



## Program summary

# Workholding systems / Machine vices

Flexible workholding systems

5-axis machining

Double and multiple  
workholding systems

Tower workholding systems

Concentric workholding systems

Automation

Box jaws









## Program summary




### Workholding systems / Machine vices

	Flexible workholding systems			
Series	EL	NC	VL	KNC
<b>Data sheet</b>	<b>WS 1.3020</b>	<b>WS 1.3020</b>	<b>WS 2.3170</b>	<b>WS 1.3150</b>
<b>Clamping jaws /Accessories</b>	WS 1.3020	WS 1.3020	WS 2.3170	WS 1.3150
<b>Jaw widths</b> (max. clamping force)	<b>100 mm</b> (25 kN) <b>125 mm</b> (40 kN) <b>160 mm</b> (50 kN)	<b>100 mm</b> (25 kN) <b>125 mm</b> (40 kN) <b>160 mm</b> (50 kN)	<b>100 mm</b> (25 kN) <b>125 mm</b> (40 kN) <b>160 mm</b> (50 kN)	<b>100 mm</b> (25 kN) <b>125 mm</b> (40 kN) <b>160 mm</b> (50 kN)
<b>Operation</b>				
mechanical	–	–	–	–
with hydraulic force transmission	with hydraulic force transmission	with hydraulic force transmission	with hydraulic force transmission	with hydraulic force transmission
hydraulic	–	single acting	single acting	–
<b>Clamping principle</b>	clamping against the fixed jaw	clamping against the fixed jaw	clamping against the fixed jaw	clamping against the fixed jaw
<b>Application</b>	manual loading	manual loading	manual loading	manual loading
<b>Machining centre</b>	vertical	vertical	vertical / horizontal	vertical / horizontal
<b>Special features/Options</b>	· basic system	· clamping force display · step jaw inserts	· clamping force display · variable overall length · step jaw inserts	· completely encapsulated
<b>Overall lengths</b>	380 ... 750 mm	380 ... 550 mm	380 ... 750 mm	300 ... 540 mm

	5-axis machining			
Series	MC-P	MC-P Z   MC-P ZB	SCS	PC
<b>Data sheet</b>	<b>WS 5.4501</b>	<b>WS 5.4502   5.4503</b>	<b>WS 5.3670</b>	<b>WS 5.3570</b>
<b>Clamping jaws /Accessories</b>	WS 5.450-Z	WS 5.450-Z	WS 5.3670	WS 5.3570
<b>Jaw widths</b> (max. clamping force)	<b>40 mm</b> (7.5 kN) <b>60 mm</b> (15 kN) <b>100 mm</b> (25 kN) <b>125 mm</b> (35 kN)	<b>40 mm</b> (7.5 kN) <b>60 mm</b> (15 kN) <b>100 mm</b> (25 kN) <b>125 mm</b> (35 kN)	<b>80 mm</b> (25 kN) <b>120 mm</b> (40 kN)	<b>80 mm</b> (20 kN)
<b>Operation</b>				
mechanical	mechanical	mechanical	mechanical	mechanical
hydraulic	on request	double acting	single acting	–
<b>Clamping principle</b>	clamping against the fixed jaw	concentric clamping / position flexible	clamping against the fixed jaw	clamping against the fixed jaw or concentric clamping
<b>Application</b>	manual loading / automation	manual loading / automation	manual loading / automation	manual loading
<b>Machining centre</b>	5-axis / pallets	5-axis / pallets	5-axis / pallets	5-axis / pallets
<b>Special features/Options</b>	· patented design · compact design	· patented design · clamping without deformation (MC-P ZB) · compact design	· covered spindle area · displaceable fixed jaw	· basic system
<b>Overall lengths</b>	110 ... 283 mm	110 ... 485 mm	206 ... 282 mm	170 mm





