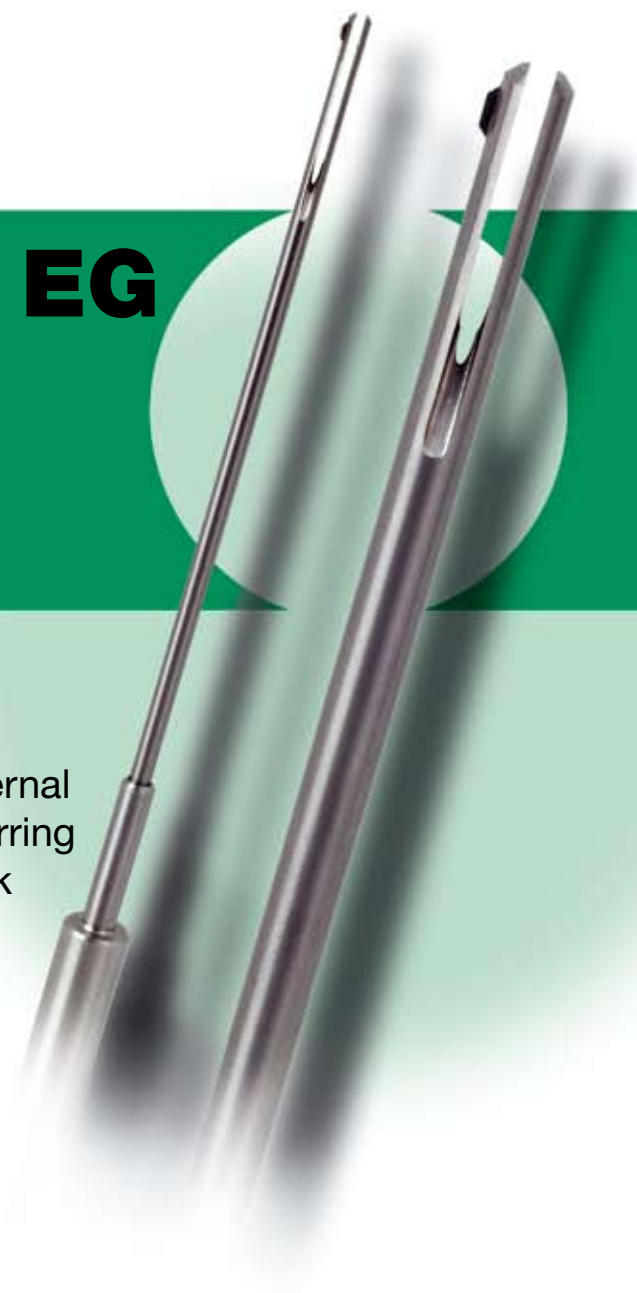


TS 100 EG

Solid carbide
de-burring fork

New:

The patented solid
carbide tool for internal
and external de-burring
operations ex-stock



HARTNER

Präzisions-Bohrwerkzeuge
Precision Drilling Tools

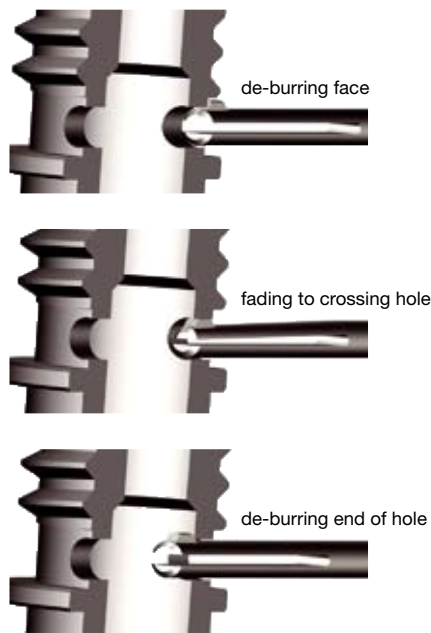
Solid carbide de-burring fork TS 100 EG

At EMO 2005 Hartner presents the solid carbide de-burring fork TS 100 EG for internal and external de-burring operations.

Advantages

- universal application with tooling, milling and turning lathes as well as robots.
- The diameter range of 0.25 mm enables the application of our solid carbide de-burring fork in holes with according tolerances. You will minimize set-up time and costs.
- production increasing. De-burring fork TS 100 EG de-burrs automatically within one setting or minor machine times. Expensive and extensive manual operations are no longer required.

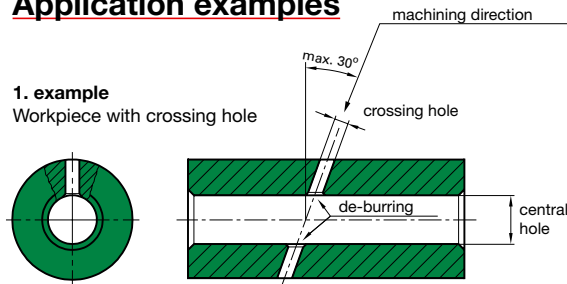
Operating



Step by step:

The automatically internal and external de-burring with solid carbide de-burring fork TS 100 EG is an easy and cost saving alternative to common, extensive manual operations. Just one tool is required for all machining steps.

