CNC Universal Turning Machines

The 5th Generation CTX Series – alpha / beta / gamma

Workpiece:
Safety screw, mechanical engineering.
Universal machining for easy and challenging workpieces that include milling and turning operations.

The 5th generation CTX Series – CTX alpha / beta / gamma with a 25% performance increase.

Batch sizes are becoming smaller and delivery times shorter. Prices and requirements are also becoming more dependant on the complexity and precision of the workpieces, and conventional standard machines have to advance even faster and often surpass their boundaries.

The new Universal Turning Machines of the CTX Series by GILDEMEISTER, in the new design, are an exception. With up to 25 percent increased performance ranging from intelligent expansion options of driven tools to complex Milling / Turning Centers with Mill / Turn spindles and tool magazines, this series stands out among the competition.

|1| Connector flange, mechanical engineering
|2| Hydraulic components, mechanical engineering
|3| Plug module, drive technology
|4| Connector sleeve, mechanical engineering
|5| Axle components, automotive industry

New generation in a new design – Technological advance with a high level of customer use.

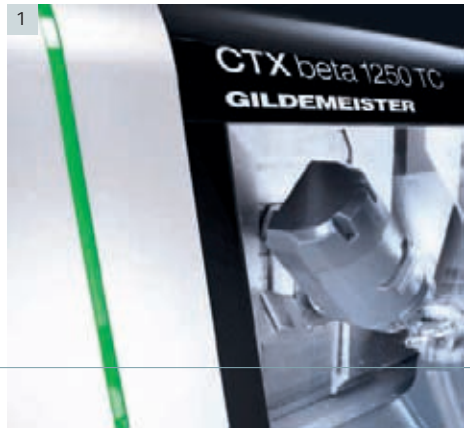
The new CTX Series defines a new standard in the area of universal machining, making it a leader in its class. Aside from the technical highlights, the CTX machines will impress you with their new innovative design.

A larger workspace is achieved through targeted structural standards, without having to increase the space requirements of the machines. This space is converted for an increased functionality of form that provides larger workpiece diameters as well as improved chip removal for increased production safety. An additional highlight of the new design is the innovative DMG ERGO*line*® Control with a large 19" screen and an ergonomic swivel operator touchpad.

New DMG Design Highlights

_ **40% increased visibility** with large shatterproof viewing glass
_ Flush surfaces from hardened plastic
_ Brushed chrome surfaces
_ **DMG LIGHT*line*®**
_ **DMG ERGO*line*® Control with a 19" screen** for more information at a glance
_ Additional **DMG SOFT*keys*®** for frequently used screen selections or operational sequences
_ **DMG SMART*key*®** with a transponder allows individualized operator authorization with user-specific access privileges
_ Screen and keyboard angle can be individually adjusted
_ Standard touchpad, mousepad and optional bracket
_ Seating (optional)

1



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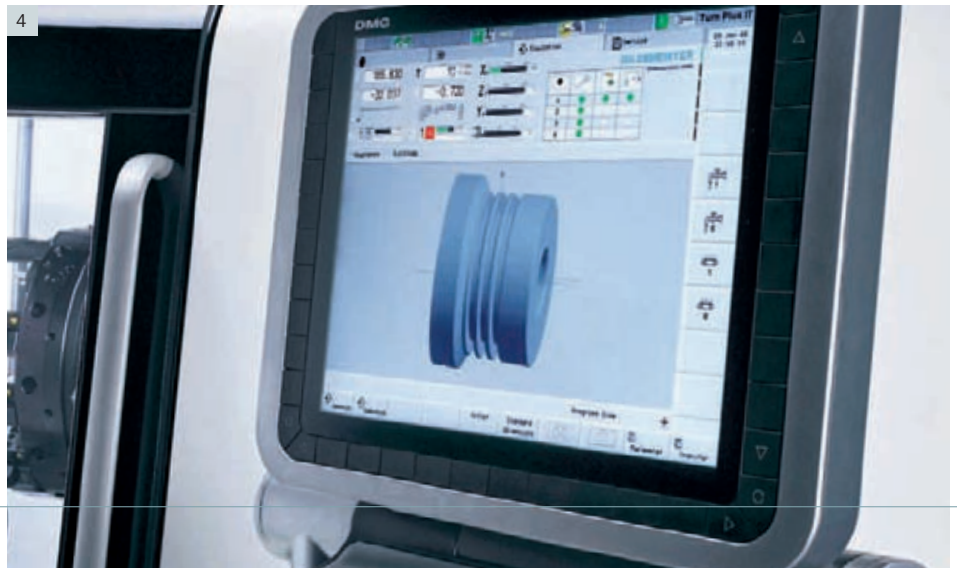
|1| DMG LIGHT*line*®
|2| DMG SMART*key*®
|3| DMG ERGO*line*® Control – adjustable screen and keyboard
|4| 19" screen with DMG SOFT*keys*® for frequently used screen selections or operational sequences

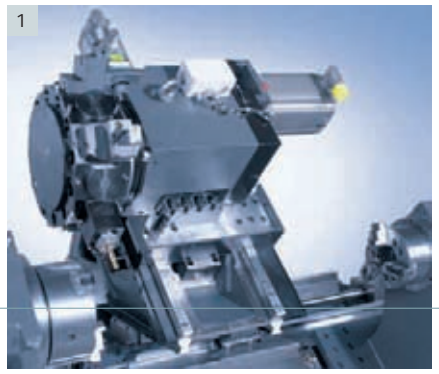
4

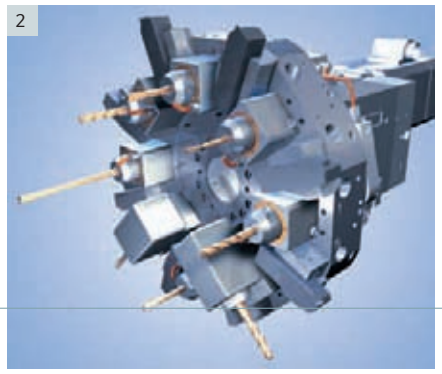


CTX alpha / beta / gamma – The success matrix for complete machining in all sizes.

The CTX Series has an intelligent modular design that allows the client to build a tailor-made Universal Lathe. This can be achieved with the single-spindle machine with a fast indexing turret, 6-sided complete machining with the main and counter spindles, as well as with the large X and Y stroke through the Universal Milling / Turning Machine with integrated B-axis and 36 tool magazine for 5-sided simultanous machining.

The designation is simple and precise: the model description(s), “alpha”, “beta” and “gamma” mark the different platforms with turning lengths of 11.8 – 78.7 in. as well as turning diameters between 6.5 in. and 24.8 in., and a bar capacity of 2 in. to 4 in. In addition, the overall size increases to the corresponding torque, having 93.7 ft. / lbs. with the CTX alpha 300 and 1,770.1 ft. / lbs. with the large CTX gamma 2000.



