

Information





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Company history

1989



1987	- Founding by Martin Krieger the company Automation- und Spannsysteme
	with the aim of manufacturing support tools for cutting plates

- Change of the company's aim from providing support tools to live tools new company name heimatec
 - external design office
 - manufacturing of components as job shop
 - assembling of tools in part time with part time employees
- hiring of the first 3 employees for assembling and design
- founding of department in Bietigheim near Stuttgart
 multi-spindle heads "big size" for special purpose machines and transfer lines
- founding of sales department in Moskau Russia

Company history



end of Dec. 2005

 Relocation to todays factory building Estate area: 26000 m²
 Office and manufacturing area: 4000 m²



2008 - Development of the u-tec change system

- founding of sales department in USA (today 4 employees)

2012 - Founding of a sales branch in Singapore/Asia

2014 - Founding of heimatec Ltd., a subsidiary at Taichung/Taiwan



Live Tools, standard and special for CNC Lathes



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Live Tools, standard and special for CNC Lathes





Static tool holders

VDI DIN 69880 and BMT (block mounted tools)



page 6



Right angle heads, standard and special for CNC machining centers



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Special tools for CNC lathes and machining centers

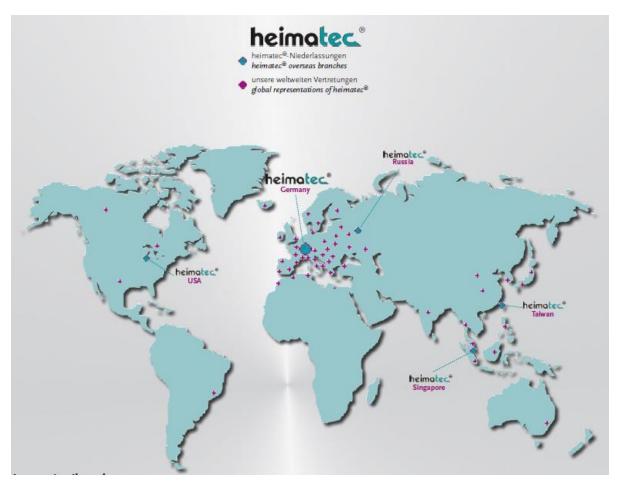


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Sales and cumstomer



- Sales of heimatec products is organized through dealers and distributors
- local and sometimes international directly at heimatec



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most important business



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Nakamura Tome

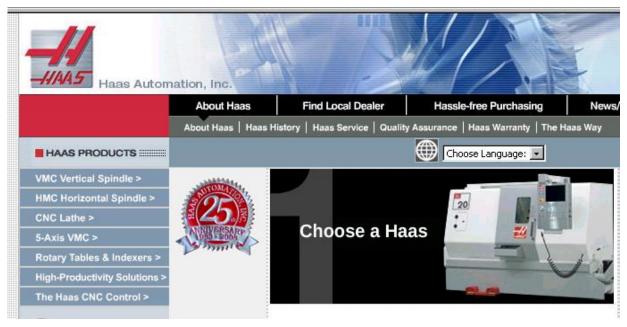




Main supplier

- > Europe 95% of agents
- > USA 60 %
- Russia 100 %
- ➤ India 50 %





Main supplier

- > Europe 90 % of agents
- ➤ USA 30 % of agents
- Russia 95 %
- ➤ India 50 %





Main supplier

> 90 % whole the world

Miyano (Citizen)





Main supplier

- > Europe 90 % of agents
- ➤ USA 50 % of agents
- Taiwan 100 %





Produktübersicht

Die Produkte der Yamazaki Mazak Group.

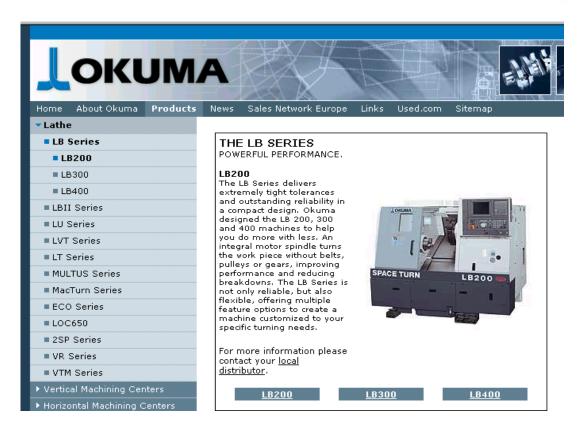
Klicken Sie auf "mehr" um zur englischsprachige Detailsbeschreibung zu gelangen.



