

Type EG5 Tool Applications: Contours, fillets, groove flanks, short bores

Diameters 8.5 mm and larger

Features

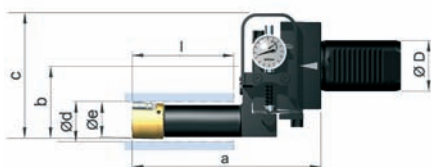
- For use with either CNC-controlled or conventional lathes
- Complete processing in one setting
- Achievable surface quality:
 $R_z < 1 \mu\text{m}$ ($R_a = 0.2 \mu\text{m}$)
- Suitable for metals with tensile strength up to 1400 N/mm² and maximum hardness HRC ≤ 45
- Modular construction allows these tools to be used in several configurations
- Symmetrical construction allows either right- or left-hand operation
- Rotates in either direction

Advantages

- Short cycle time
- Eliminates set-up and auxiliary processing time
- No dust or grinding residue
- Minimal lubrication required (oil or emulsion)
- Accurately measured burnishing force ensures consistent, high quality results
- Unrestricted roller face makes roller burnishing of shoulders and other edges possible
- Easy to change wear parts

EG5-08F

- Roller burnishes groove flanks on the face or circumference and bores with diameters of 8.5 mm and larger
- Max. rolling depth: 20 mm for diameters of 8.5 mm and larger (EG5-08F)
- Max. rolling depth: 30 mm for diameters of 11.5 mm and larger (EG5-11F)
- Tool body's spring assembly positioned parallel to workpiece surface
- Floating roller head attached to the tool body's flexible, spring-loaded section

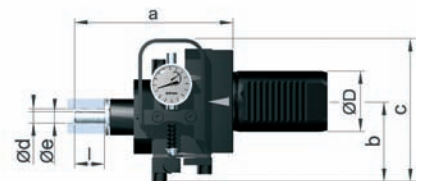


Basic tool design

- Tool body equipped with a tool shank, a spring assembly that allows the roller head to move with no play and very low friction
- Gauge that indicates the burnishing force
- Variable burnishing force dependent on spring deflection
- Feed in the direction of the arrow label on the tool
- Tool design includes fixed roller clearance angle α

Parameters

Tool	Circumferential speed	Feed rate
EG5-08F	80-100 m/min.	0.1-0.4 mm/ rev.
EG15-32	80-150 m/min.	0.1-0.6 mm/rev.
EG15		
EG5-40M	100-200 m/min.	0.1-0.8 mm/rev.
EG5-40M-45°		



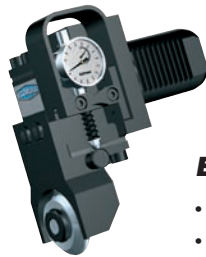
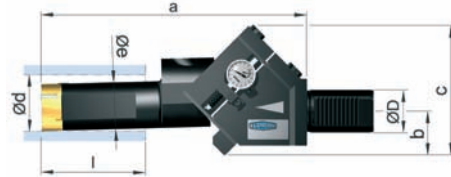
EG15-32

- Roller burnishes bores with diameters of 32 mm and larger
- Maximum rolling length: 80 mm
- Tool body's spring assembly positioned parallel to workpiece surface
- Roller head attached to the tool body's flexible, spring-loaded section
- Roller head consists of a cage that guides the burnishing roller and a support roller with a large-scale needle bearing

Tool Design and Specifications

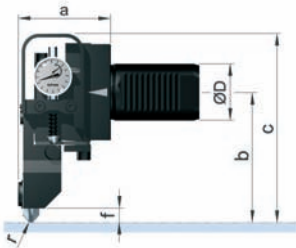
EG15

- Roller burnishes bores with diameters of 55 mm and larger
- Maximum rolling length: 105 mm
- Tool body's spring assembly positioned at a 45° angle to workpiece surface
- Roller head attached to the tool body's flexible, spring-loaded section
- Roller head consists of a cage that guides the burnishing roller and a support roller with a large-scale needle bearing
- Cage also contains two spare rollers



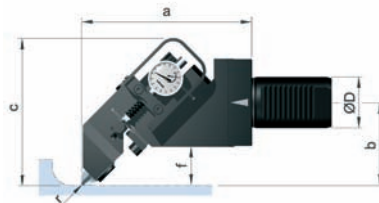
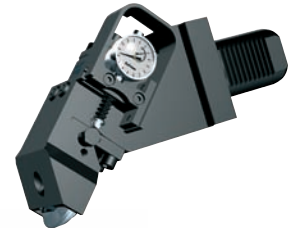
EG5-40M

- Roller burnishes contoured external surfaces
- For low and mid-level strength materials
- Tool body's spring assembly positioned parallel to workpiece surface
- Roller head attached to the tool body's flexible, spring-loaded section
- Extremely narrow roller with an integrated four-point bearing



EG5-40M-45°

- Roller burnishes cylindrical surfaces with connecting fillet radii up to the workpiece face
- For low and mid-level strength materials
- Tool body's spring assembly positioned at a 45° angle to workpiece surface
- Roller head attached to the tool body's flexible, spring-loaded section
- Extremely narrow roller with an integrated four-point bearing



Tool type	VDI shank Ø D (mm)	Height (mm)		Square shank (mm)	Basic dimensions (mm)					
		h ₁	h ₂		a	b	c	d	e	l
EG5-08F	20,30,40	40	67-91	20 25 32	106	53	95	8.5/11.5	8/11	20/30
	117									
EG15-32	20,30,40	63	81-90	20 25 32	150	58	99	32	24	80
	161									
EG15	30, 40	63	81-90	20 25 32	252	41	122	55	44	100
	50									
										f
EG5-40M	20,30,40	50	67-91	20 25 32	66	92	134			10
	50				77					
EG5-40M-45°	20,30,40	50	67-91	20 25 32	136	65	115			30
	50				147					