

## MULTITASKING TURNING AND MILLING CENTER DMG MORI CTX BETA 1250 TC 2ND Machine installed and available for inspection



### TECHNICAL DATA

CELOS CNC WITH SIEMENS 840D AND MULTI-TOUCH SCREEN

WORKING AREA:

Turning diameter:	mm 500
Max turning diameter:	mm 500
Max turning length:	mm 1,200
Distance between spindles (machine with sub-spindle):	mm 1,470

MAIN SPINDLE:

Spindle nose flange:	mm 170 h5
Spindle bore:	mm 87
Inner diameter of draw tube:	mm 67
Front bearing diameter:	mm 130
Power, S1-100% ED / S3-40% ED:	kW 33/40
Speed range:	rpm 4,000
Torque S1-100% ED / S3-40% ED:	Nm 580/700

### SUB-SPINDLE:

Power, S1-100% ED / S3-40% ED:	kW 25/32
Speed range:	rpm 5,000
Torque S1-100% ED / S3-40% ED:	Nm 280/360

### SLIDE:

X-axis travel:	mm 490 (-10/+480)
Y-axis travel:	mm ±125
Z-axis travel:	mm 1,200
Rapid traverse X, Y, Z:	m/min 40/40/50
Feed force S6-40% X/Y/Z:	kN 9/6/9

### MILLING-TURNING SPINDLE:

Tool interface:	Capto C6
Max spindle speed:	rpm 12,000
Power, S1-100% ED / S3-40% ED – 2 min:	kW 19/22.5
Torque, S1-100% ED / S3-40% ED – 2 min:	Nm 85/120
Spindle indexing resolution:	degrees 0.001
Holding torque:	Nm 850

### B-AXIS CNC:

Swivel range B1:	±120°
Swivel speed:	°/min 25,200
B-axis torque, S6-40% ED:	Nm 614
Hydraulic clamping:	Nm 2,800

### MACHINE CONFIGURATION

#### Control

CELOS with Siemens 840D sl Operate ERGOline 21.5" with multi-touch screen

#### Main Spindle

Integrated motor spindle ISM 102

- Drive: 33/40 kW (100/40% ED)
- Torque: 580/700 Nm (100/40% DC)
- Speed range: 0–4,000 rpm
- Semi-hollow hydraulic clamping device
- Inner draw tube Ø 104 x 800 mm depth
- C-axis and spindle brake (hydraulic)

#### Sub-Spindle

Integrated synchronous motor spindle ISM 76

- Drive: 25/32 kW (100/40% ED)
- Torque: 280/360 Nm (100/40% DC)
- Speed range: 0–5,000 rpm
- Semi-hollow hydraulic clamping device, inner Ø 67
- C-axis and spindle brake (hydraulic)

- Lower slide (Z3), servo-driven with ball screw drive, direct measuring system
- Coolant through spindle
- Spindle cleaning device

### Spindle Options

Hydraulic hollow clamping device  $\varnothing$  104 mm, pull force 105.5 kN at max pressure 45 bar, max speed 3,600 rpm

Differential pressure for main spindle

Differential pressure for sub-spindle

### Main Spindle Chuck

3-jaw hollow power chuck with through hole, BBD 315/122, manufacturer SMW-Autoblok

### Sub-Spindle Chuck

3-jaw chuck BBD 210–66, manufacturer SMW Autoblok

### Milling Spindle

Milling spindle and tool magazine with Capto C6 interface

### Tailstock

Tailstock function for sub-spindle including pedal

Mechatronic programmable thrust control

Thrust force:

- kN 2.5 – 6

### Tool Magazine

Chain-type tool magazine, 48 positions, Capto C6 interface

### Coolant / Chip Removal

Hinged belt chip conveyor, including coolant tank

High-pressure coolant system through milling spindle, consisting of:

- 980 L coolant tank with belt filter system
  - 8 bar / 20 L/min
- Spindle cleaning device on main spindle and sub-spindle  
Mechanical fume extractor 1100 m<sup>3</sup>/h, filter class H13

### Control Options (CELOS with Siemens)

Technology cycle for alternating spindle speed to reduce vibrations

### Machine complete with:

- Approx. 50 Capto C6 tool holders with related tools
- No. 2 cabinets with inserts and various equipment
- Instruction manuals and CE declaration of conformity