

# DR. FRITSCH

## SONDERMASCHINEN

### Segment Brazing Machine

### CBM 300



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## Technical Specification

### CBM 300

for brazing segments onto saw blades and gang saws (option)

#### **ESSENTIAL CHARACTERISTICS**

- for saw blades from  $\varnothing$  200 mm (with a segment height of 10 mm) up to 2000 mm (pit required as of  $\varnothing$  1500 mm)
- fully automatic cycle
- improved working height thanks to an ergonomic arrangement of belt-type magazine, solder feeder and inductor.
- recently developed high-frequency generator based on semiconductor technology (10 kVA); high efficiency, automatically adjusted output power
- intuitive handling thanks to an improved touch panel
- precise temperature measuring and control device with an optical pyrometer
- optimal brazing result thanks to an adjustable pressing of the segment
- improved brazing joint for sandwich blades through heating-up of the blade without segments
- improved brazing cycle via max. 3 heating ramps
- shorter cycle and change-over times

#### **OPTION**

- adaptor to braze gang saws
- cooling unit

#### **DESIGN AND FUNCTIONING**

- a ruggedly welded machine frame
- vertical diameter adjustment via spindle
- belt-type magazine for segments
- gripper system for positioning the segments for the brazing and cooling process
- adjustable contact pressure of the gripper
- holding fixture and pneumatic feeding unit for silver solder
- electric drive for blade rotation with fork-type light barrier (slot width min. 0,3 mm)
- contact copper cooling cheeks for cooling the blank
- temperature measuring and control device with optical pyrometer
- central operating panel and programmable control
- high-frequency generator based on semiconductor technology

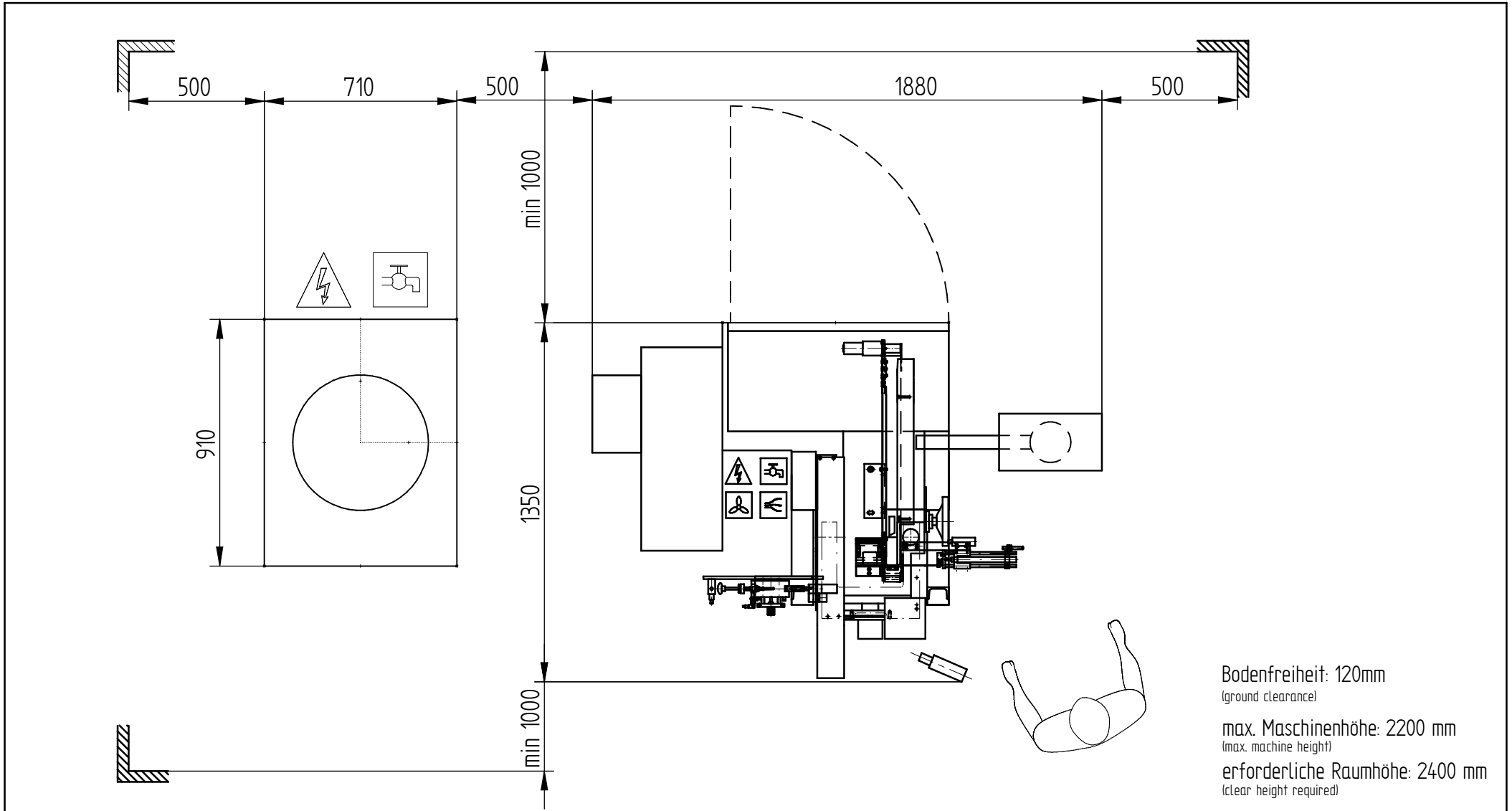
The blank is vertically clamped into the machine. The diameter adjustment is done by means of a spindle at the blank in vertical direction so that the brazing position always remains in constant working height.