Very good programm

> Europe 35 % of agents

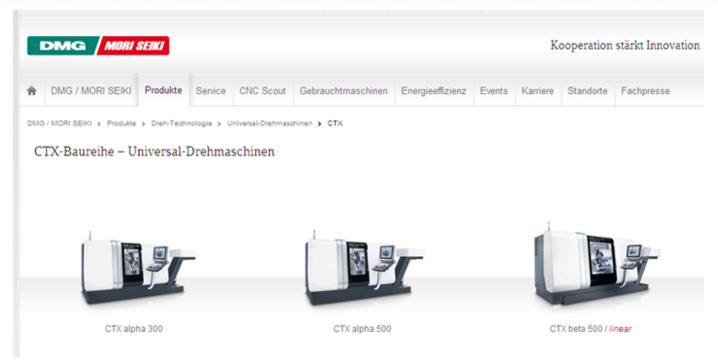




very good standard programm

DMG / Mori Seiki





very good standard programm

Customer

- DMG Mori Hungary
- DMG Mori Singapure
- DMG Mori China









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Victor / Fortuna





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Other new products for Citizen Swiss typ lathe







Standard driven tools middle of 2016

easy quick HT fast change system





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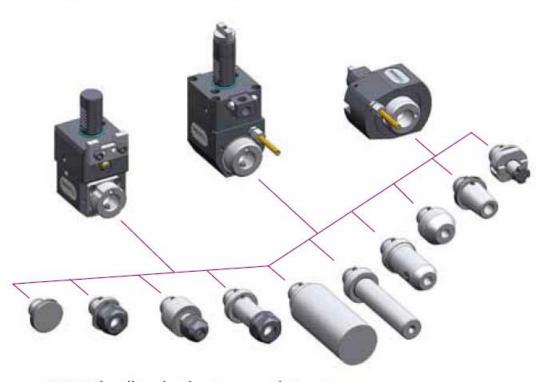
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easy-quick HT fast change system



easy-quick HT Schnellwechselsystem
 easy-quick HT fast change system



DAS Schnellwechselsystem von heimatec für angetriebene und feste Werkzeuge THE fast change system of heimatec

for driven and static tools

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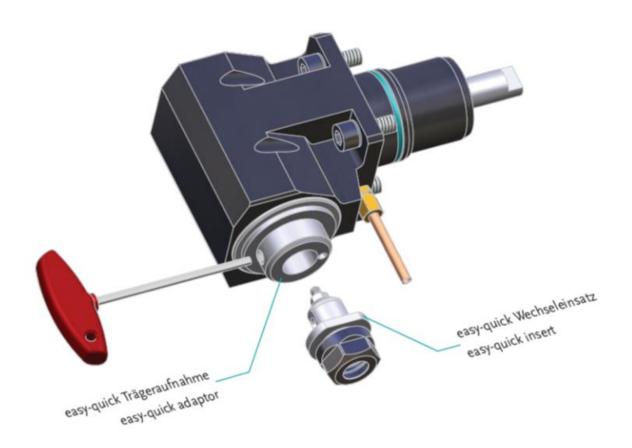
www.heimatec.de Produkte / easy-quick www.heimatec.com

products / easy-quick

 Ausführungen siehe Katalog versions see catalogue



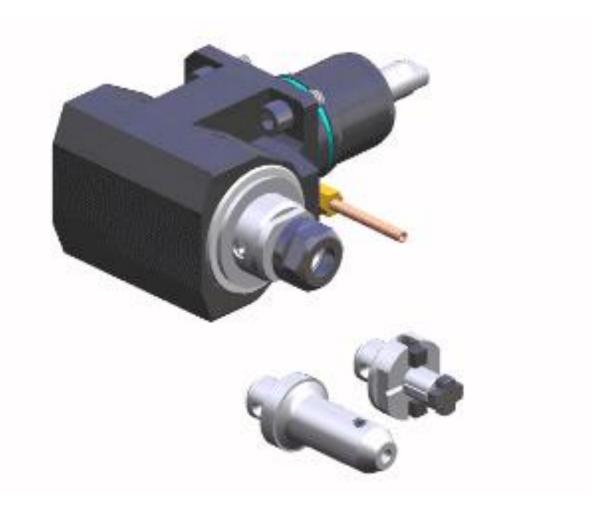




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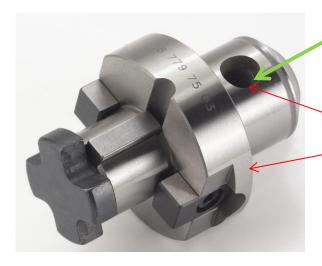