## Double and multiple workholding systems

DF	DS	Duo	MSH
			
<b>WS 3.3420</b> WS 3.3420	<b>WS 3.3660/3.3680</b> WS 3.3660/3.3680		<b>WS 8.3480</b> WS 8.3480
<b>100 mm</b> (25 kN) <b>125 mm</b> (40 kN) <b>160 mm</b> (50 kN)	<b>100 mm</b> (25 kN) <b>125 mm</b> (40 kN)	<b>80 mm</b> (20 kN)	<b>24 mm</b> (15 kN) <b>40 mm</b> (20 kN) <b>60 mm</b> (25 kN) <b>100 mm</b> (25 kN)
–	mechanical	mechanical	mechanical
with hydraulic force transmission	–	–	–
single acting	single acting	–	–
clamping against the fixed jaw	clamping against the fixed jaw	clamping against the fixed jaw	clamping against the fixed jaw
manual loading	manual loading / automation	manual loading / automation	manual loading
vertical	vertical/horizontal	vertical/horizontal	vertical/horizontal
<ul style="list-style-type: none"> <li>· clamping force display</li> <li>· step jaw inserts</li> <li>· operation with 2 spindles</li> </ul>	<ul style="list-style-type: none"> <li>· operation with 1 spindle</li> <li>· with 3rd-hand function</li> <li>· Vector design on request</li> </ul>	<ul style="list-style-type: none"> <li>· compact workholding system</li> </ul>	<ul style="list-style-type: none"> <li>· MSH variant stainless</li> <li>· locking via eccentric</li> </ul>
540 ... 750 mm	420 ... 510 mm	240 mm	250 ... 750 mm

Concentric workholding systems	Automation	Box jaws
<b>ZH</b>	<b>ASH</b>	<b>KK</b>
		
<b>WS 7.3540</b> WS 7.3540	<b>WS 11.3100</b> WS 11.3100	<b>WS 10.2060</b> WS 10.2060
<b>100 mm</b> (16 kN) <b>125 mm</b> (25 kN) <b>160 mm</b> (40 kN)	<b>100 mm</b> (25 kN) <b>125 mm</b> (32 kN)	<b>KK 150</b> (30 kN) <b>KK 180</b> (63 kN)
–	–	mechanical
double acting	double acting	–
concentric clamping	clamping against the fixed jaw	–
manual loading / automation	manual loading / automation	manual loading
vertical / horizontal	vertical / horizontal	turning/milling centres
<ul style="list-style-type: none"> <li>· completely encapsulated</li> </ul>	<ul style="list-style-type: none"> <li>· option: stroke measuring system</li> <li>· clamping stroke up to 250 mm</li> <li>· completely encapsulated</li> </ul>	<ul style="list-style-type: none"> <li>· completely encapsulated</li> </ul>
395 ... 605 mm	application-specific	–



**Tower workholding systems**

Series	<b>TS</b>	<b>TS TriStar</b>	<b>TS Vector</b>	<b>TS TriStar Vector</b>
				
<b>Data sheet</b> <b>Clamping jaws / Accessories</b>	<b>WS 4.3301</b> WS 4.330-Z	<b>WS 4.3302</b> WS 4.330-Z	<b>WS 4.3301</b> WS 4.330-Z	<b>WS 4.3302</b> WS 4.330-Z
<b>Jaw widths</b> (max. clamping force)	<b>100 mm</b> (25 kN) <b>125 mm</b> (40 kN)	<b>80 mm</b> (20 kN) <b>100 mm</b> (25 kN) <b>125 mm</b> (40 kN)	<b>100 mm</b> (25 kN) <b>125 mm</b> (40 kN)	<b>100 mm</b> (25 kN) <b>125 mm</b> (40 kN)
<b>Operation</b> mechanical	mechanical	mechanical	mechanical	mechanical
hydraulic	–	–	on request	–
<b>Clamping principle</b>	clamping against the fixed jaw	clamping against the fixed jaw	clamping against the fixed jaw	clamping against the fixed jaw
<b>Application</b>	manual loading	manual loading	manual loading / automation	manual loading / automation
<b>Machining centre</b>	horizontal	horizontal	horizontal	horizontal
<b>Special features/ Options</b>	<ul style="list-style-type: none"> <li>· patented guide and sealing system</li> <li>· with 4 clamping sides - 4 x 90°</li> <li>· operation with 1 spindle per side</li> <li>· with 3rd-hand function</li> </ul>	<ul style="list-style-type: none"> <li>· patented guide and sealing system</li> <li>· with 3 clamping sides - 3 x 120°</li> <li>· operation with 1 spindle per side</li> <li>· with 3rd-hand function</li> </ul>	<ul style="list-style-type: none"> <li>· patented guide and sealing system</li> <li>· with 4 clamping sides - 4 x 90°</li> <li>· operation with 2 spindles (transmission of different clamping forces)</li> <li>· with central fixed jaw or 2 x fixed jaw</li> </ul>	<ul style="list-style-type: none"> <li>· patented guide and sealing system</li> <li>· with 3 clamping sides - 3 x 120°</li> <li>· operation with 2 spindles (transmission of different clamping forces)</li> <li>· with central fixed jaw or 2 x fixed jaw</li> </ul>
<b>Overall heights</b>	562 / 707 mm	248 ... 707 mm	599 ... 750 mm	599 ... 750 mm



