

# WIAP DM4C

## 1. Specifications WIAP DM4-C Type CNC controlled lathe Horizontal Maschin Nr. 10032 Jg 2000

3000 (Peak width)

### 1.1 Machine bed / processing area

4-panel flat-bed (2 outer Z-carriage; 2 inner for tailstock) with movable Z-slide on the outer 2 guides; Distance 1160 mm in inner guides for Tailstock 700 mm

bed length	mm	5300
Peak width (length between rotation. Feed height and peaks)	mm	3000
Center distance	mm	800
Swing over bed	mm	1600
Swing over carriage	mm	1200
Bed width guide Outside	mm	1160
Guide width tailstock Mitte	mm	700

Bed welded; relaxed by WIAP-MEMV method and vibration dampened after pat. process WIAP® VDSF®

(Pat.No. 68433; Anm.4230130.30; PCT / CH95-00108; PCT / CH95-00108, PCT / CH95-1072, PCT / CH95-1073)  
Guide pads ground; guides interchangeable without bed dismantling

### 1.2 headstock / main drive - firmly arranged

Number headstocks	Stk.	1
Spindle measuring circuit	digital / linear	
Axis position monitoring	no; since rotary axis	
spindle hole	mm	112
spindle nose	A15	DIN 55021
Main spindle motor: 100% ED	kW	46
	nm	305

Motor 1PH7184 2NE

Power unit 6SN112-1AA00-0FA

constructed behind the headstock 3-stage transmission

Automatic over M transmission programmable function

gear stage 1	RPM	5.6 to 120
gear stage 2	RPM	16-360
gear stage 3	RPM	45-800
Torque Step 1 (100%)	nm	15236
Torque Step 2: (100%)	nm	5290
Torque Step 3: (100%)	nm	1904
Max speed	RPM	800

### 1.3 longitudinal and cross slides

Number of cross slide	Stk.	1
Number longitudinal slide	Stk.	1
Achsmesssystem the engine	digital / linear	
Achsmesssystem the engine	Balluf	
Achsendlagenüberwachung (3-shift set)	RpM	2000
Final drive Z-feed motor 27 Nm	mm	1005

2 X carriages independently traversable Max distance inwards		
About M function coupled X slide 1 4 specialist Rev. and X carriage 2 with Driven. revolver	kN	27
feed force	mm	6000
Max feed / rapid traverse Z	mm	63 x 10
Feed type: backlash-free ball screw	mm	3020
Z axis	m / min	6 *
Rapid Z-axis (interpretation 10 m / min)		
	RpM	2000
Final drive X-feed motor 1FT5076 18/22 Nm	kN	15
feed force	mm	6000
Max feed / rapid traverse X	mm	50 x 10
Feed type: backlash-free ball screw	mm	850
X axis	m / min	10
Rapid traverse the X-axis		

### 1.3a tailstock

manually adjustable; Air-assisted for easy movement  
vibration dampened with cone for tailstock  
Quill diameter  
Quill stroke  
Auxiliary towing means is provided with the Z-slide  
Clamping with nut and lever / ring nut  
div threads within. displaceable

mm	200
mm	200

### 1.4 guides

All tours are on ground surfaces and reibgeklebt  
Dimensions  
Hardness of the steel guides about  
Counter-guides plastic coated  
Automatic central lubrication with electric. control  
The heavy units for the smooth running and against pollution air assisted with the WIAP® Press-air method

mm	90 x 50
HRC	55 - 60

### 1.5 tool turret with driven tools

Turret Baruffaldi type K18.0320.12041.B	TOER	320
No. of positions	Pos	8th
Straight shank diameter	VDI	60
outside diameter turret plate	mm	570
VDI turret plate diameter 60	mm	476
slices thickness	mm	95
Driven tools	Stk.	4
A motor-driven tool 1PH7107 2NF	KW	9
	nm	114.6

Tool drive directly through the clutch. Only the selected Tool rotates. Or if only a partial circle is selected, The use of 12 driven tools is possible.  
Start and Stop programmable via M function;  
Speed programming of driven tools with H and W function  
with integrated spindle positioning

kW

Revolver control Barrufaldi AG 820

**1.5a tool turret 4-fold; additionally**

Tool turret 4-fold; Baruffaldi; 4-Kant  
No. 63.5999.6200

265 x 265

Revolver Interfacing module AG 820

TAN

265

**1.5b C axis**

The C-axis enables 3D interpolation; End face machining  
with polar coordinates; Transmit and peripheral surface machining  
Motor Siemens 1 FK6101 300 rev. 27 NM