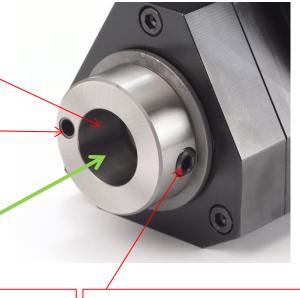
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Cylinder tolerance 0,005 mm

pin hole for positioning, not for power transfer



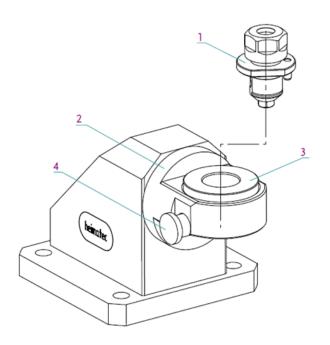


Oval hole

set screw with cone

pin for positioning, not for power transfer





mounting device HT 8 710 95 001

For mounting cutters in various adpators (1). Please place mounting device safely, in vice or mount on bench. The attachment (2) can be adjusted in 30° steps. The holding fixture (3) is held by locator pin (4). (left and right side operation)

More holding fixtures (3) available as options for adapters (1) in various sizes and types.

Wechselbuchsen (3) erhältlich:

interchangeable bushings (3) available:

HT2 - 8 732 54 007

HT3 - 8 732 55 005

HT4 - 8 732 56 005

HT5 - 8 732 57 004

HT6 - 8 732 58 003

HT7 - 8 732 59 003

Empfohlene Anzugsdrehmomente für HT - Spannschraube recommended clamping torque for HT clamping bold

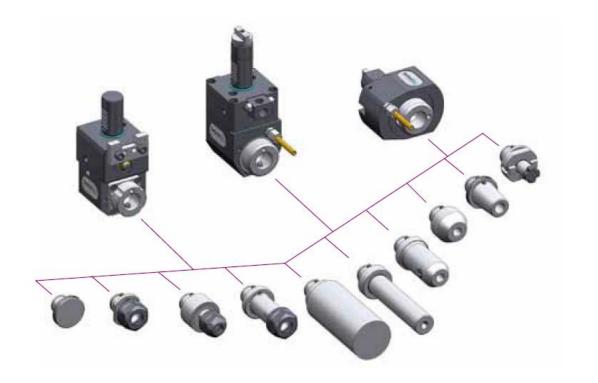
HT 2	HT 3	HT 4	HT 5	HT 6	HT 7
2,5 Nm	4 Nm	8 Nm	12 Nm	28 Nm	52 Nm

Warnung! Das maximale Anzugsdrehmoment darf nicht mehr als 15% über den empfohlenen Werten liegen. **Warning!** The maximum clamping torque should not extend more than 15% of the recommended clamp torque.



Advantage

- Single hand operation
- > Pre settable
- Highest repeatability
- Fast tool change



easy-quick HT fast change system



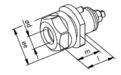




Wechseleinsätze für easy-quick

inserts for easy-quick

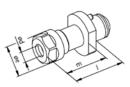
Schnittstelle: easy-quick HT 2 interface: easy-quick HT 2



Spannzangenaufnahme collet chuck

Spannsystem clamping syst		ø d [mm]	ø e [mm]	l [mm]	m [mm]
ER 8 M	8 779 42 003	0,5 - 5,0	12,0	17,0	13,0
ER 11	8 779 43 002	0,5 - 7,0	19,0	17,5	13,5

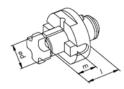




> Spannzangenaufnahme lang collet chuck long

Spannsystem	Bestell-Nr.	ø d	ø e	l	m
clamping system	refno.	[mm]	[mm]	[mm]	[mm]
ER 8 M	8 779 42 005	0,5 - 5,0	12,0	40,0	36,0

@ ZB 741 ...*



Fräsdorn arbor

Spannsystem clamping system	Bestell-Nr. refno.	ø d [mm]	l [mm]	m [mm]
Fräsdorn 10 / arbor 10	8 779 42 001	10,0	21,0	16,0
Fräsdorn 13 / arbor 13	8 779 43 001	13,0	26,0	21,0
Kombidorn ½" / universal arbor ½"	8 779 43 026	1/2"	34,0	14,3