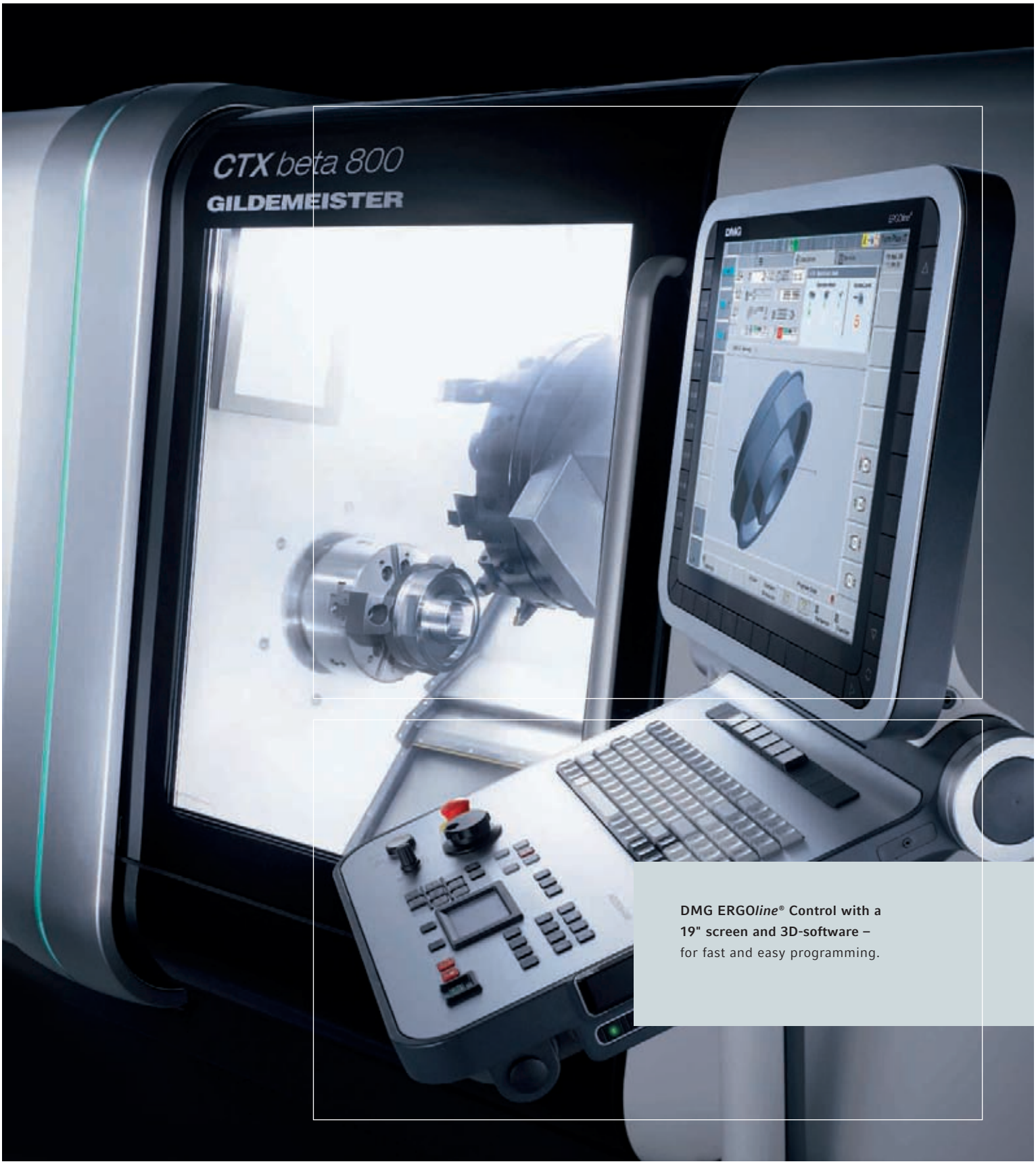


|1| Expansion option with driven tools, a Y-axis and a counter spindle **|2|** 16x (optional) **|3|** Linear measuring scales in all slide axes (TC version) **|4|** For the highest precision: Linear drive with the precision package (optional)

CTX alpha / beta / gamma Highlights

_**Modular tool storage system** with expansion stages ranging from Universal Turning to **Milling / Turning Centers with Mill / Turn spindles and a tool magazine** for complete machining in all sizes
_**Tailstock as standard**
_**Optimum number of tools** (12, 16, 24, 36) according to the machining task and driven tools as standard
_**Larger applications spectrum –** larger axis range, the largest diameter and the largest torque on the market
_**Highest stability and life cycle –** rigid Y-axis and high metal removal performance (45% larger metal removal cross section)
_**Maximum productivity time** with the utilization of sister tools
_**Linear version with the linear drive in the X-axis,** active cooling and a glass scale in the X-axis (optional)

CTX beta 1250 TC, CTX gamma 1250 TC / 2000 TC – Complete machining with a Milling / Turning spindle and a tool magazine.

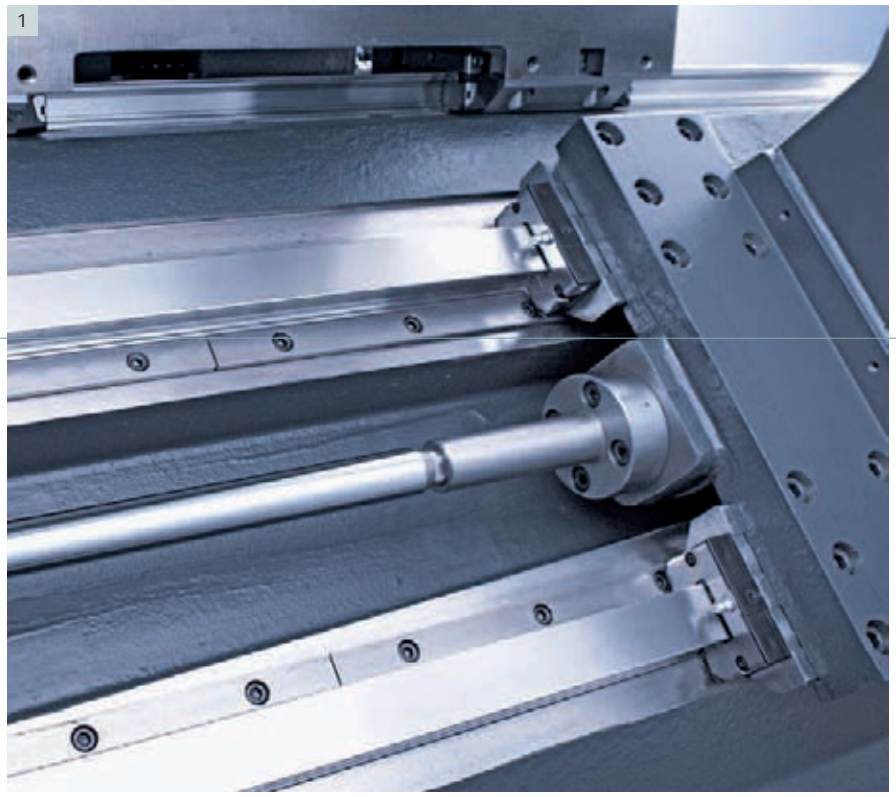


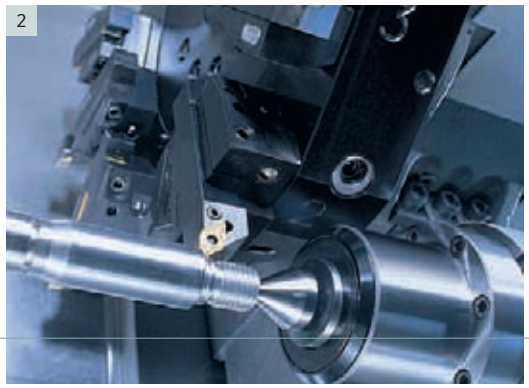
DMG ERGO*line*® Control with a 19" screen and 3D-software – for fast and easy programming.

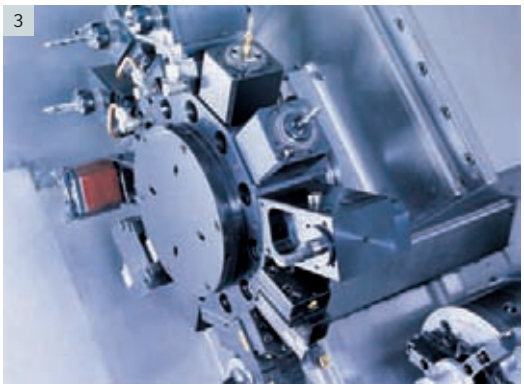
CTX alpha 300 / 500 and CTX beta 500 / 800 / 1250 – High-Tech in every detail.

