



# CHETO<sup>®</sup>

CNC DEEP HOLE DRILLING WITH MILLING

[www.cheto.eu](http://www.cheto.eu)

CHETO

DB Series 6 Axes



# OUR PRODUCTS & DESIGN



## INL MODEL

BTA / GUNDRILL

up to **3** Axes



## IXN MODEL

1000 / 2000 / 3000 / 4000

**6 & 7** Axes



## PWN MODEL

1000 / 2000 / 3000

**5** Axes



## CSHI MODEL

Versions 4.0 / 9.0



## SiC MODEL

650 / 1000 / 1000 HD

**6** Axes with Gun Drill Arm

- Efficient **Deep Hole Drilling** with **Milling** for **Small Size Parts**
- Working **5 Faces** on a **Single Setup**
- **3+2 milling / 5 axes**
- **No Angle Limitation**

# Location

CHETO TECHNOLOGICAL CENTER:

Área de Acolhimento Empresarial  
UI-Loureiro, Lotes 13-21  
3720-070 Loureiro, Oliveira de Azeméis  
Portugal  
GPS: 40°48'00.5"N | 8°30'35.3"W

CONTACT US

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WORLDWIDE PRESENCE

DEEP SOLUTIONS  
INNOVATIVE CONCEPT  
TO OPTIMIZE  
DEEP HOLE DRILLING,  
STANDARD DRILLING  
AND MILLING



inovadora'21



PME líder



PME  
excelência'16

# CHETO®

## CNC DEEP HOLE DRILLING WITH MILLING

### INNOVATIVE machine tools

CHETO was officially established in 2009, when the founders started a project to fully develop a deep hole drilling and milling machine-tool up to 7-axis, specialized for the mold making and energy industry.

Since then, a continuous improvement and investigation allowed CHETO to offer the market a versatile product with high levels of accuracy and reliability.

This concept quickly positioned CHETO as a world-renowned brand. With machines sold in four continents, it is our goal to keep improving and innovating, to offer a highly competitive and value-creating product.





Milling Configuration



Deep Hole Drilling Configuration

**DBA**

**DBB**

**CNC Axis**

- W drilling stroke
- X longitudinal travel
- Y vertical travel
- Z cross travel
- B table rotation
- A tilting rotation

1550 mm	61.0 in
1250-1800 mm	49.2-70.9 in
900 mm	35.4 in
800 mm	31.5 in
360,000	
+25°/-15°	

1550 mm	61.0 in
1250-1800 mm	49.2-70.9 in
900 mm	35.4 in
800 mm	31.5 in
360,000	

**Drilling capacity**

- Max. drilling stroke W+Z
- Drilling capacity

1550+800 mm	61.0+31.5 in
Ø4-25 mm	Ø0.16-0.99 mm

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Ø4-25 mm	Ø0.16-0.99 mm

**Milling capacity**

- Milling
- Rigid tapping
- Helical threading

250 cm³/min	15.3 in³/min
m20	
Standard	

250 cm³/min	15.3 in³/min
m20	
Standard	

**Spindle\***

- Spindle taper
- Speed
- Power
- Torque

ISO50 / BT50 / CAT50	
0-6000 rpm	
11 kW	14.8 hp
96/132 Nm	70.8/97.4 ft-lbs

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0-6000 rpm	
11 kW	14.8 hp
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**Automatic rotary table**

- Table size
- Resolution
- Max. load in rotation

1000x1000 mm	39.4x39.4 in
0,001°	
5 Ton	11,200 lbs

1000x1000 mm	39.4x39.4 in
0,001°	
5 Ton	11,200 lbs

**Layout dimensions**

- Total weight
- Foot print (WxL)

18 Ton	40,320 lbs
5993x6455 mm	235.9x254.1 in

17.5 Ton	39,200 lbs
5993x6455 mm	235.9x254.1 in

# DB Series 1250 | 1800

— 6 AXES



## STANDARD EQUIPMENT

- CNC HEIDENHAIN TNC 640
- CNC FAGOR 8065 as optional equipment
- Electronic handwheel
- Digital drives
- Encoders in linear axis X, Y, and Z
- Angular encoders in rotating axis A and B
- Positioning table with continuous movement controlled with servo motor
- 3+2 milling / 5 axes
- External status led indication
- High-pressure pump up to 90 bar, 70 l/min | 1,305 psi, 18.5 gal/min
- Machine prepared to use emulsion or oil
- Coolant tank with automatic filtering
- Pumps for oil recirculation
- Automatic chip conveyor
- Quick change between drilling/milling
- Rigid tapping
- Complete cover with doors
- Spindle HSK63 (11.620rpm) as optional equipment
- ATC 40/80 tools, L=600 mm | 23.6 in for Spindle HSK63 as optional equipment
- ATC 32/50 tools, L=600 mm | 23.6 in for Spindle ISO50/BT50/CAT50 as optional equipment