27 ZB 655 ...* 0 ZB 620 *

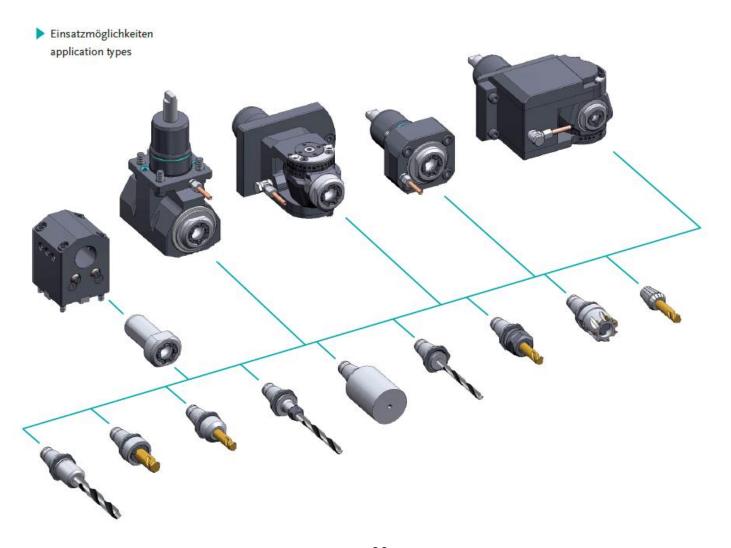
u-tec change system





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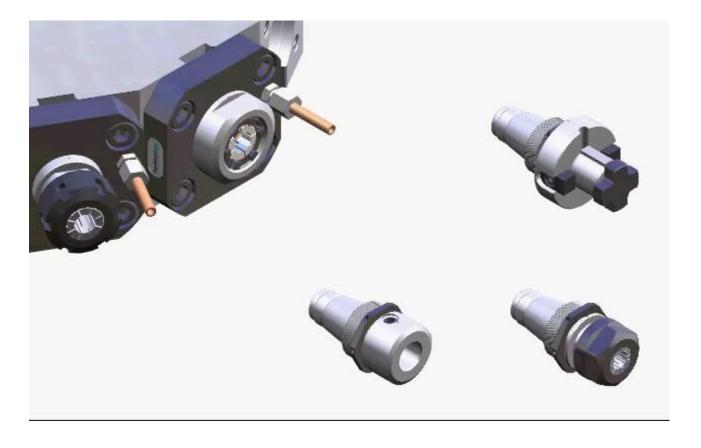




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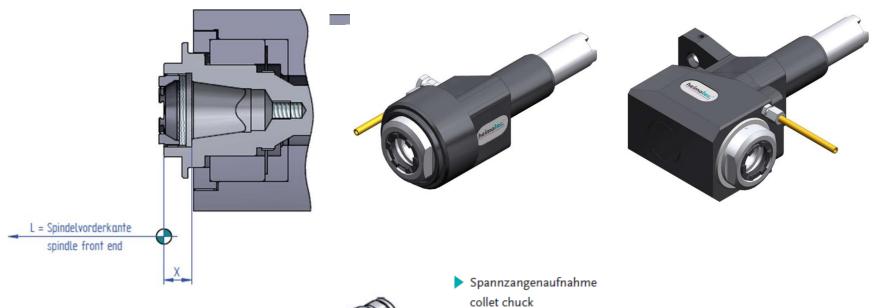


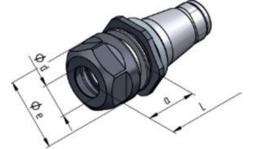
u-tec change system



 Nullpunktsdefinition definition of zero

ER 16		ER	20	ER 25		ER 32		ER 40	
X	10	X	- 11	Х	12	X	14	X	16





Spannsystem clamping system	Bestell-Nr. refno.	ø d [mm]	ø e [mm]	a [mm]	L [mm]
ER 16	8 779 64 039	0,5 - 10,0	28,0	22,5	32,5
ER 20	8 779 64 040	0,5 - 13,0	34,0	24,0	34,0
ER 25	8 779 65 010	0,5 - 16,0	42,0	25,0	35,0