The 5th generation of the CTX Series offers added value in every detail. This series offers increased performance, higher torque and more precision. In addition, the increased flexibility and improved ergonomics of the design ensures operator comfort and 25 percent more efficient machining performance. An outstanding feature in this machine class is the unique configuration with numerous high-tech components.

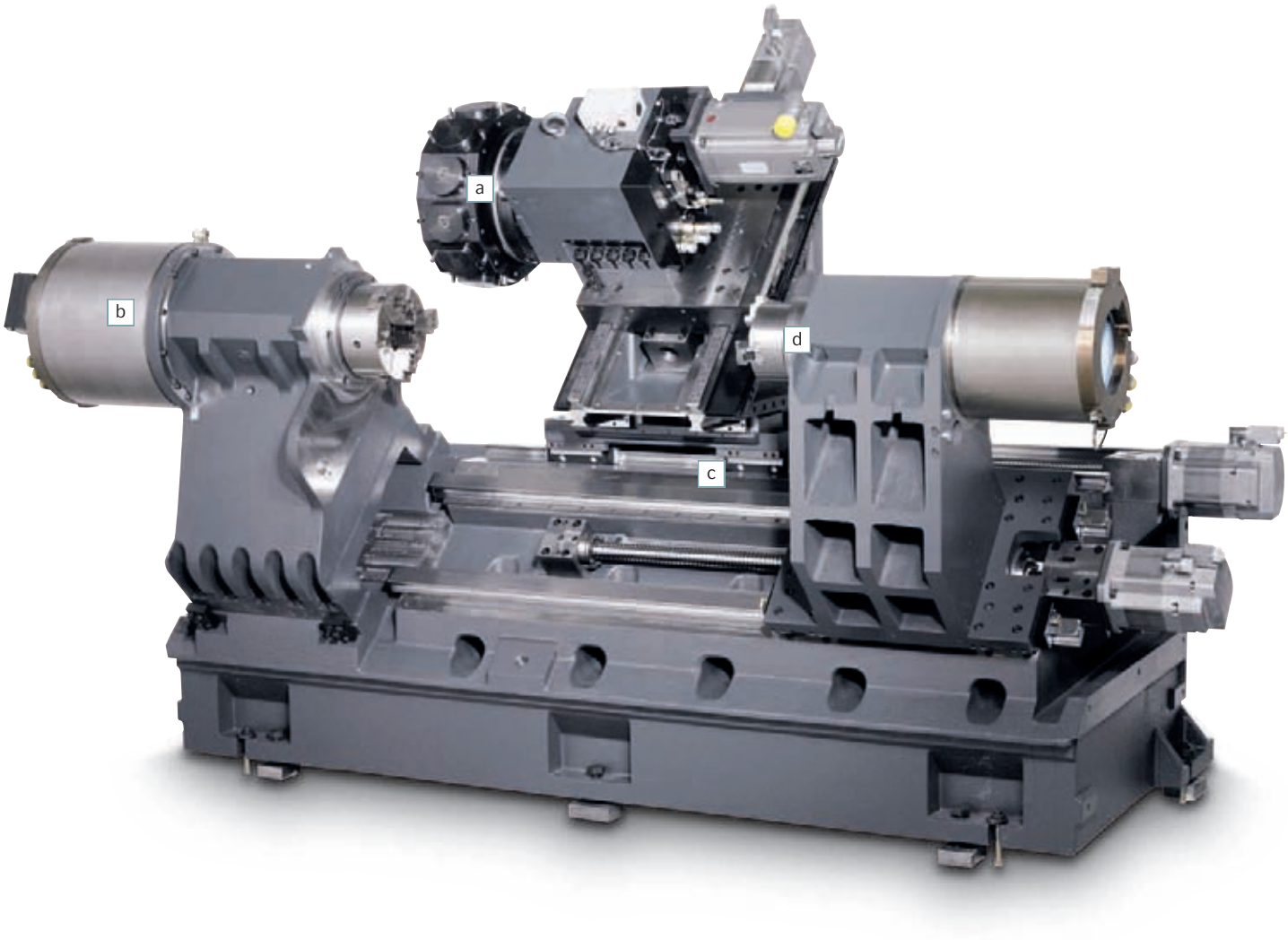
Integrated spindle motors for highly-dynamic acceleration and deceleration behavior, 12x or 16x servo turret with indexing times starting at 0.1 seconds, driven tools in the standard version, as well as the tailstock with regulated approach speed ranges, are all top features of this state-of-the-art machine design.







|1| Linear drives for the highest dynamics and precision **|2|** Machining with a hydraulic-driven tailstock
|3| 12x turret with driven tools (with an optional 16x turret)



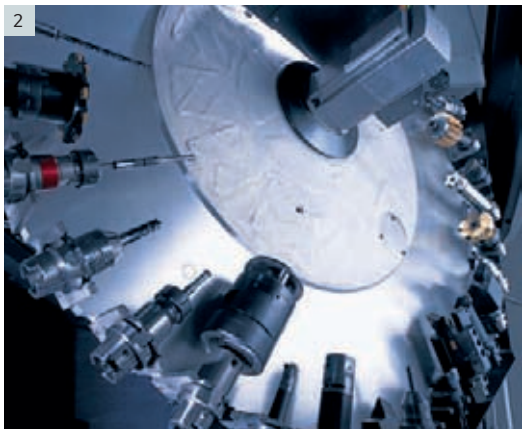
CTX alpha 300 / 500 and CTX beta 500 / 800 / 1250 Highlights

_ Optimal machining of workpieces up to 7.9 in. (CTX alpha) and up to 16.1 in. turning diameter (CTX beta)
_ Large-dimensioned components for high stability and long life cycles
_ **|a|** 12x servo turret with a tool drive for high chip removal performance
_ Reduced production and idle times with a VDI fitting (VDI 30 for alpha, VDI 40 for beta) for fast tool-exchange
_ **|b|** Digital drives for increased accuracy and an integrated spindle motor for the highest dynamics
_ **|c|** Absolute measuring systems (no reference point process) with the CTX beta
_ Tailstock, driven tools and C-axis as standard
_ Y-axis (optional)
_ **|d|** Y-axis and an optional counter spindle (with the CTX alpha, only in size 500)

Milling / Turning Centers with a B-axis milling spindle and a tool magazine – CTX beta 1250 TC and CTX gamma 1250 TC / 2000 TC.

The innovative CTX Series by GILDEMEISTER stands out as a Milling / Turning model (TC version). The TC designation is for the integrated disk magazine of 24 or 36 tools with fast tool-exchange. This also marks the integration of a controlled slide having a powerful B-axis milling spindle for 5-axis simultaneous machining. In addition, the new Universal high-tech CTX Series offers B-axis possibilities that are easily defined with the internal control programmer systems.