The segments are stacked in a belt-type magazine. When the brazing process starts, a segment and the corresponding portion of silver solder are put on the blank. Afterwards, the brazing process starts automatically according to the parameters entered before. Then, the blank turns on to the next tooth and the process already described starts again until the whole blank has been brazed.

## **TECHNICAL DATA**

Total connected load:	14 kVA
Supply voltage:	3 x 400 V, 50/60 Hz Other voltages upon request.
Nominal power:	3 x 20 A
Fuse protection: (provided by the customer)	3 x 25 A
Cooling water:	
- pressure:	4 – 6 bar
- consumption:	approx. 25 l/min.
- temperature:	15 – 25 °C
Compressed air:	
- consumption:	approx. 250 l/min., depending on the process
- pressure:	4 – 6 bar
Suction:	provided by the customer
- connection:	connection piece Ø 50 mm
- air flow:	approx. 600 m <sup>3</sup> /h
Diameter range:	200mm (with a segment height of 10 mm) - 2000 mm (pit required as of Ø 1500 mm)
Segment dimensions:	length: 20 - 50.8 mm thickness: 1.8 – 12 mm height: 5 - 25 mm
Dimensions of the machine (without saw blade):	length: approx. 1.315 mm (approx. 1.880 mm with an operator panel tilt out depth: approx. 1.350 mm height: approx. 2.200 mm
Weight:	approx. 950 kg

- Technical data and design are subject to modifications -



Bodenfreiheit: 120mm  
(ground clearance)

max. Maschinenhöhe: 2200 mm  
(max. machine height)

erforderliche Raumhöhe: 2400 mm  
(clear height required)

Symbol	Bedeutung ( meaning )	Symbol	Bedeutung ( meaning )	XX cm — —	DFT029069.dft ASM029067.asm		<b>Aufstellplan</b> floor plan
	Elektrik ( electrics )		Gas ( gas )			Datum	
	Pneumatik ( pneumatics )		Wand ( wall )		Bearb.	13.10.2011	p_schaefer
	Kuehlwasser ( cooling water )		Arbeiter ( operator )		Gepr.		
	Absaugung ( suction )				Norm		
					DR. FRITSCH Sondermaschinen GmbH D-70722 Fellbach		Maschinen Typ : <b>CBM 300</b> machine type :
					Zeichnungs Nr.: <b>5V</b>		Bl. 4 / 7