1,0 - 20,0

50,0

27,5

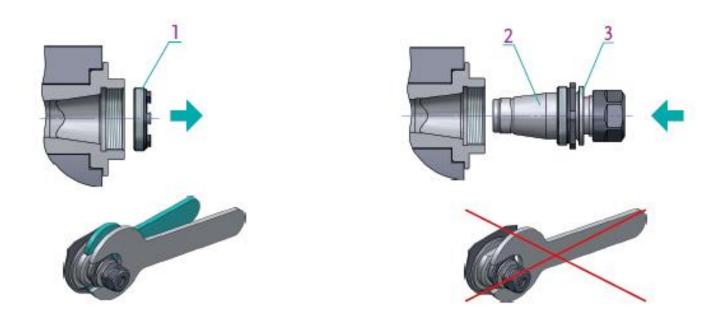
8 779 66 001

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ER 32

43,0

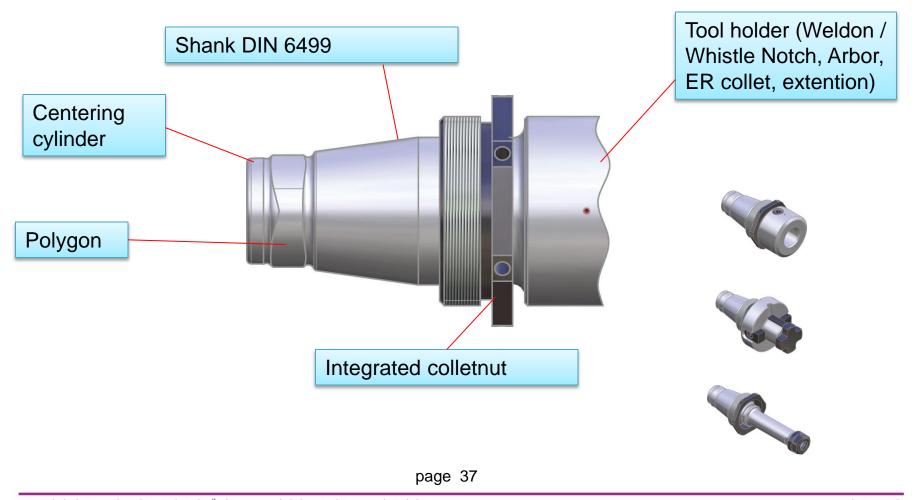




Remove collet nut (1) and store. The u-tec adapter (2) is clamped with a special collet nut (3). Clamp collet nut (3) properly by using a wrench to hold the tool spindle.



Functional features of u-tec





mounting device UT 8 710 95 001

For mounting cutters in various adpators (1). Please place mounting device safely, in vice or mount on bench. The attachment (2) can be adjusted in 30° steps. The holding fixture (3) is held by locator pin (4). (left and right side operation)

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Wechselbuchsen (3) erhältlich: interchangeable bushings (3) available:

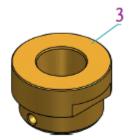
UT 16 - 8 732 54 005

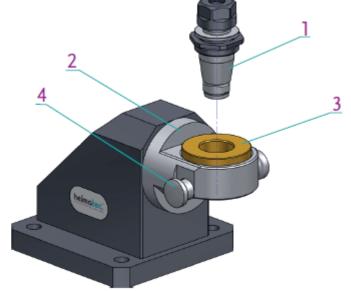
UT 20 - 8 732 54 006

UT 25 - 8 732 55 004

UT 32 - 8 732 56 004

UT 40 - 8 732 57 003



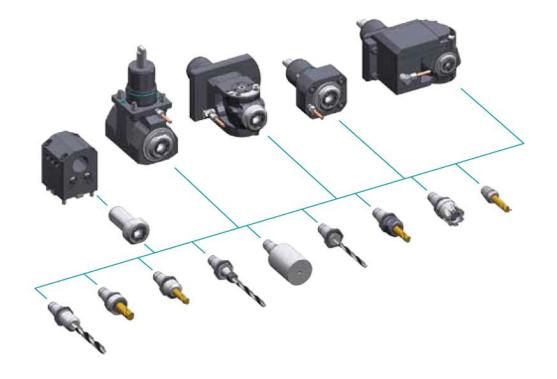


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Advantage

- Standard tool for customer
- The customer can use the u-tec inserts, but it's not a must
- Very flexible
- > Pre-settable
- Highest repeatability and run out
- Very rigid









Wechseleinsätze für u-tec®

inserts for u-tec®

Schnittstelle: UT 32 A interface: UT 32 A



Spannzangenaufnahme

collet chuck

Spannsystem clamping system	Bestell-Nr. refno.	ø d [mm]	ø e [mm]	a [mm]	L [mm]
ER 16	8 779 64 039	0,5 - 10,0	28,0	22,5	32,5
ER 20	8 779 64 040	0,5 - 13,0	34,0	24,0	34,0
ER 25	8 779 65 010	0,5 - 16,0	42,0	25,0	35,0
ER 32	8 779 66 001	1,0 - 20,0	50,0	27,5	43,0

\$\text{\$7} \text{\$28 \text{ 655}...*} \text{\$\mathbb{G}} \text{\$ZB \text{ ER...*}} \text{\$\mathbb{D}} \text{\$ZB \text{ ET...*}} \text{\$\mathbb{G}} \text{\$ZB \text{ GB...*}} @ ZB 741 ...*

> Spannzangenaufnahme lang



(ZB 741 ...*

€ ZB 655 ... * F ZB ER ... * D ZB ET ... * F ZB GB ... *

Fräsdom



Spanns ystem clamping system	Bestell-Nr. refno.	ø d [mm]	a [mm]	L [mm]
Kombidorn 16 / universal arbor 16	8 779 64 049	16,0	17,0	35,5
Kombidorn 22 / universal arbor 22	8 779 65 015	22,0	19,0	38,5
Kombidorn 27 / universal arbor 27	8 779 66 004	27,0	21,0	43,5
Kombidorn ½"/ universal arbor ½"	8 779 63 024	3/2"	14,3	31,0
Kombidorn ¾"/ universal arbor ¾"	8 779 64 054	34"	17,45	37,0