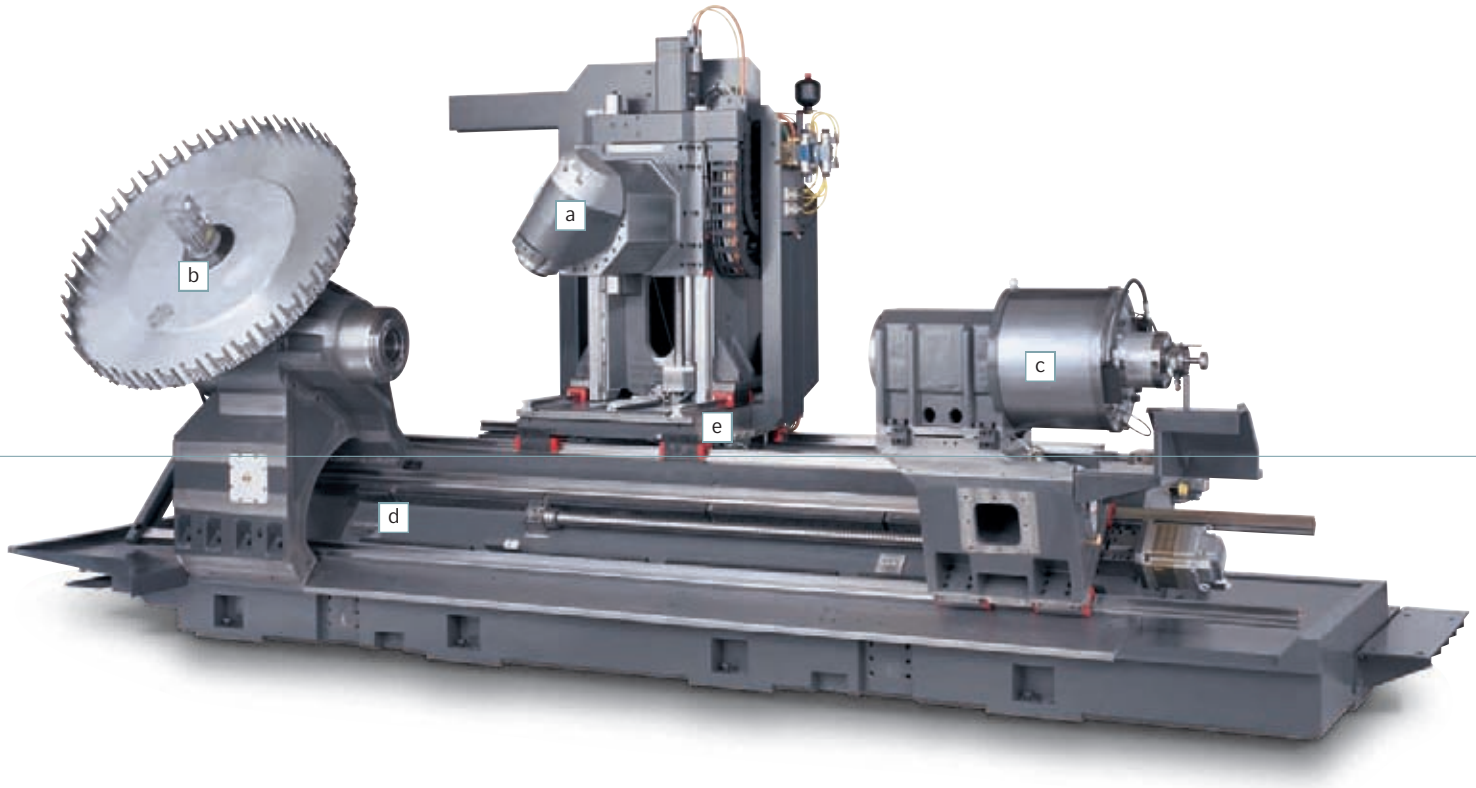
|1| Milling / Turning spindle as a B-axis
|2| Disk magazine for 24 or 36 tools



CTX beta 1250 TC and CTX gamma 1250 TC / 2000 TC Highlights

_ **Expansion stages TC: Counter spindle** (optional) and a **Milling / Turning spindle** for turning lengths up to 49.2 in. (1250 TC) or 78.7 in. (2000 TC)
_ Large-dimensioned components (guideway size 1.8 in. or 2.2 in.) for high stability and a long life cycle
_ **Largest Y-axis range in its class** (± 7.9 in. with the CTX gamma 2000 TC)
_ Powerful **Milling / Turning spindle with a high torque motor in the B-axis**
_ **Linear roller guideways in all axes** for maximum machine dynamics
_ Disk magazine with **24 or 36 tools** and a chain magazine with **120 tools** (optional with the CTX gamma TC)
_ Larger, easily visible work area with small machine footprint requirements

CTX EXPANSION OPTIONS	Driven tools	Y-axis Driven tools	Y-axis Driven tools Counter spindle	TC Milling / Turning spindle Counter spindle Tool magazine
CTX alpha 300	•	•		
CTX alpha 500	•	•	•	
CTX beta 500	•	•	•	
CTX beta 800	•	•	•	
CTX beta 1250	•	•	•	
CTX beta 1250 TC				•
CTX gamma 1250	•	•		
CTX gamma 2000	•	•		
CTX gamma 1250 TC				•
CTX gamma 2000 TC				•



|a| Milling / Turning spindle as a B-axis
|b| 36x HSK tool magazine
|c| High torque motors
|d| Thermo-symmetric design of the massive machine bed
|e| Highly precise guides and measuring systems

Optimum operator comfort and more information at a glance – DMG ERGO*line*® Control with a 19" screen.

An outstanding highlight of the new machine design is the DMG ERGO*line*® Control with a 19" screen. The larger screen guarantees easier reading and visibility and allows the integration of additional DMG SOFT*keys*® and advanced status information, leading to efficient operations. The screen as well as the operator touchpad is in tune with individual requirements of the operator, as is the optional and adaptable seating support, or the optional mousepad. The key switch has been replaced with an intelligent DMG SMART*key*® with a transponder that offers access to the machines available operational methods based on user authorization level.

1

|1| 19" screen with DMG SOFT*keys*®: Customizable hotkeys for frequently used screen selections or operational sequences

DMG ERGO*line*® Control

_ Ergonomics

Larger 19" screen (1280 x 1024 pixels);
Screen and keyboard angle can be tilted and adjusted (screen from 5–30°, keyboard from 15–70°); functional expansion with optional mousepad with bracket and integrated seating

_ Added functions in the standard version

DMG SOFT*keys*®: Customizable hotkeys for frequently used screen selections or operational sequences
DMG SMART*key*® with a transponder: Individualized authorization of the operator with user-specific access privileges for the control and the machine. Expanded functionality through transponder technology: Individualized allocation of operational data, mode selector switch and an advanced security system preventing unauthorized use

_ Screen partition

Wide screen – more NC information:
Use of the screen width for long programming lines
Upper screen – more machine information:
Use of the screen height for status indicators and process monitoring

|2| DMG ERGO*line*® Control – Functional expansion with optional mousepad and bracket; integrated seating
|3+4| DMG ERGO*line*® Control with DMG SMART*key*®
|5| DMG SOFT*keys*®

Easy shop floor programming with Siemens ShopTurn and Heidenhain Plus iT (TurnPlus).

Whether you are using Siemens 840D with ShopTurn or Heidenhain Plus iT with DINPlus (TurnPlus optional) these two control choices for shop floor programming have something in common: They reduce programming time and combine high-tech performance with a high-level of user comfort so that your task can be made easier and faster with successful programming.

Siemens 840D solutionline with ShopTurn

_ Direct programming
_ 3D-graphics including real-time simulation
_ New, clearly-laid out screen design
_ Signal lamp diagnosis for all drives

Benefits

_ Easy graphic programming
_ Graphic images for fast setup
_ Ethernet interface for fast data exchange
_ Secure setup with graphic support
_ Easy trouble shooting with diagnostic reference
_ Preventative maintenance

Heidenhain Plus iT with DINPlus (TurnPlus optional)

_ Graphic dialogue programming (structured machining time)
_ 3D real-time simulation
_ Program analysis and signal lamp diagnosis for all drives
_ Part program memory > 1 GB
_ Tool data with 999 tools and 64 materials
_ Tool service life monitoring
_ Parallel programming

Benefits

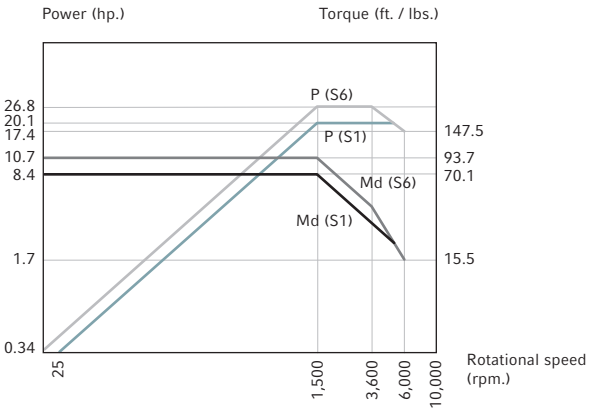
_ Ease-of-use with comprehensive cycle selection
_ Compatible with the 1190 and 3190
_ Open performance for IT applications
_ Complete programming handbook available
_ Ethernet interface for fast data exchange

The new **DMG ERGO*line*® Control with a 19" screen** offers optimum user comfort.

