
- Higher accuracy and memory capacity
- Reduced downtime
- Guaranteed long term availability of spare parts

# Contact

## Hamuel Reichenbacher Group

Reichenbacher Hamuel GmbH is a part of the business association Hamuel Reichenbacher. Further members are the HAMUEL Maschinenbau GmbH & Co. KG and the Hamül Maschinenbau Plauen GmbH & Co. KG. These three companies act as Hamuel Reichenbacher. As a customer, you benefit from the synergy effects of this partnership.

### TIMBER, PLASTICS AND ALUMINIUM PROCESSING

#### Reichenbacher Hamuel GmbH

Rosenauer Straße 32 Phone: +49 (0)9561-599-0 info@reichenbacher.de  
96487 Dörfles-Esbach Fax: +49 (0)9561-599-199 www.reichenbacher.de

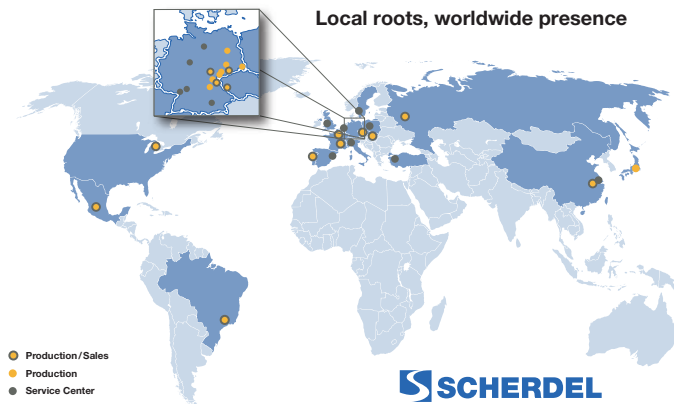
### METAL PROCESSING

#### HAMUEL Maschinenbau GmbH & Co. KG

Industriestraße 6 Phone: +49 (0)9566-9224-0 info@hamuel.de  
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## SCHERDEL group of companies

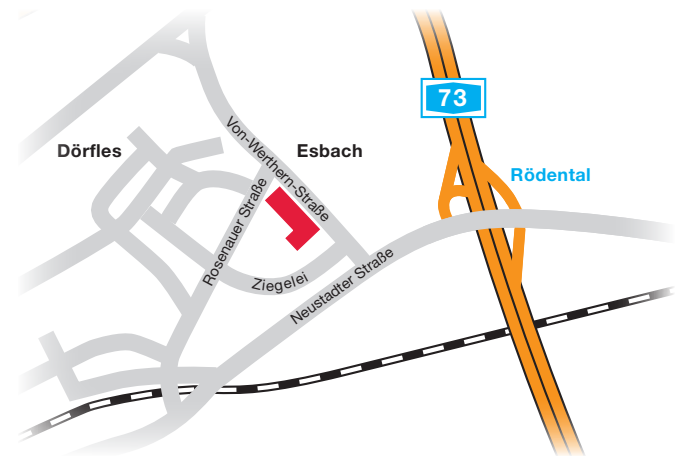
The SCHERDEL group of companies with its headquarters at Marktredwitz in the North-East of Bavaria has gone global featuring 29 locations with 37 production sites and more than 4,000 employees. The members of the SCHERDEL group offer to the market a wide range of products and services.



## How to find us



The Reichenbacher Hamuel GmbH factory is in Dörfles-Esbach, north east of Coburg.



CNC-Technology at its best



*A member of the SCHERDEL group*

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