57 ZB 655 ... * O ZB 620 ... *

Darstellung symbolisch symbolic drawing

Weitere Ausführungen auf Anfrage further versions on request

* Nicht im Lieferumfang enthalten * not included in delivery

ZB UT32 6 000

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Technical details

Live Tooling for CNC Lathes with turrets





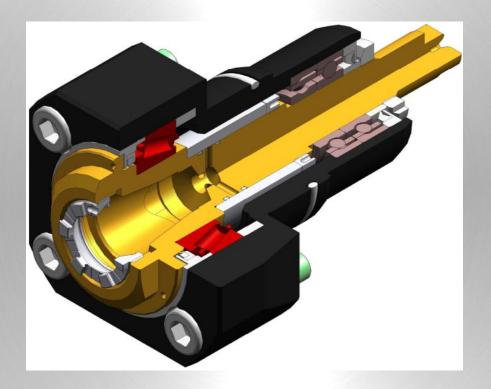
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Technical details axial live tools





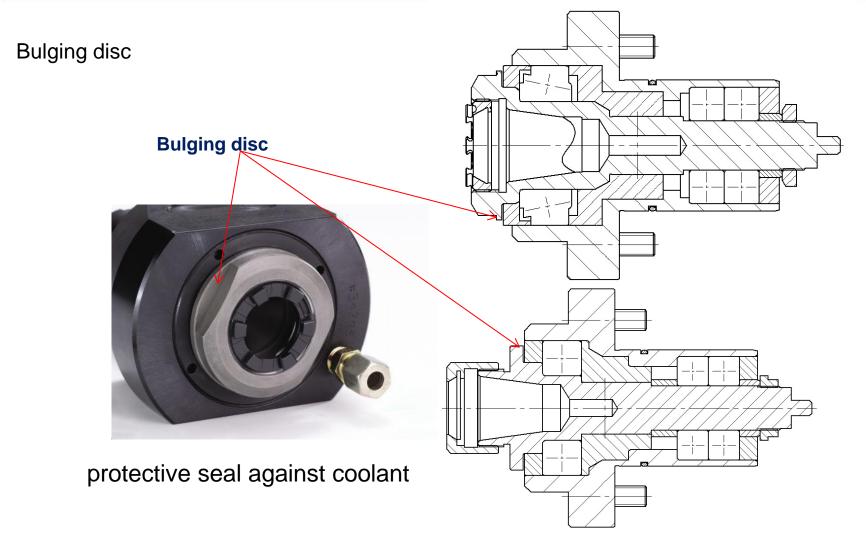


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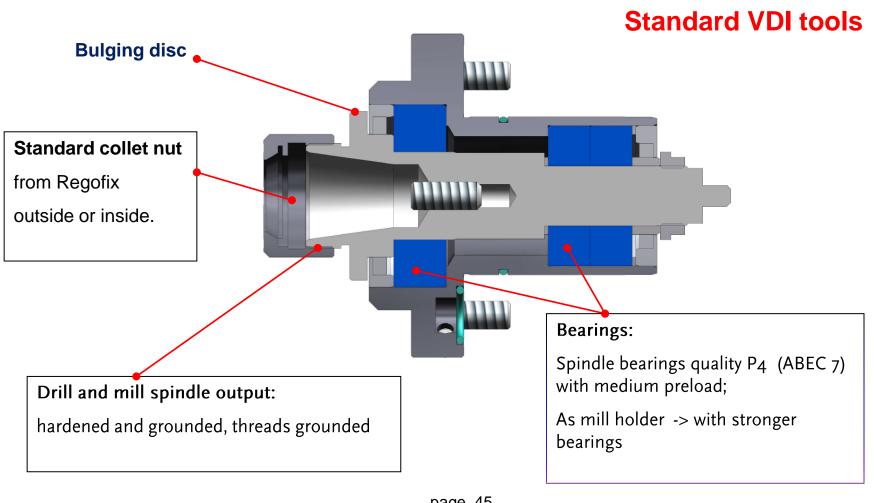




