



CNC Special Machines

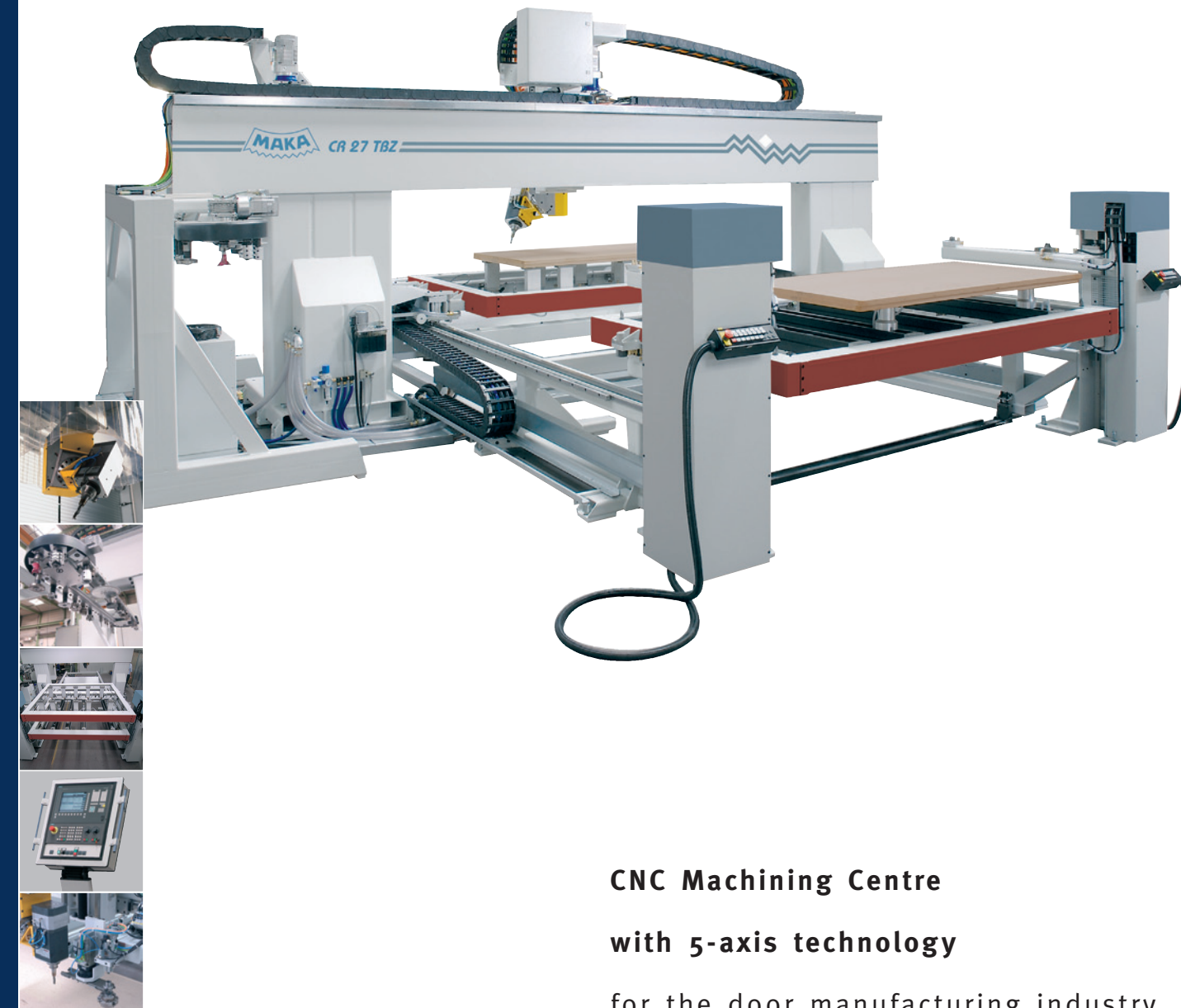


CNC Special Machines

### Technical Data CR 27 TBZ

<b>Details</b>	
Controller	Siemens 840 D, Solution Line with integrated PC in mobile panel
Routing spindle	HSK F 63, water-cooled, power max. 16 kW infinitely variable speed regulation up to 24,000 rpm
Working unit	universal robot unit with Z axis stroke 800 mm, A 540°, B +/- 98°, A/B arranged at an angle of 50°
Extraction	swarf collecting basket, vertically adjustable via CNC, connection 1 x D 300
Axis drives	X axis toothed rack Y axis toothed rack Z axis recirculating ball screw
Machine table	2 pallet tables with vacuum clamping device
Loading	automatic via robot or manual loading, with safety mats
Protection facility	safety guard with 2 access doors at the rear side
<b>Working area in 5-axis operation</b>	
