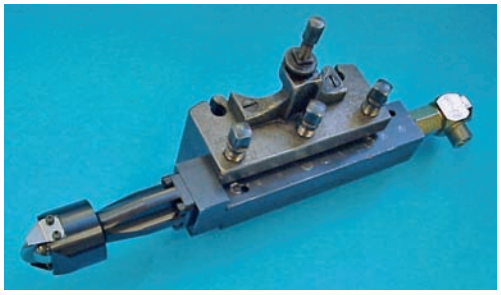
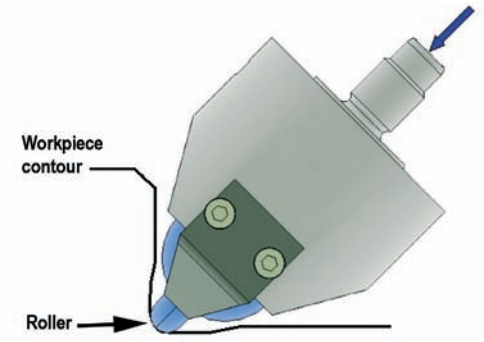
Design Version HG with HFR Roller Application: Deep rolling fillets



Features

- *Deep rolls small, hard-to-reach fillets (R < 2.5 mm)*
- *Deep rolls hardened workpieces up to 65 HRC*
- *Deep rolls in a plunge-in process with rolling forces up to 15 kN*
- *Operating pressure: 200 - 1500 bar*



Advantages

- *Noticeable increase in fatigue strength*
- *Improved surface quality*
- *Machining can be completed in one setting*
- *Extra hardening process unnecessary*

How to order HG tools

*The tools are listed as follows: HG**x**-**y**, where **x** indicates the ball size and **y** the design version. See also the naming conventions on pages 30 and 31. The lettered dimensions refer to the diagrams pictured with the respective tools.*

Tool	Diameter range D	Rolling length T	a	b	Ø e	f	l
HG6-1	≥ 19	50/80/125	106	131/161/206	40[1)]	136	60/90/135
HG6-2	≥ 70	200/400/600/800	53		50	145	T+40
HG6-2P	≥ 40	200/300	38		40	120	200/350
HG13-2	≥ 125	800	60		63	90	1000
HG13-4	≥ 50	unlimited	49		BTA boring bar thread lead per order		260

NOTES: 1) *With design version DD (rotating union) maximum shank Ø = 32 mm*

Tool	Ball D	Fillet R	a	b[2)]	b_1[2)]	c	d	h	Contact angle α
HG2-9E45°-SL		> 2.5	57	32	61	205		20	45°
HG2-9V70°-SL			68		72	216		25	10° or 80°
HG3-9E45°-SL		> 4	69		73	217		32	45°
HG3-9V70°-SL			80		84	228			10° or 80°
HG6-9._-SL(K)		> 5	66		33	216(148)			30°[3)]
HG13-9._-SL(K)		> 10	80		96	228(160)			
HG6-9E270-SL(K)		> 5			90	276(208)			adjust in 15° increments
HG13-9E270-SL(K)		> 10			111	298(230)			
HG6-5_°-VDI		> 5	100	89	142	130	20 or 30	50	30°[3)]
HG6-5_°-VDI		> 5	109	91	109	164	40 or 50	85 or 100	
HG13-5_°-VDI		> 10	128		162	178	60 or 80	125 or 160	
HG6-6_-VDI		8-25	by request				20 or 30	50	infinitely variable
HG6-6_-VDI40	8-70						40	85	
HG13-6_-VDI	50-250	20-80					40/50/60	by request	

NOTES: 2) *For operation without VDI shank other values apply. Please ask ECOROLL.*
3) *Adapters can be converted to accommodate setting angles of 0°, 60° and 90°. Please request modified dimensions.*