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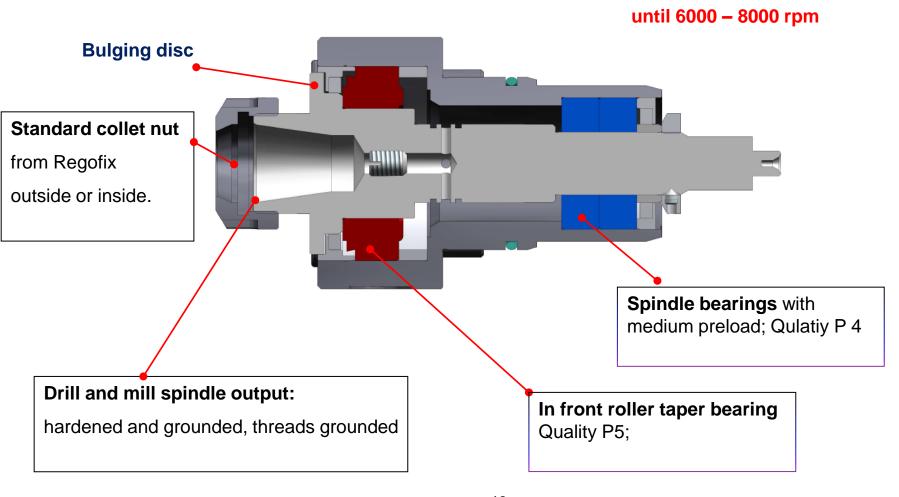


Axial drilling and milling head ext. coolant "spindle bearing,, outside collet nut



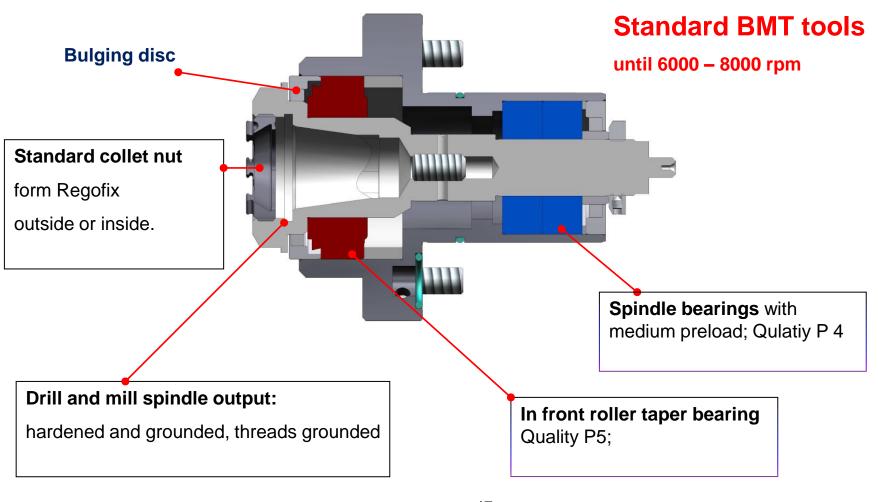


Axial drilling and milling head ext coolant "combi bearing" outside collet nut



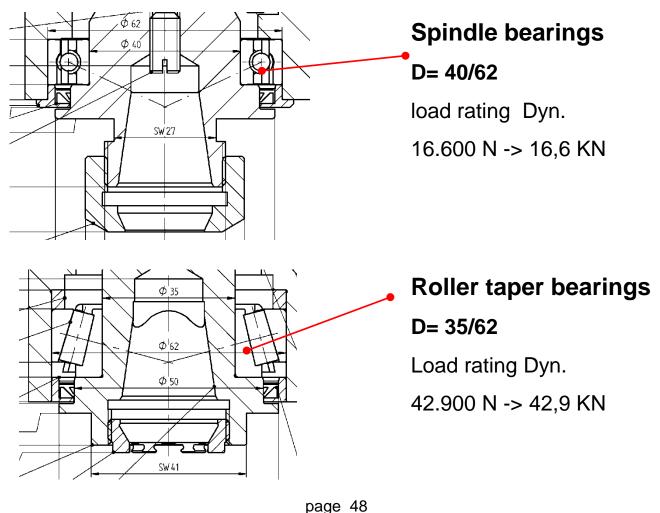


Axial drilling and milling head ext. coolant "combi bearing" inside collet nut





Technical Comparison spindle bearings with taper roller bearings





spindle bearing tool

Axial drilling and milling head comparison

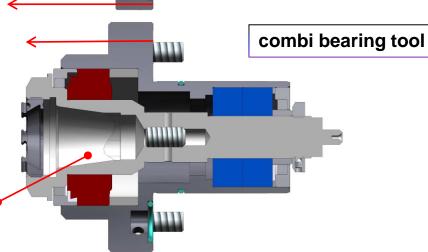
Combi bearing / inside collet nut advantage