Condition	tool dia. 160 mm, total tool length 160 mm X = 2,500 mm, Y = 1,400 mm, Z = 100 mm alternative X = 2,800 mm, Y = 1,400 mm, Z = 100 mm
Travel speeds	X = 100 m/min, Y = 100 m/min, Z = 55 m/min, A/B = 10,000 °/min
<b>Travel dynamics</b>	
Acceleration	X, Y, Z rapid motion 3 m/sec <sup>2</sup> , operation feed 1,5 m/sec <sup>2</sup>
<b>Tool changer</b>	
Data	chain-type tool magazine, 51 magazine places, C:C 99 mm max. dia. 450, total length max. 280 mm max. tool weight 6 kg saw blade dia. 450 mm occupies 5 tool places
<b>Installation conditions</b>	
Machine weight:	approx. 10,000 kg with Y axis stroke 1,500 mm
Required space:	approx. 7,500 x 8,300 x 3,600 (w x d x h) incl. operation and safety space

# CR 27 TBZ



Subject to technical alterations. 05/2007/3265/500

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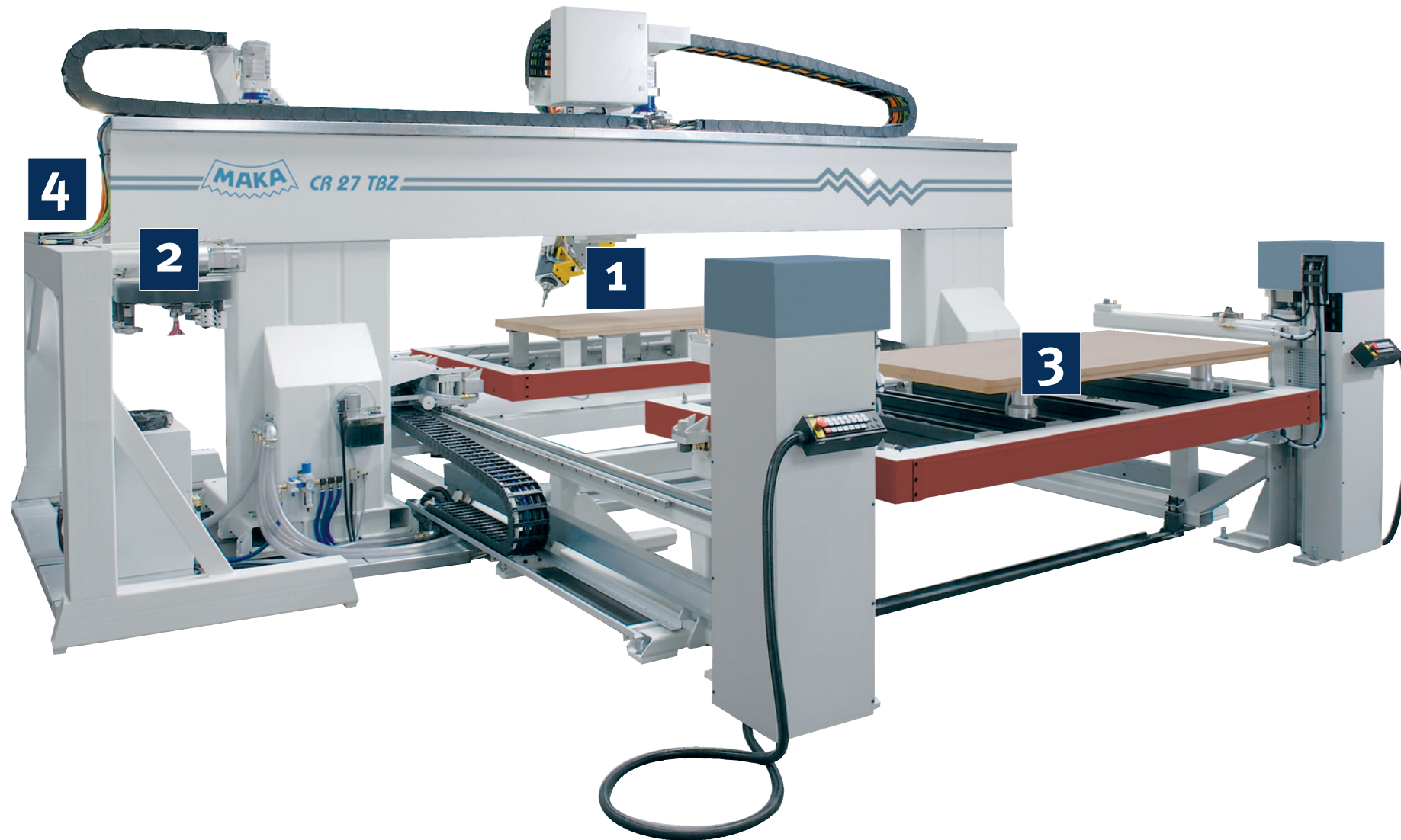
**CNC Machining Centre  
with 5-axis technology**