## Accessories

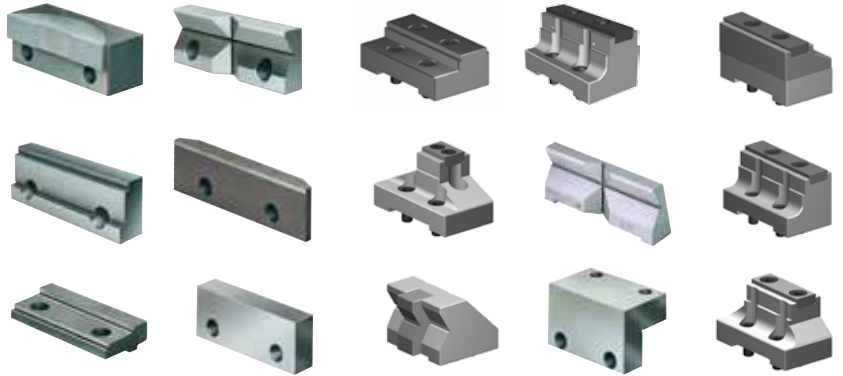
### Clamping jaws

Clamping jaws have a great influence on the clamping quality and safety and thus also on the machining results.

We offer a large catalogue range of clamping jaws for each clamping system.

If you do not find the desired clamping jaw in our catalogue range, please contact us. Besides the catalogue range, we also manufacture customised clamping jaws. We would be pleased to advise you on the selection of optimum clamping jaws.

- Clamping jaws with or without jaw inserts
- Clamping jaws, extra wide or extra high
- Step jaws
- Reversible jaws/reversible step jaws
- Step jaw inserts
- Block jaws
- Vee jaws
- Pendulum jaws
- Central jaws, fix or floating
- QIS clamping jaw system
- SlimFlex clamping jaw system
- Special grip jaws
- Clamping modules for multiple clamping systems

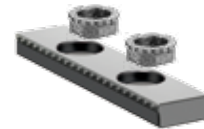


### Jaw inserts

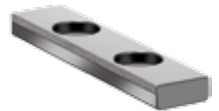
Jaw inserts allow the clamping of blanks and finished parts with the same clamping jaws or the same clamping system.

An overview of jaw inserts with application recommendations is shown on data sheet WS-12-SE.

Jaw inserts  
grip serrated



Jaw inserts  
with coatings



### Clamping power units

For the hydraulic supply and control of hydraulic clamping systems, we offer the suitable clamping power units. Completely equipped with the necessary electrical and hydraulic control, the desired operating element such as hand panel or foot switch as well as the integration into the machine control.

Dependent on the application and the desired functions, we select the suitable clamping power unit for you. Please contact us.



### Rapid change block Quintus

The rapid change block Quintus is used to fix the workholding systems for 5-axis machining on the machine table, alternatively with or without integrated mechanical STARK zero point clamping system "SPEEDY metec". It ensures a good accessibility of the machining tools to the workpiece.

See data sheet WS 5.6150

Rapid change block Quintus  
without zero point clamping  
system



Rapid change block Quintus  
with zero point clamping system



### Other accessories

- Clamping claws
- T-nuts
- Workpiece stops
- Angle drives
- Clamping force preselection
- Torque wrenches



**Elements and systems  
for production engineering**



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