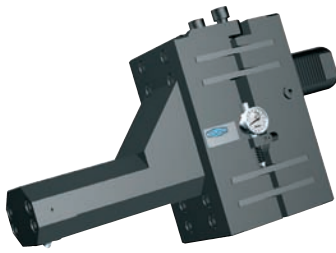
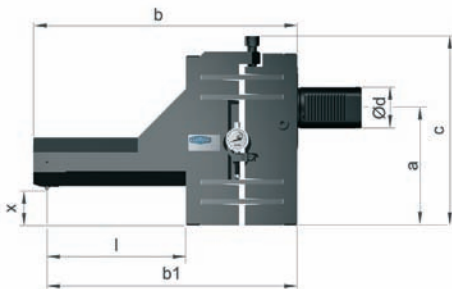


# Type FAK Tool Applications: Internal and external fillets



**FAK025**



### Features

- For use with CNC-controlled or conventional lathes
- Complete processing in one setting
- Symmetrical construction allows either right- or left-hand operation
- Rotates in either direction

### FAK025

- Deep rolls internal thread root radii
- Deep rolls within the machine's thread cycle
- Axial floating roller compensates for marginal positioning errors
- Automatic roller angle alignment
- No conversion necessary to machine either right- or left-handed threads
- Roller made to fit component's thread root radius
- Integrated pre-loading mechanism, no further X-axis adjustment necessary

### FAK120

- Deep rolls fillets with the plunge-in process
- Deep rolls contours or large fillets with the in-feed process
- Roller unit includes axial/radial bearings for the in-feed process
- Rolling force monitored by a dial gauge or sensor

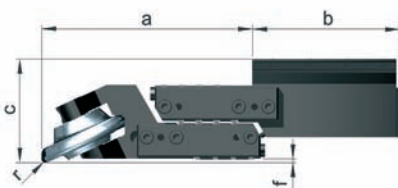
### Basic tool design

Type FAK deep rolling tools consist of a tool body equipped with a shank, a spring assembly that allows the roller head to move with no play and very low friction, and a dial gauge that indicates the burnishing force as measured by spring deflection. An optional device transmits the values by cable or wireless signal to an external indicator.

The roller head is attached to the flexible, spring-loaded section of the tool body. The flexible roller holder moves in response to the radial or axial rolling forces on either side of the tool.



**FAK120**



### FAK025

The roller is suspended within the roller retainer with a slide bearing bolt. In addition, the roller mount swings such that the roller automatically adjusts to the thread pitch. A set screw limits the roller's pivoting angle.

### FAK120

The roller holder contains a finely machined, hardened roller with two tapered roller bearings.

Tool type	Max. rolling force (kN)	Max. machining radius (mm)	Max. yield strength (N/mm <sup>2</sup> )	Machining diameter (mm)	Main dimensions (mm)					Shank Ø d (mm)
					a	b	c	b <sub>1</sub>	x	
FAK025	20	1.6	1400	≥ 80	142	324	229	307	42	≥ VDI 40
FAK120	35	4.0			256	179	126		depends upon machine	