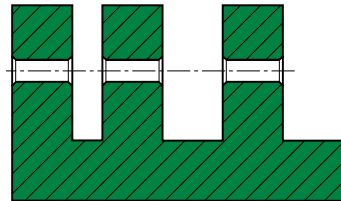
Application examples



1. example
Workpiece with crossing hole

Please remind when machining workpieces with crossing hole:
– the crossing hole must be 3,5 to 4 times smaller than the central hole
– the diameter of the crossing hole must be 40% larger than the cutting length l_G

2. example
Workpiece with multi-interrupted cut



Universal application:

The new ex-stock de-burring fork machines workpieces with one crossing hole as well as workpieces with multi-interrupted cut and produces high quality de-burred faces and ends of the hole.

diameter range mm	revolutions rev./min
2 - 2.9 mm	1000
3 - 3.9 mm	960
4 - 4.9 mm	940
5 - 5.9 mm	900
6 - 6.9 mm	800
7 - 8.1 mm	860

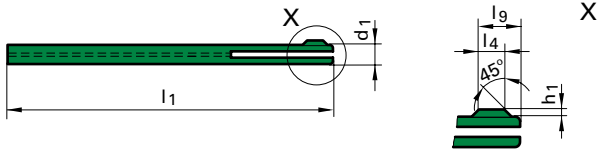
Important note:

Please remind, that the cutting parameters are just recommendations. They can be adapted to higher and lower cutting parameters.

feed f: 0.1 - 0.2 mm/rev.

Solid carbide de-burring fork TS 100 EG with straight shank

This version of our solid carbide de-burring fork TS 100 EG is equipped with a straight shank for clamping in collet holders.



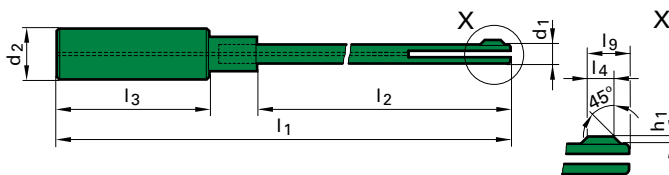
Tools with the dimensions mentioned in the table are available within 2 or 3 weeks. Special dimensions on request.

nom.-Ø of bore hole d mm	for Ø-range min.-max. mm	fork-Ø d ₁ mm	total length l ₁ mm	cutting length l ₄ mm	pivot length l _g mm	pivot height h ₁ mm
2.00	1.91 - 2.15	1.9	80.0	1.0	2.05	0.35
2.25	2.16 - 2.40	2.1	80.0	1.5	2.60	0.40
2.50	2.41 - 2.70	2.4	80.0	1.5	2.90	0.40
2.75	2.71 - 2.90	2.6	90.0	1.5	2.95	0.45
3.00	2.91 - 3.25	2.9	90.0	2.0	3.65	0.45
3.50	3.26 - 3.60	3.2	90.0	2.0	3.80	0.60
4.00	3.61 - 4.25	3.6	90.0	2.0	4.10	0.70
4.50	4.26 - 4.75	4.2	90.0	2.5	4.60	0.70
5.00	4.76 - 5.30	4.7	100.0	2.5	4.85	0.75
5.50	5.31 - 5.80	5.2	100.0	2.5	4.85	0.75
6.00	5.81 - 6.20	5.6	110.0	3.0	5.80	0.80
6.50	6.21 - 6.70	6.0	110.0	3.0	5.90	0.90
7.00	6.71 - 7.10	6.5	110.0	3.0	5.85	0.85
7.50	7.11 - 7.60	6.9	110.0	3.5	6.95	0.95
8.00	7.61 - 8.05	7.3	110.0	3.5	7.00	1.00

On request the de-burring fork TS 100 EG is available with coating.

Solid carbide de-burring fork TS 100 EG with re-inforced plain shank

For clamping in hydraulic chucks and shrink fit chucks the de-burring fork TS 100 EG is also available with re-inforced plain shank to DIN 6535 HA.



Tools with the dimensions mentioned in the table are available within 2 or 3 weeks. Special dimensions on request.

nom.-Ø of bore hole d mm	for Ø-range min.-max. mm	fork-Ø d ₁ mm	shank-Ø d ₂ mm	total length l ₁ mm	working length l ₂ mm	shank length l ₃ mm	cutting length l ₄ mm	pivot length l _g mm	pivot height h ₁ mm
2.00	1.91 - 2.15	1.9	6.0	120.0	69.0	36.0	1.0	2.05	0.35
2.25	2.16 - 2.40	2.1	6.0	120.0	69.0	36.0	1.5	2.60	0.40
2.50	2.41 - 2.70	2.4	6.0	120.0	69.0	36.0	1.5	2.90	0.40
2.75	2.71 - 2.90	2.6	6.0	130.0	79.0	36.0	1.5	2.95	0.45
3.00	2.91 - 3.25	2.9	6.0	130.0	79.0	36.0	2.0	3.65	0.45
3.50	3.26 - 3.60	3.2	10.0	135.0	80.0	40.0	2.0	3.80	0.60
4.00	3.61 - 4.25	3.6	10.0	135.0	80.0	40.0	2.0	4.10	0.70
4.50	4.26 - 4.75	4.2	10.0	135.0	80.0	40.0	2.5	4.60	0.70
5.00	4.76 - 5.30	4.7	10.0	135.0	80.0	40.0	2.5	4.85	0.75
5.50	5.31 - 5.80	5.2	10.0	145.0	90.0	40.0	2.5	4.85	0.75
6.00	5.81 - 6.20	5.6	10.0	145.0	90.0	40.0	3.0	5.80	0.80
6.50	6.21 - 6.70	6.0	16.0	165.0	102.0	48.0	3.0	5.90	0.90
7.00	6.71 - 7.10	6.5	16.0	165.0	102.0	48.0	3.0	5.85	0.85
7.50	7.11 - 7.60	6.9	16.0	165.0	102.0	48.0	3.5	6.95	0.95
8.00	7.61 - 8.05	7.3	16.0	165.0	102.0	48.0	3.5	7.00	1.00

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