> more rigid

Good result regarding heating up

Longer live time

u- tec system



The cone is in the bearing

- short distance
- less torque on the bearing

Technical details radial live tools





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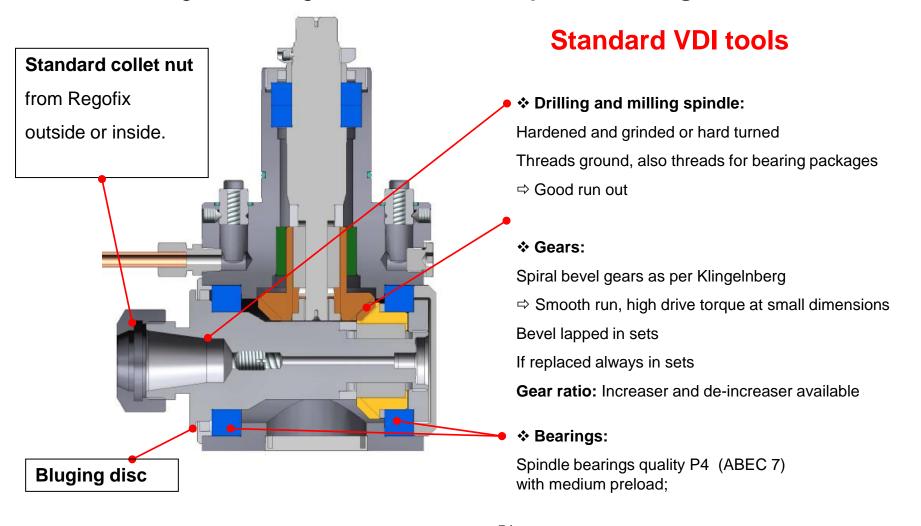
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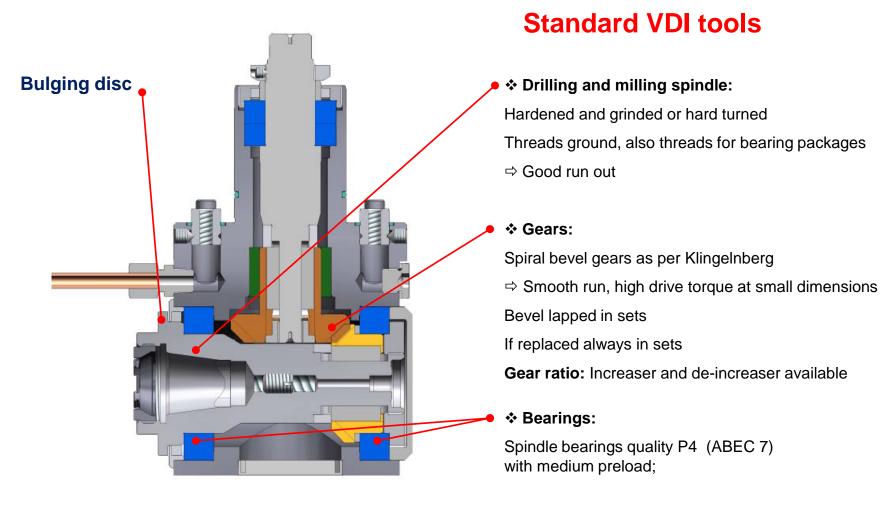


Radial drilling and milling head ext coolant "spindle bearing, out side collet nut





Radial drilling and milling head ext coolant "spindle bearing,, inside collet nut





Radial drilling and milling head ext coolant "combi bearing,, inside collet nut

Bulging disc

Standard VDI tools

until 6000 - 8000 rpm

Drilling and milling spindle:

Hardened and grinded or hard turned

Threads ground, also threads for bearing packages

⇒ Good run out

❖ Gears:

Spiral bevel gears as per Klingelnberg

⇒ Smooth run, high drive torque at small dimensions

Bevel lapped in sets

If replaced always in sets

Gear ratio: Increaser and de-increaser available

❖ Bearings:

Spindle back side

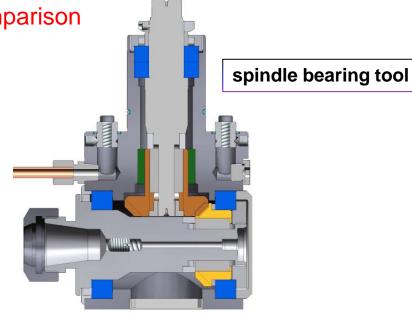
Roller taper bearing front side



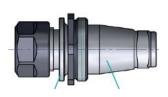
radial drilling and milling head comparison

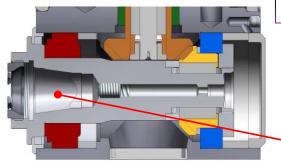
Combi bearing / inside collet nut advantage

- more rigid
- good result regarding heating up
- longer live time
- > u- tec system



combi bearing tool





The cone is in the bearing

- short distance
- less torque on the bearing



Radial drilling and milling head "BMT tools have only one housing"

Standard version BMT



- Optimized housing design
- > short screw connection to turret
- ➤ bigger bearings
- > less vibrations



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end

Thank you for your attention!

About a positive cooperation, we would be very happy!





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