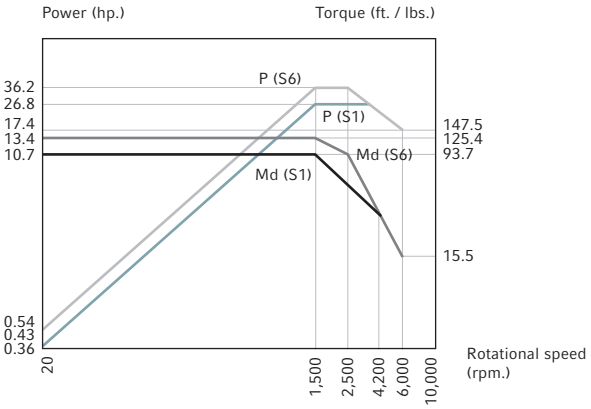
Performance Diagrams

CTX alpha 300 Main Spindle

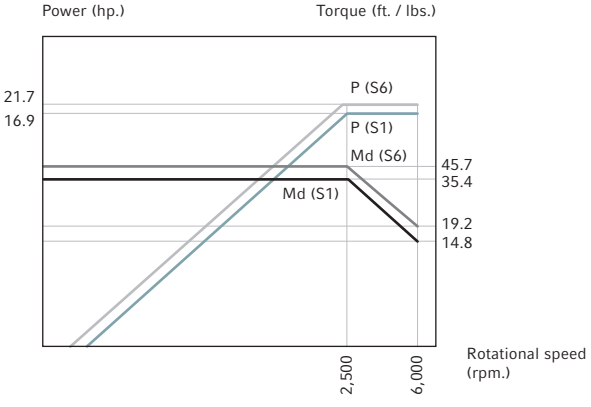
CTX beta 500 / 800 / 1250 / 1250 TC Counter Spindle



CTX alpha 500 Main Spindle

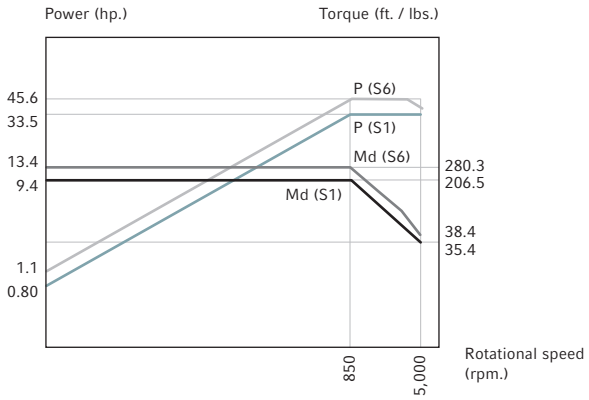


CTX alpha 500 Counter Spindle



CTX beta 500 / 800 / 1250 TC Main Spindle

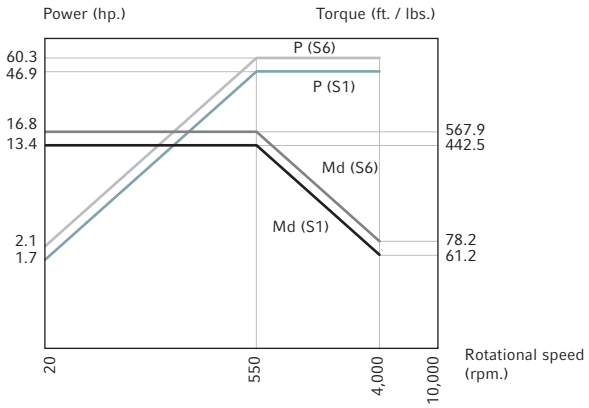
CTX gamma 1250 TC Main and Counter Spindles



CTX beta 1250 Main Spindle, CTX beta 1250 TC optional for the Main Spindle

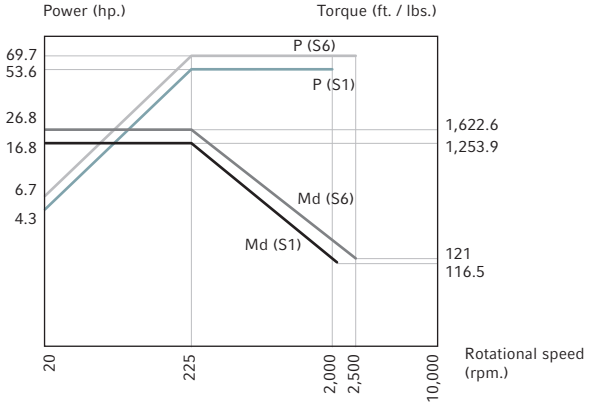
CTX gamma 1250 TC optional for the Main and Counter Spindles

CTX gamma 2000 Main and Counter Spindles



CTX gamma 1250 / 2000

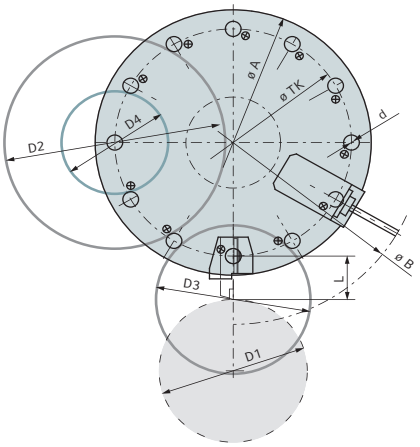
CTX gamma 1250 TC / 2000 TC optional for the Main Spindle



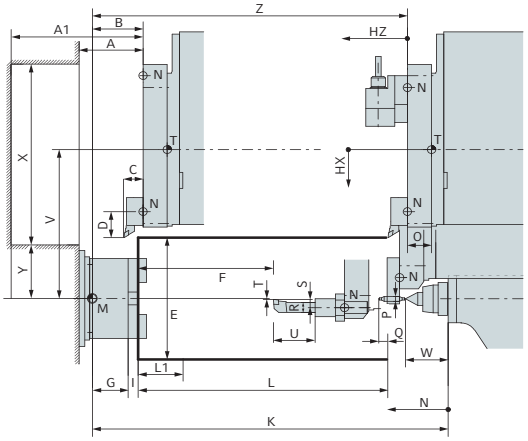
Tool Turret / Work Areas

Universal disk magazine CTX alpha, beta, gamma with a tailstock

Tool Turret



Work Area



Tool Turret

Machine	A	B	d	D1	D2	D3	D4	TK	HY	L
CTX alpha 300	16.1	21.3	1.2	7.9	12.2	9.6	5.7	13.4	±1.6	2.6
CTX alpha 500	16.1	21.3	1.2	7.9	12.2	9.6	5.7	13.4	±1.6	2.6
CTX beta 500	19.7	27.6	1.6	16.1	15.0	9.4	7.0	16.5	±2.4	2.6
CTX beta 800	19.7	27.6	1.6	16.1	15.0	9.4	7.0	16.5	±2.4	2.6
CTX beta 1250	19.7	27.6	1.6	16.1	15.0	9.4	7.0	16.5	±2.4	2.6
CTX gamma 1250	22.8	31.3	2.0	27.6	17.0	16.3	12.4	18.9	±3.1	2.6
CTX gamma 2000	22.8	31.3	2.0	27.6	17.0	16.3	12.4	18.9	±3.1	2.6