**1.6 chucking means**

Power chuck SMW including

Clamping cylinder SMW

Chuck diameter 800 mm;

Hydraulic unit and clamping cylinder

with 2-pressure solution Programmable Oelhydraulik

KNCS-NB 800-165

DIN HL 200

**1.7 chip conveyor**

1 Center 2 and side conveyors integrated in the machine  
discharge height

mm

1200

**1.8 Coolant system**

integrated

**1.9 Machine cover**

Subspace panel with a sliding door; 3-reinforced  
protective glass

**2. CNC control and electrical equipment**

Heidenhain CNC Pilot 3190

logic unit

Color flat panel TFT

2 + and C axes spindle axis

Drive suitable for Simodrive 611D

TurnPlus Software

CNC

pilot 3190

10.4 "

611D

400 V / 50 Hz

**2.1 Electrical Equipment**

- Electrical cabinet / voltage

integrates light in the machine -

- Cranes for automatic and manual operation  
and CNC programming console easily and clearly  
in a control panel on the left side of the machine  
appropriate

- External machine control panel variably hung in  
Panel and / or at the door, so that before and after the  
machine benützbär

**2.2 Energy supply**

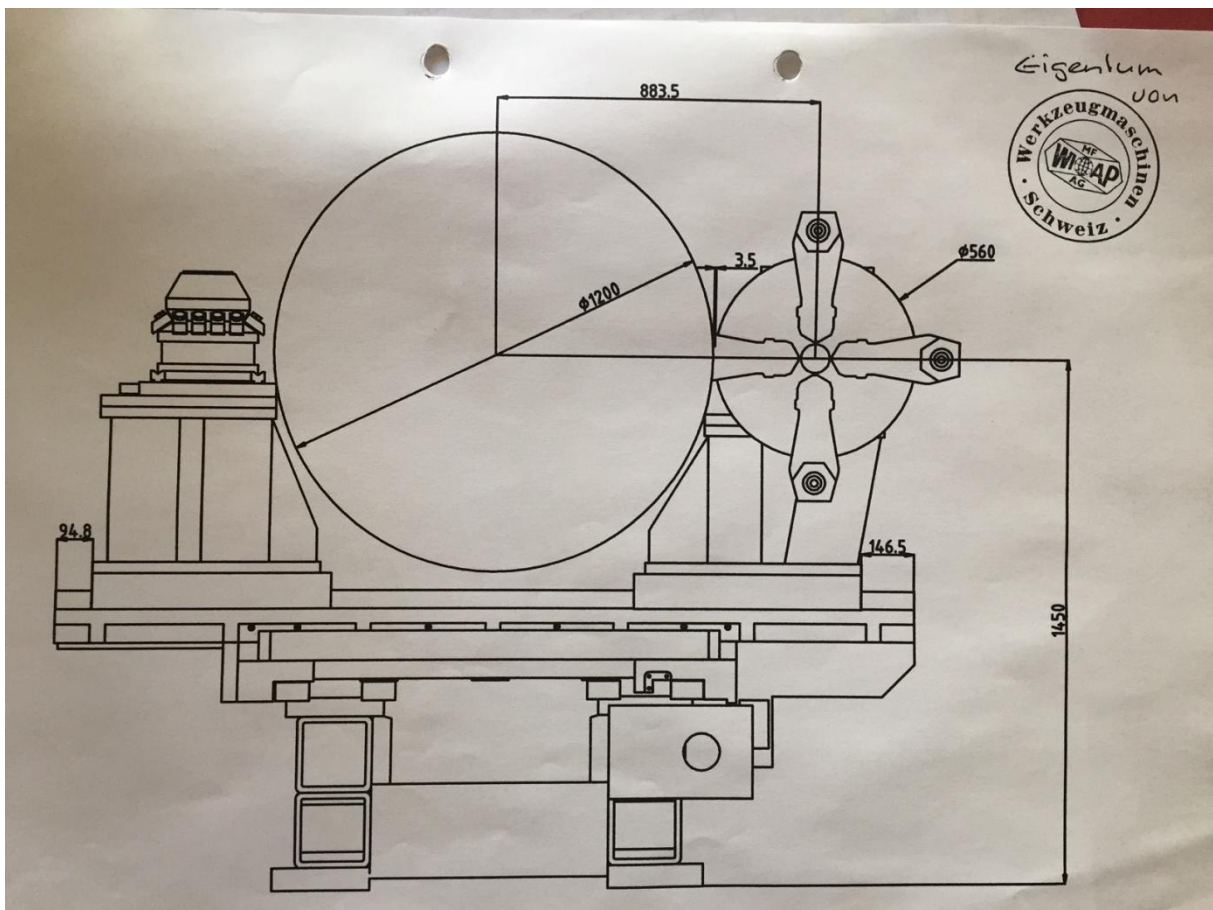
All chips vulnerable energy supply systems are in Protective hoses or arranged in the cable drag chain. The electric cables in the cable trailing. the drag chain Cables are oil resistant.