# DB OPTIONAL EQUIPMENT



TWO CONTROL OPTIONS



INTERFACE REQUIREMENTS

HEIDENHAIN  
TNC 640

SIEMENS  
SINUMERIK ONE

FAGOR  
CNC 8065



END OF  
EXTRAORDINARY COSTS



## ADAPT MACHINING PARAMETERS ONLINE

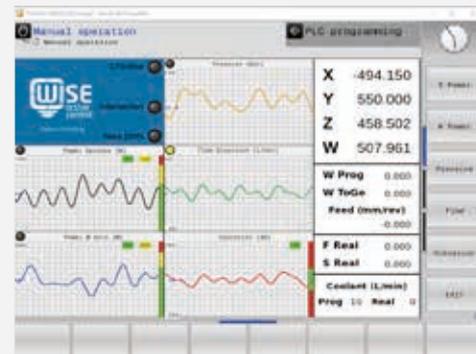
- Spindle torque
- Feed
- Coolant pressure
- Coolant flow
- Vibration

## INTERSECTION

The system automatically detects intersections in the process and sets the parameters accordingly to keep the quality of the operation and to protect the tool lifetime.

## PROCESS

The system detects variations of the efforts of the process and automatically adjust the drilling parameters online to keep a continuous process.



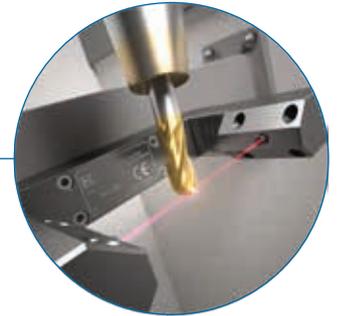
## END OF EXTRAORDINARY COSTS OF NONCONFORMANCE

The diversity of operations, the lack of raw materials homogeneity, the deficient parameter settings, and intersection holes often lead to the reduction of the tool lifetime. As hole intersections are a constant matter on mold making, and considering the difficulty of these operations, it's common to have problems on final results as unexpected hole drifts, premature tool wear or tool break.