Work Area

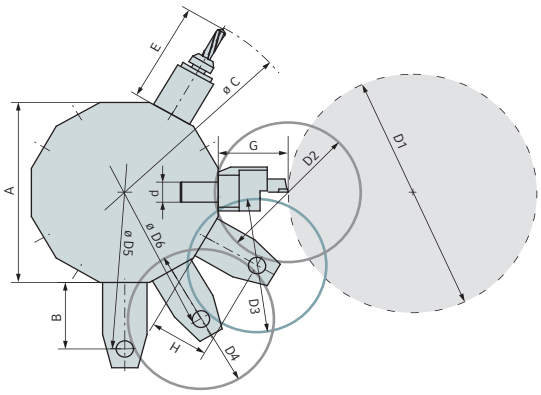
Machine	A	A1	B	C	D	E	F	G	HX	HZ	I	K	L
CTX alpha 300	6.5	10.8	4.7	1.9	2.6	7.9	3.7	3.0	7.5	13.2	0.70	24.4	12.2
CTX alpha 500	6.5	10.8	4.7	1.9	2.6	7.9	11.1	3.0	7.5	20.7	0.70	31.5	19.7
CTX beta 500	6.5	10.9	4.5	2.1	2.6	16.1	10.7	3.4	11.8	21.7	0.90	30.6	19.7
CTX beta 800	6.5	10.9	4.5	2.1	2.6	16.1	22.5	3.4	11.8	33.5	0.90	42.4	31.5
CTX beta 1250	6.5	10.9	4.5	2.1	2.6	16.1	38.4	3.4	11.8	51.2	0.90	60.1	49.2
CTX gamma 1250	11.8	27.6	6.5	2.4	3.3	27.6	43.3	6.7	18.9	51.2	1.4	59.4	51.0
CTX gamma 2000	11.8	27.6	6.5	2.4	3.3	27.6	72.8	6.7	18.9	80.7	1.4	89.0	80.5

	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
CTX alpha 300	14.6	2.6	0.32	0.24	0.98	0.98	0.12	3.9	13.2	3.9	19.7	7.7	17.9
CTX alpha 500	21.7	2.6	0.32	0.24	0.98	0.98	0.12	3.9	13.2	3.9	19.7	7.7	25.4
CTX beta 500	19.7	3.0	–	–	1.6	1.2	0.01	5.9	18.9	4.0	31.3	7.9	26.2
CTX beta 800	31.5	3.0	–	–	1.6	1.2	0.01	5.9	18.9	4.0	31.3	7.9	38.0
CTX beta 1250	49.2	3.0	–	–	1.6	1.2	0.01	5.9	18.9	5.9	31.3	7.9	55.7
CTX gamma 1250	45.7	3.7	0.79	0	1.6	2.4	1.6	3.4	26.0	3.7	27.6	11.8	58.1
CTX gamma 2000	75.2	3.7	0.79	0	1.6	2.4	1.6	3.4	26.0	3.7	27.6	11.8	87.6

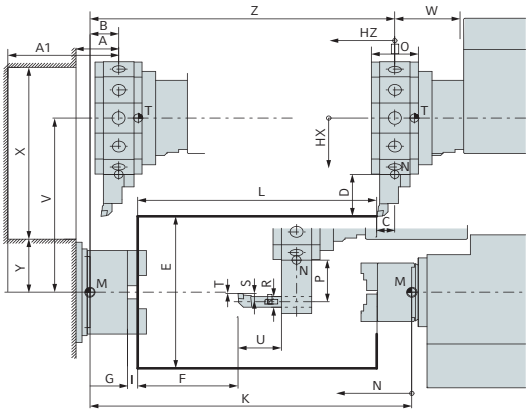
Measurements in inches

Star turret CTX alpha, beta with a counter spindle and a Y-axis

Tool Turret



Work Area



N...Tool reference point T...Tool holder reference point M...Machine zero point

Tool Turret

Machine	A	B	C	D	D1	D2	D3	D4	D5	D6	E	G	H	HY
CTX alpha 500	10.6	3.9	21.3	1.2	9.4	7.9	7.7	8.1	18.5	17.3	5.3	3.9	3.3	±1.6
CTX beta 500	12.6	4.7	25.6	1.6	17.7	9.6	9.0	9.5	22.0	20.5	6.5	4.7	3.4	±2.4
CTX beta 800	12.6	4.7	25.6	1.6	17.7	9.6	9.0	9.5	22.0	20.5	6.5	4.7	3.4	±2.4
CTX beta 1250	12.6	4.7	25.6	1.6	17.7	9.6	9.0	9.5	22.0	20.5	6.5	4.7	3.4	±2.4

Work Area

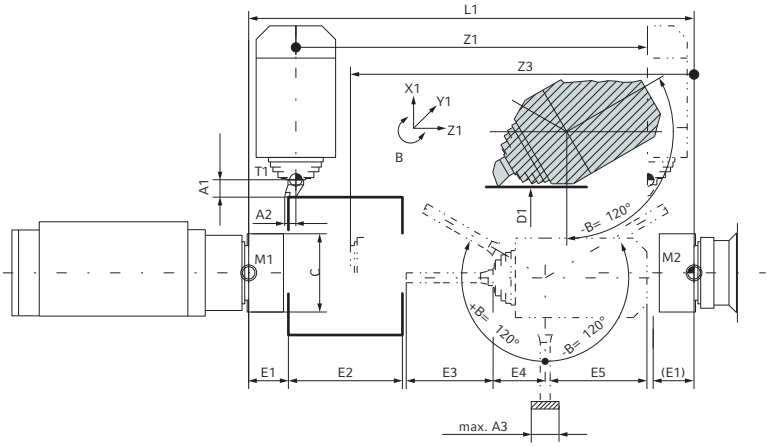
Machine	A	A1	B	C	D	E	F	G	HX	HZ	I	K	L
CTX alpha 500	5.5	9.4	3.7	1.9	3.9	9.4	15.2	3.0	6.7	20.5	0.79	30.7	18.5
CTX beta 500	4.6	8.9	2.6	2.3	4.7	17.7	6.5	3.4	11.8	19.7	0.94	28.3	15.6
CTX beta 800	4.6	8.9	2.6	2.3	4.7	17.7	18.2	3.4	11.8	31.5	0.94	40.2	27.4
CTX beta 1250	4.6	8.9	2.6	2.3	4.7	17.7	35.9	3.4	11.8	47.2	0.94	57.9	45.1

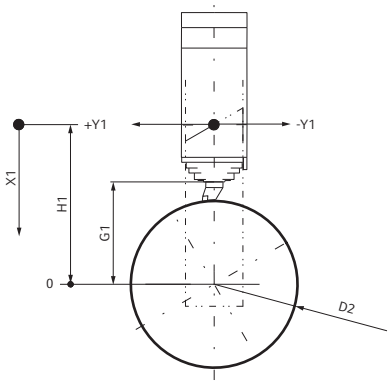
	N	O	P	R	S	T	U	V	W	X	Y	Z
CTX alpha 500	21.7	4.2	3.3	0.98	0.87	0.20	3.9	14.0	5.5	27.6	5.1	24.2
CTX beta 500	19.7	5.2	3.4	1.6	2.2	1.1	5.9	19.9	7.1	31.3	7.9	22.3
CTX beta 800	31.5	5.2	3.4	1.6	2.2	1.1	5.9	19.9	7.1	31.3	7.9	34.1
CTX beta 1250	47.2	5.2	3.4	1.6	2.2	1.1	5.9	19.9	7.1	31.3	7.9	51.8