for the door manufacturing industry

# CR 27 TBZ

## CNC Machining Centre with 5-axis technology

for the door manufacturing industry



### Fields of application

The advancement of the CNC door machining centre offers a novelty of technical solutions. It is a long time since the first door machining centre was built in 1963 – today MAKA machines reflect an unrivalled level of competence and experience in the field of 5-axis technology. Beside quick tool change and total shuttle table flexibility this universal CNC machining centre embodies the optimum integration of robot features.

field-proven 5-axis technology in one machining cycle. This stationary portal machine enables high travel dynamics and thus stands for first-class routing results. A special tool place for a saw blade with a max. dia. of 450 mm can be optionally provided in the chain-type tool magazine. A vertically adjustable dust and swarf collecting basket reduces the emission of swarf and small particles.

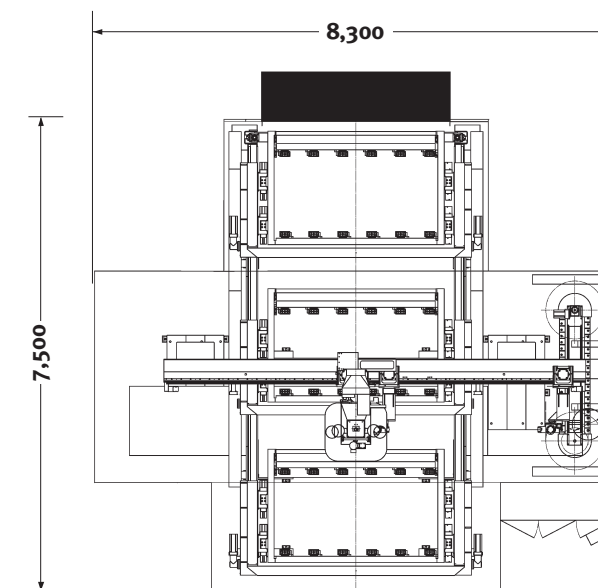
Dynamic rigid design, a high-duty routing unit and a large tool magazine permit complete machining performances of

### Required space

approx. 7,500 x 8,300 x 3,600 (w x d x h)

### Machine weight approx.

10,000 kg with Y axis stroke 1,500 mm



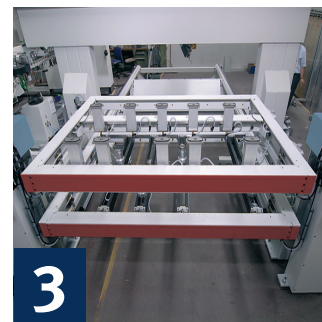
### 1 Routing unit

As standard spindle we offer HSK F 63. Other spindles available on request



### 2 Tool magazine

Chain-type tool magazine with 51 magazine places



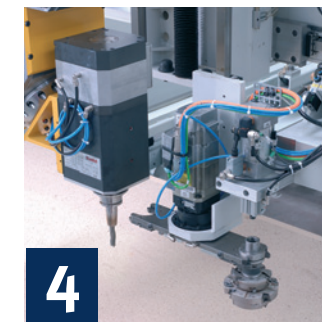
### 3 Machine table

Two pallet shuttle tables with vacuum clamping device



### CNC controller

The new Siemens 840 D, Solution Line



### 4 Toolshuttle

Tool change via shuttle with an operating speed of 150 m/min

Thanks to new technologies, cycle times have been extremely minimized, enabling an output that was realizable in former times with multiple-spindle machines, only.