# DB OPTIONAL EQUIPMENT\*



\*LASER MEASURING SYSTEM  
BLUM LC50



\*ELECTRIC PROBE  
BLUM TC60

\*TOOL CABINET

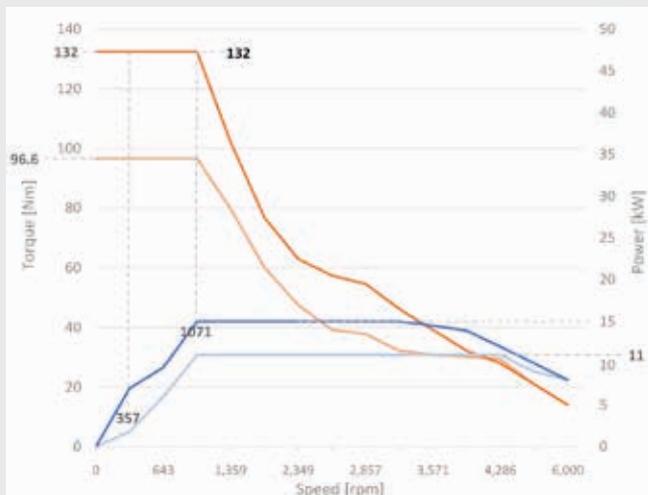


\*CHETO RE100  
GUNDRILL GRINDER Ø5-32 mm | Ø0.2-1.26 in

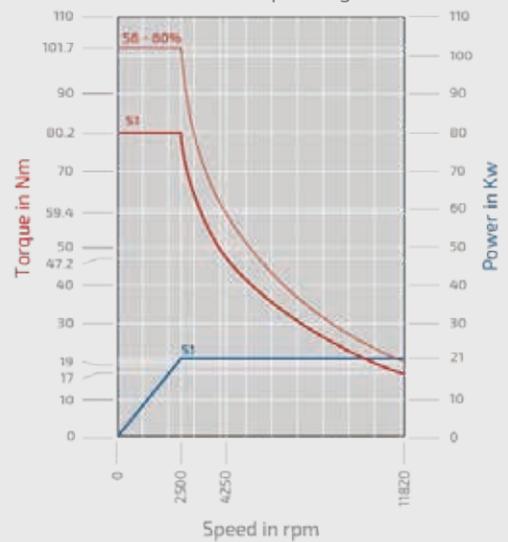


## SPINDLE

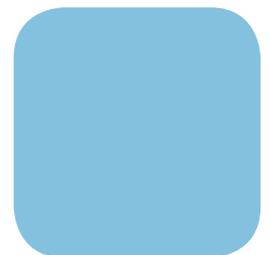
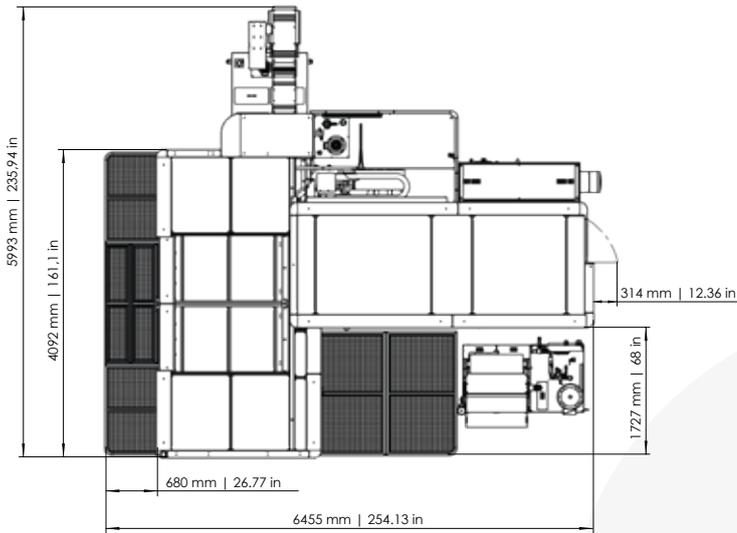
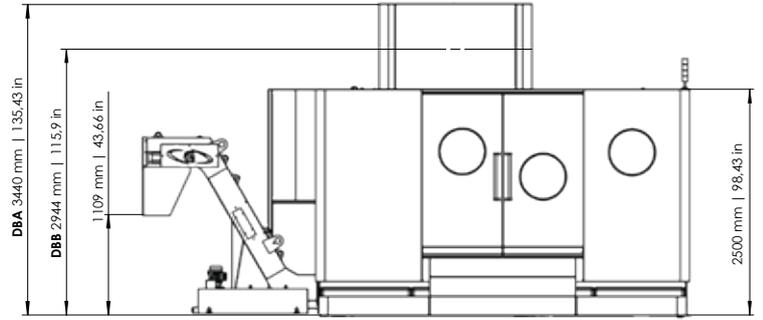
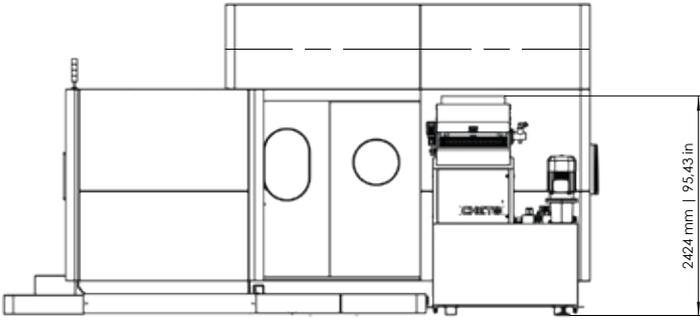
ISO50 / BT50 / CAT50  
Spindle Power / Torque Diagram



\*HSK63 (optional)  
High Speed Spindle  
Power / Torque Diagram



# FOOT PRINT DB Series



Subject to technical change without notice

# ©HETO

## CHETOCORPORATION, S.A.

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