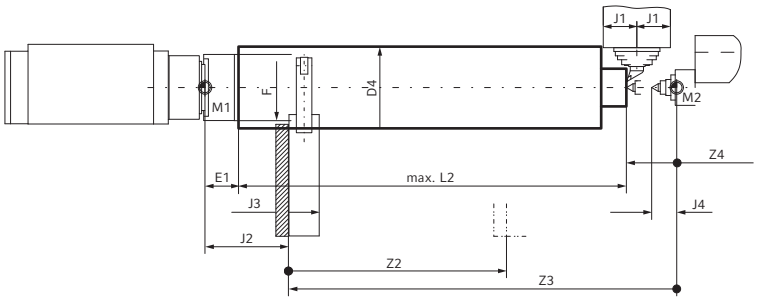
Measurements in inches

Work Areas

Work area CTX beta 1250 TC / CTX gamma 1250 TC / 2000 TC







T...Tool holder reference point

M...Machine zero point

Machine	A1	A2	A3	C	D1	D2	D4*	E1	E2	E3	E4	E5	G1
CTX beta 1250 TC	2.8	1.8	4.7	8.3	22.4	18.4	7.9	4.4	15.7	11.8	6.9	13.7	10.4
CTX gamma 1250 TC	2.8	1.8	5.5	12.4	24.8	24.0	13.8	6.7	11.8	11.8	9.8	10.7	14.8
CTX gamma 2000 TC	2.8	1.8	5.5	12.4	24.8	24.0	13.8	6.7	18.9	15.7	9.8	10.7	14.8

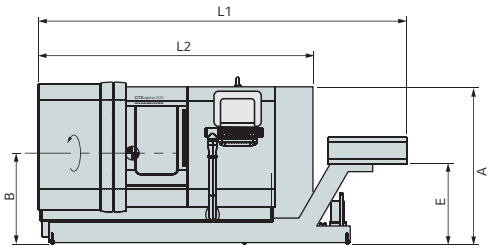
	H1	J1	J2	J4	L1	L2	X1	Y1	Z1	Z2	Z3	Z4**
CTX beta 1250 TC	17.3	5.6	10.6	7.4	57.9	49.0	17.7	7.9	49.0	38.2	47.2	–
CTX gamma 1250 TC	24.6	6.9	4.7	4.0	59.4	45.7	25.6	15.7	51.2	45.7	45.7	(7.1)
CTX gamma 2000 TC	24.6	6.9	4.7	4.0	89.0	75.2	25.6	15.7	80.7	75.2	75.2	(7.1)

* Clamp area steady rest, ** Hub tailstock center, ( ) Optional

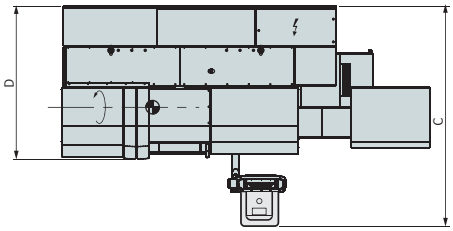
Floor Plans

CTX alpha / beta / beta TC

Front View



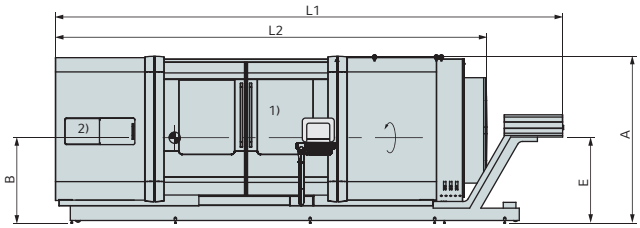
Top View



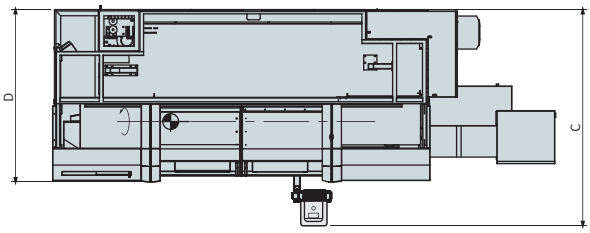
Machine	A	B	C	D	E	L1	L2
CTX alpha 300	71.3	40.0	98.8	66.7	47.2	163.8	120.7
CTX alpha 500	71.3	40.0	98.8	66.7	47.2	176.1	128.5
CTX beta 500	78.3	40.9	105.6	73.8	48.0	176.1	152.2
CTX beta 800	78.3	40.9	105.6	73.8	48.0	187.9	164.0
CTX beta 1250	78.3	40.9	107.1	73.8	48.0	211.5	189.6
CTX beta 1250 TC	81.4	40.9	117.0	85.0	50.5	222.6	194.5

CTX gamma / gamma TC

Front View



Top View



Machine	A	B	C	D	E	L1	L2
CTX gamma 1250	101.6	50.4	135.2	102.7	49.2	269.8	255.1
CTX gamma 2000	101.6	50.4	135.2	102.7	49.2	299.3	254.6
CTX gamma 1250 TC	101.6	50.4	135.2	102.7	49.2	269.7	255.1
CTX gamma 2000 TC	101.6	50.4	135.2	102.7	49.2	299.3	254.6

1) CTX gamma 1250, CTX gamma 1250 TC with a work area door left

2) Door to the tool magazine only with the CTX gamma TC

Measurements in inches

Technical Data

Machine Type		CTX alpha 300	CTX alpha 500
Work area			
Max. circle diameter	in.	19.7	19.7
Max. turning diameter	in.	7.9	7.9
Travel (X)	in.	7.5	7.5
Vertical travel (Y)*	in.	±1.6	±1.6
Longitudinal travel (Z)	in.	13.2	20.7
Main spindle			
Spindle head (flat flange)	in.	5.5h5	5.5h5
Bar diameter	in.	2.0 (2.6)*	2.0 (2.6)*
Spindle diameter in the front position	in.	3.9	3.9
Chuck*	in.	6.5 / 8.3	6.5 / 8.3
Drive power (40 / 100% DC)	hp. (AC)	26.8 / 20.1	36.2 / 26.8
Max. torque (40 / 100% DC)	ft. / lbs.	93.7 / 70.1	125.4 / 93.7
Max. rotational speed range	rpm.	6,000	6,000
Counter spindle*			
Spindle head (flat flange)	in.	–	5.5h5
Spindle diameter in the front position	in.	–	3.5
Chuck*	in.	–	6.5
Drive power (40 / 100% DC)	hp. (AC)	–	21.7 / 16.9
Max. torque (40 / 100% DC)	ft. / lbs.	–	45.7 / 35.4
Max. rotational speed range	rpm.	–	6,000
Feed drive AC			
Rapid traverse X / Y* / Z	ipm.	1,181.1 / 885.8 / 1,181.1	1,181.1 / 885.8 / 1,181.1
Tool holder			
Number of tool stations		12 (16)*	12 (16)*
Number of which are driven tools		12 (8)*	2 (8)*
Shaft diameter (according to DIN 69880)	in.	1.2	1.2
Drive power (40% DC)	hp.	7.2	7.2
Max. torque (40% DC)	ft. / lbs.	13.3	13.3
Max. rotational speed range	rpm.	5,000	5,000
Milling / Turning spindle			
Tool holder		–	–
Max. spindle rotational speed	rpm.	–	–
Max. drive power (40% DC)	hp.	–	–
Max. torque (40% DC)	ft. / lbs.	–	–
B-axis (torque motor)			
Rotation path (B)	Degrees	–	–
Max. torque (40% DC)	ft. / lbs.	–	–
Hydraulic clamping	ft. / lbs.	–	–
Tool magazine			
Number of tools		–	–
Tool length	in.	–	–
Tool weight G1 / G2	lbs.	–	–
Max. tool diameter (with open space)	in.	–	–
Tailstock			
Tailstock hub (automatically moveable)	in.	14.6	21.7
Center punch receiver	MK	4	4
Max. tailstock power	lbf.	1,348.9	1,348.9
Machine weight with control cabinet	lbs.	9,590.1[1)]	10,251.5[1)]

Controls	
DMG ERGO*line*® Control with a 19" screen	**Siemens** 840D, **Heidenhain** Plus iT

