

# MAKA twin

## Technical data

<b>Details</b>	
Controller	Siemens 810 D
<b>Working units</b>	
Routing spindle	universal unit HSK F 63, water-cooled, 11 kW, infinitely variable speed regulation up to 24,000 rpm
Multiple-spindle drilling unit optional	in L shape, 9 vertical spindles, individually selectable swivelling grooving saw with 1 integrated horizontal double drilling spindle, 0° and 90°, or multiple spindle drilling unit with 13, 16, 19 spindles incl. integrated horizontal double drilling spindles in X and Y and integrated grooving saw
Extraction	extraction hood mounted to the working unit, connection 1 x 300 mm
Axis drives	X-axis recirculating ball screw Y axis gear rack Z axis recirculating ball screw
Machine table	vacuum matrix tables / plane top tables (1,600 x 1,600 mm)
Clamping station	2 vacuum clamping circuits, 1 control circuit per table
Safety guard	safety bumpers mounted to the tables and the gantry lamella curtain at the entrance area of the tables safety guard with door at the rear side of the machine (optional)
<b>Working area in 3-axis operation</b>	
Condition main spindle	tool dia. 20 mm, total tool length 130 mm X = 2 x 1,540 mm (stop size), Y = 1,540 mm (stop size), free passage width Z 250 mm
<b>Machining capacity</b>	
Carbide roughing cutter Ø 20 solid wood beech	feed rate 8 m/min routing depth 55 mm
<b>Travel speeds</b>	X = 80 m/min, Y = 80 m/min, Z = 24 m/min
<b>Tool magazine</b>	
Data	drum-type tool magazine, horizontal, 10 tool places (optional 16), total tool length 130 mm, tool diameter with assorted deposit max. 160 mm, max. tool weight 6 kg, deposit of angular heads is possible
<b>Installation details</b>	
Machine weight	approx. 10.000 kg with a Y axis stroke of 1,600 mm
Required space with usable length 6,000	approx. 5,100 mm x 5,700 mm x 2,700 mm (l x w x h) without front operating area, see foundation plan

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# MAKA twin



CNC Universal Machining Centre  
for the machining of wood,  
wood derived material,  
plastics & composite material

# Competence by experience

## The company

MAKA – Max Mayer Maschinenbau GmbH – is an owner-managed company, deeply rooted in the Swabian machine building tradition, with a workforce of around 170. MAKA can draw on almost 50 years of experience in mechanical engineering and over 25 years of experience in the building of CNC machines, putting it at the cutting-edge of this technology for woodworking, aluminium machining as well as plastics and composites processing.

In addition we also supply solutions which are of a great response by manual workers and industrial producers at the same time. Be it manufacturers of motor vehicles, aircraft, rail vehicles, boats, facade construction as well as furniture, doors and stairs construction and moreover in the field of deep-drawn components or acrylic glass – top name manufacturers in these sectors all use high-speed machining centres.

The application of 3- and 4- axes technics enables the standardized CNC-machining centers **MAKAtwin** and **MAKAmove** to provide a great variety of possibilities of processing and convince by productivity and flexibility.



## Company philosophy

Our products are continually improved, gaining technical maturity in long-established development processes. This capability is the result of continuous creativity. The CNC machining centers **MAKAtwin** and **MAKAmove** are completely featured by MAKA and manufactured in a foreign production site. All important features are produced in Europe which ensures the high MAKA quality demand.

Under the service principle of “everything from one source” MAKA aftersales service personnel are available through a hotline service to look after MAKA CNC special machines all over the world – even on Saturdays. Their activities cover the machine’s control system and electronics as well as its mechanical parts. Availability of all spare parts is guaranteed for 10 years, which is a great advantage for customers.

Closeness to our customers is part of the MAKA service. Representatives in Germany and abroad have experienced CNC specialists available to advise customers, our comprehensive customer-oriented consulting service drawing on years of experience and a high level of technical know-how.

In addition, the well equipped demonstration centre in Nersingen provides further support for our comprehensive consulting service, while MAKA can also organize visits to reference projects, if required.

## Areas of business

### Woodworking

Be it for machining building elements such as windows, doors and stairs, or for components for furniture manufacturers, interior finishing, vehicle manufacture and wood products – MAKA woodworking machines **MAKAtwin** and **MAKAmove** are used in all these sectors, evidence of MAKA’s first-class reputation as a manufacturer of CNC machines.

### Plastics processing

Plastic panel processing is a market segment where e.g. manufacturers of filtration panels or panels for technical application successfully make use of MAKA machining centres. The machining centres are well-known for their extraordinary routing performances with utmost precision and allow a big variety of processing possibilities.

### Composites

MAKA CNC machining centres are moreover applied for compound and sandwich material processing, rounding off the diverse range of potential applications. MAKA CNC special machines are also appreciated by firms in diverse areas due to their reliable and easily-applicable equipment of the high level of MAKA technics.



# MAKA twin

## Range of applications

The universal machining centre **MAKAtwin** with stationary gantry, tandem tables and with 3 and 4-axis technology has been designed for a huge variety of woodworking operations and for the machining of plastics and composite material, as well.

This series is best suited for manufacturers of interior fittings as well as for suppliers for furniture industry, for manufacturers of kitchen panels, stairs, doors, windows, filtration panels and plastic panels for technical applications.

The design of this series is based on a field-proven concept. The rigid construction of this stationary gantry machine in combination with a high-duty working unit allow first-class routing results with high travel dynamics.

A high safety standard is guaranteed by positioning the machining operations in the rear side of the machine. Manufacturers profit from the top price performance ratio.



### Routing spindle

As standard spindle we offer HSK F 63 with 11 kW



### Multi-spindle routing unit

In L-shape, 9 spindles, individually selectable



### Tool magazine

Drum-type tool magazine with 10 magazine places



### Machine table

vacuum matrix tables / plane top tables

