

MACHINE TYPES

Machine types

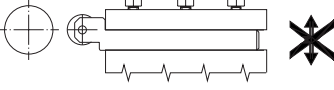
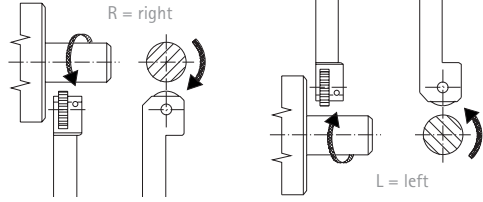
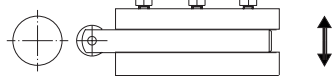
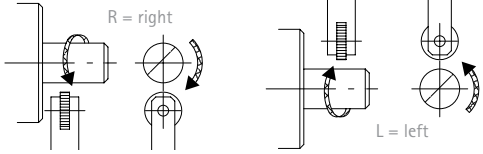
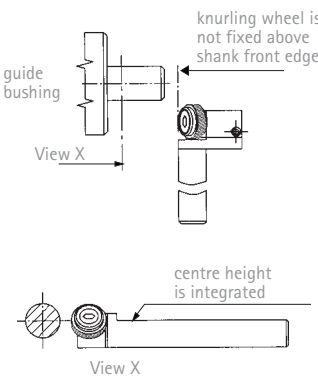
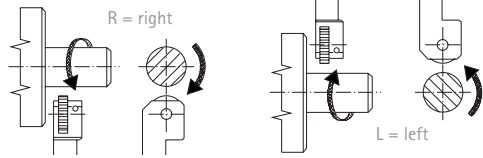
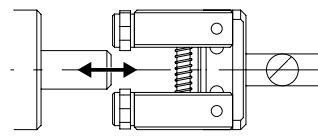
Distinctive features according to machine characteristics

Swiss type autolathes	Tool fitting in: <ul style="list-style-type: none"> • Long slide • Cross slide • Turret 	CNC	Right-hand turning Left-hand turning	LD
		Conventional	Direction of rotation universal	
Automatic short-turning lathes / Universal lathes / Turning-/milling centre	Tool fitting in: <ul style="list-style-type: none"> • Long slide • Cross slide • Turret 	CNC	Right-hand turning Left-hand turning	KD
		Conventional	Direction of rotation universal	
Multispindle automatic lathes	Tool fitting in: <ul style="list-style-type: none"> • Long slide • Cross slide • Support of an automatic lathe 	CNC	Right-hand turning Left-hand turning	MS
		Conventional	Direction of rotation universal	
Rotary indexing machine / Indexing table type machine / Transfer machine	Tool fitting in: <ul style="list-style-type: none"> • Spindle nose unit 		Tool rotating Work piece fix Direction of rotation universal	RT

TOOL CHARACTERISTICS

Tool Characteristics

Distinctive features according to machine types and machine characteristics

<p>Knurling tools for CNC lathes/autolathes</p> <p>On the knurling tools for CNC lathes / autolathes, the centre height is already incorporated (centre height = top of shank). As a result it is possible to employ these in CNC lathes / autolathes without adjustment of the centre height (fixed tool holder). Basically these knurling tool series are also suitable for conventional lathes / autolathes, insofar as the centre height can be set on the machine.</p>	 <p>Tool holder fixed (not adjustable in height) centre height is incorporated in the tool.</p>	 <p>The zeus® range of products includes special designs for right- (R) and left-oriented (L) lathes/autolathes. Insofar as constructionally possible, zeus® Knurling tools are of modular tool design (M). These (M)-versions can be used rotating both right and left.</p>	<p>LD KD MS</p>
<p>Knurling tools for conventional lathes/autolathes</p> <p>zeus® Knurling tools for conventional lathes / autolathes are designed in a way that the centre height adjustment is effected by means of the tool holder. As a result these tools have a basic design.</p>	 <p>Tool holder adjustable. Centre height has to be set.</p>	 <p>zeus® Knurling wheels for conventional machine types can be used rotating both right and left.</p>	<p>LD KD MS</p>
<p>Knurling tools for swiss type autolathes</p> <p>On knurling tools that are suitable for swiss type autolathes, the knurling wheel must not protrude over the front edge of the shank, in order to prevent a collision with the guide bush. Most knurling tools with a shank height of 8-16 mm are suitable for swiss type autolathes. Basically these can also be used in CNC and conventional lathes / autolathes.</p>	 <p>knurling wheel is not fixed above shank front edge</p> <p>guide bushing</p> <p>View X</p> <p>centre height is integrated</p> <p>View X</p>	 <p>On swiss type autolathes the knurling wheel should be positioned as closely as possible to the clamping of the work piece, to be able to machine small work piece diameters. For this reason, on the knurling tools of the zeus® RD1 and RD2 series with the shank dimensions of 8 x 8 to 16 x 16, the knurling wheels are not arranged centrally but laterally offset.</p>	<p>LD</p>
<p>Knurling tools for axial machining</p> <p>Knurling tools for axial machining of the work piece can be clamped axially to the work piece on all conventional and CNC lathes/autolathes with tailstock. The machining takes place through a work piece rotating in a tool fixed and stationary in a tailstock.</p> <p>On rotary indexing machines / indexing table machines / automatic transfer machines a stationary work piece is machined by a tool rotating axially.</p>		<p>Machining options:</p> <ul style="list-style-type: none"> • Tool stationary • Work piece revolving • Direction of rotation universal <ul style="list-style-type: none"> • Tool revolving • Work piece stationary • Direction of rotation universal 	<p>LD KD MS RT</p>