*Optional: [1)]Machine with chip tray

CTX beta 500	CTX beta 800	CTX beta 1250	CTX beta 1250 TC
27.6	27.6	27.6	19.7
16.1	16.1	16.1	15.4
11.8	11.8	11.8	17.7 (-0.39)
±2.4	±2.4	±2.4	±3.9
21.7	33.5	51.2	51.2
6.7h5	6.7h5 | (8.7h5)*	8.7h5	6.7h5 | (8.7h5)*
2.6 (3.0)*	2.6 (3.0*) | (3.7 / 4.0)*	3.7 (4.0)*	2.6 (3.0*) | (3.7 / 4.0)*
5.1	5.1 | (6.3)*	6.3	5.1 | (6.3)*
9.8 / 12.4	9.8 / 12.4 | 12.4 / 15.7	9.8 / 12.4 / 15.7	9.8 / 12.4 | 12.4 / 15.7
45.6 / 33.5	45.6 / 33.5 | 60.3 / 46.9*	60.3 / 46.9	45.6 / 33.5 | (60.3 / 46.9)*
280.3 / 206.5	280.3 / 206.5 | (567.9 / 442.5)*	567.9 / 442.5	280.3 / 206.5 | (567.9 / 442.5)*
5,000	5,000 | (4,000)*	4,000	5,000 | (4,000)*
5.5h5	5.5h5	5.5h5	5.5h5
3.9	3.9	3.9	3.9
6.5 / 8.3	6.5 / 8.3	6.5 / 8.3	6.5 / 8.3
26.8 / 20.1	26.8 / 20.1	26.8 / 20.1	26.8 / 20.1
91.8 / 68.7	93.7 / 70.1	93.7 / 70.1	93.7 / 70.1
6,000	6,000	6,000	6,000
1,181.1 (60)** / 885.8 / 1,181.1	1,181.1 (2,362.2)** / 885.8 / 1,181.1	1,181.1 (2,362.2)** / 885.8 / 1,181.1	1,181.1 / 1,181.1 / 1,181.1
12 (16)*	12 (16)*	12 (16)*	–
12 (16)*	12 (16)*	12 (16)*	–
1.6 (1.2)*	1.6 (1.2)*	1.6 (1.2)*	–
15.2	15.2	15.2	–
20.7	20.7	20.7	–
4,000	4,000	4,000	–
–	–	–	HSK-63A (Capto C6)*
–	–	–	12,000
–	–	–	29.5
–	–	–	73.8
–	–	–	220
–	–	–	253.7
–	–	–	2,065.2
–	–	–	Disk 24
–	–	–	11.8
–	–	–	11.0
–	–	–	3.1 (3.9)
19.7	19.7	47.2	47.2
5	5	5	5
1,798.5	1,798.5	2,697.7	2,697.7
11,023.1	13,448.2	16,865.4	17,526.7

Siemens 840D, **Heidenhain** Plus iT

*Optional **For the linear version

Technical Data

Machine Type		CTX gamma 1250	CTX gamma 1250 TC
Work area			
Max. circle diameter	in.	35.4	27.6
Max. turning diameter	in.	27.6	24.8 | (27.6)[1]
Travel (X)	in.	18.9	25.6 (-0.79)
Vertical travel (Y)*	in.	±3.1	±7.9
Longitudinal travel (Z)	in.	51.2	51.2
Main spindle			
Spindle head (flat flange)	in.	8.7h5	6.7h5 | (8.7h5)*
Bar diameter	in.	4.0	2.6 (3.0)* | (4.0)*
Spindle diameter in the front position	in.	6.3	5.1 | (6.3)*
Chuck*	in.	15.7–24.8 | 12.4 / 15.7	9.8 / 12.4 | 12.4-19.7 | 15.7-24.8
Drive power (40 / 100% DC)	hp.	69.7 / 53.6 | (60.3 / 47)*	45.6 / 33.5 | (60.3 / 46.9)* | (83.3 / 60.5)*
Max. torque (40 / 100% DC)	ft. / lbs.	1,622.6 / 1,253.9 | (567.9 / 442.5)*	280.3 / 206.5 | (567.9 / 442.5)* | (1,622.6 / 1,253.9)*
Max. rotational speed range	rpm.	2,500 | (4,000)*	5,000 | (4,000 / 2,500)*
Counter spindle*			
Spindle head (flat flange)	in.	–	6.7h5 | (8.7h5)*
Spindle diameter in the front position	in.	–	5.1 | (6.3)*
Chuck*	in.	–	9.8 / 12.4 | 12.4 – 19.7
Drive power (40 / 100% DC)	hp. (AC)	–	45.6 / 33.5 | (60.3 / 46.9)*
Max. torque (40 / 100% DC)	ft. / lbs.	–	280.3 / 206.5 | (567.9 / 442.5)*
Max. rotational speed range	rpm.	–	5,000 | (4,000)*
Feed drive AC, Rapid traverse X / Y* / Z	ipm.	1,574.8 / 1,102.4 / 1,181.1	1,574.8 / 1,574.8 / 1,181.1
Tool holder			
Number of tool stations		12 (16)*	–
Number of which are driven tools		12 (16)*	–
Shaft diameter (according to DIN 69880)	in.	2.0 (1.6)*	–
Drive power (40% DC)	hp.	29.9	–
Max. torque (40% DC)	ft. / lbs.	52.4	–
Max. rotational speed range	rpm.	3,000	–
Milling / Turning spindle			
Tool holder		–	HSK-63A (Capto C6)*
Max. spindle rotational speed	rpm.	–	12,000 (18,000)*
Max. drive power (40% DC)	hp.	–	29.5
Max. torque (40% DC)	ft. / lbs.	–	73.8
B-axis (torque motor)			
Rotation path (B)	Degrees	–	240
Max. torque (40% DC)	ft. / lbs.	–	2,065.2
Hydraulic clamping	ft. / lbs.	–	2,950.2
Tool magazine			
Number of tools		–	Disk 36 | (Chain 120)[2]
Tool length	in.	–	15.7
Tool weight G1 / G2	lbs.	–	22 | (13.2 / 26.5)[2]
Max. tool diameter (with open space)	in.	–	3.1 (5.5)
Tailstock			
Tailstock hub (automatically moveable)	in.	45.7[3]	45.7[3]
Center punch receiver	MK	6	6
Max. tailstock power	lbf.	2,922.5	2,922.5
Machine weight with control cabinet	lbs.	30,864.7	40,785.5

Controls
DMG ERGO*line*® Control with a 19" screen

CTX gamma 2000	CTX gamma 2000 TC
35.4	27.6
27.6	24.8 | (27.6)[1]
18.9	25.6 (-0.79)
±3.1	±7.9
80.7	80.7
8.7h5	8.7h5
4	4
6.3	6.3
15.7 – 24.8 | 12.4 / 15.7	12.4 – 19.7 | 15.7 – 24.8
69.7 / 53.6 | (60.3 / 47)*	60.3 / 46.9 | (69.7 / 53.6)*
1,622.6 / 1,253.9 | (567.9 / 442.5)*	567.9 / 442.5 | (1,622.6 / 1,253.9)*
2,500 | (4,000)*	4,000 | (2,500)*
–	8.7h5
–	6.3
–	315 – 500
–	60.3 / 47
–	567.9 / 442.5
–	4,000
1,574.8 / 1,102.4 / 1,181.1	1,574.8 / 1,574.8 / 1,181.1
12 (16)*	–
12 (16)*	–
2 (1.6)*	–
29.9	–
52.4	–
3,000	–
–	HSK-63A (Capto C6)*
–	12,000 (18,000)*
–	29.5
–	73.8
–	240
–	2,065.2
–	2,950.2
–	Disk 36 | (Chain 120)[2]
–	15.7
–	22 | (13.2 / 26.5)[2]
–	3.1 (5.5)
75.2[3]	75.2[3]
6	6
4,046.6	4,046.6
40,785.5	52,910.9
Siemens 840D, **Heidenhain** Plus iT	

*Option: [1]in connection with optional 120x chain magazine;
[2]Option 120x chain magazine (only for the DMG ERGO*line*® Control with Siemens 840D Control): [3]NC-controlled, electro-mechanical

TC: Complete machining with a Milling / Turning spindle and tool magazine.

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