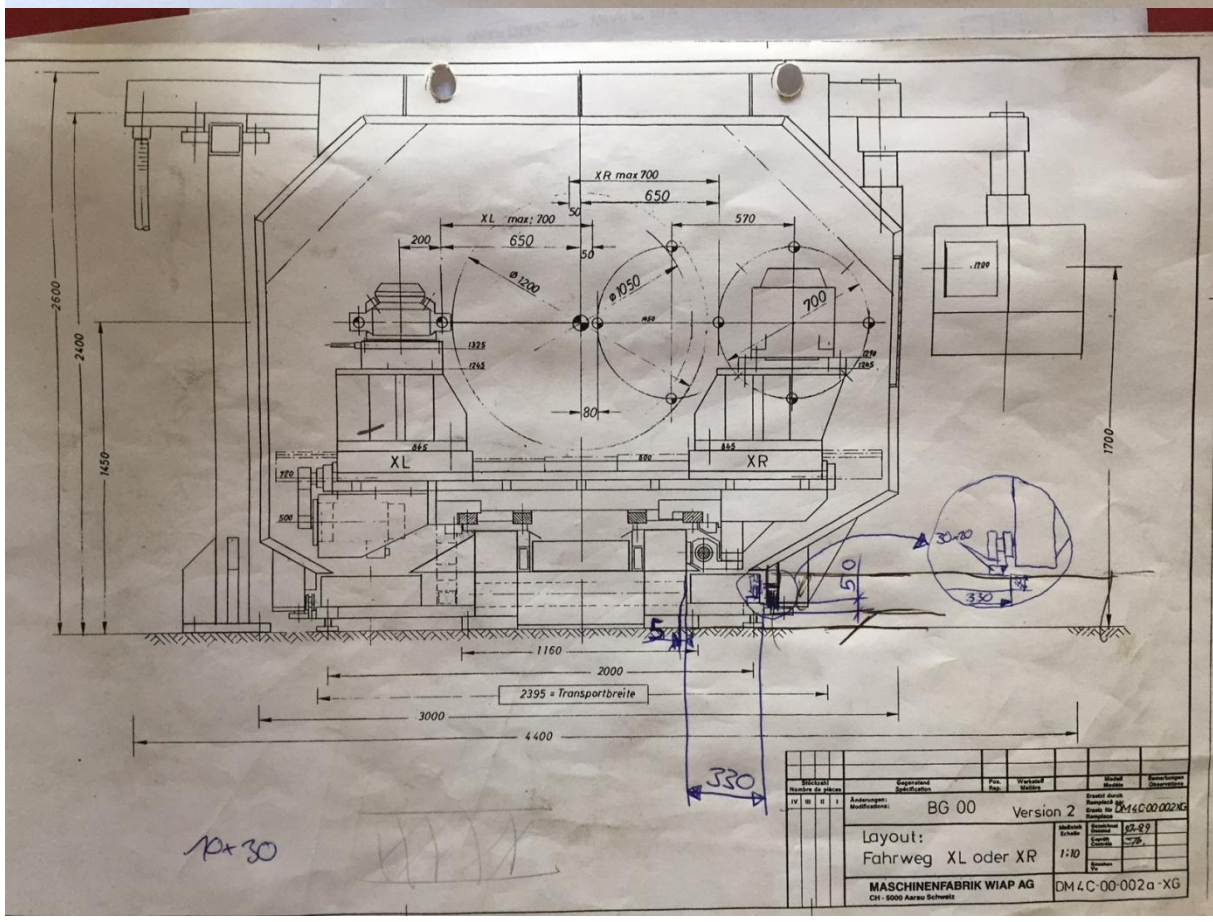
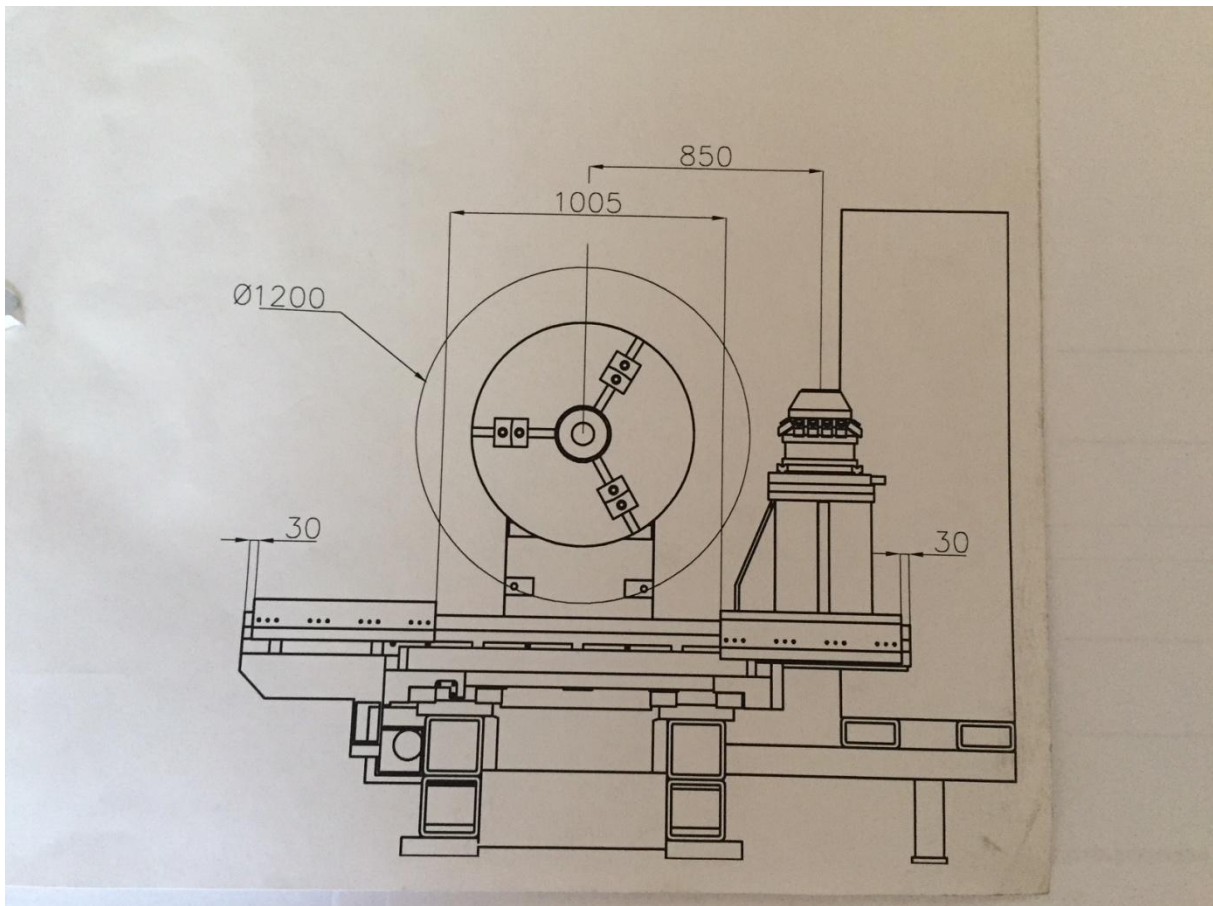
**3. General:**

To dye:

- moving parts:
- stationary parts:

Machine weight; net approx	kg	21800
Space requirements:		
- Machine length	mm	8360
- machine width	mm	4000
- Machine height	mm	2700





*12x30*

Stückzahl	Gezeichnet	Geprüft	Freigegeben	Werkstoff	Material	Montage	Montage
1	2	3	4	5	6	7	8
Anmerkungen:		BG 00		Version 2		Gezeichnet durch: <i>DM 4C 00 002 AG</i>	
Modifikationen:		Layout:		Fahrweg XL oder XR		1:10	
		MASCHINENFABRIK WIAP AG		DM 4C 00 002 a XG		CH - 5000 Aarau Schweiz	

