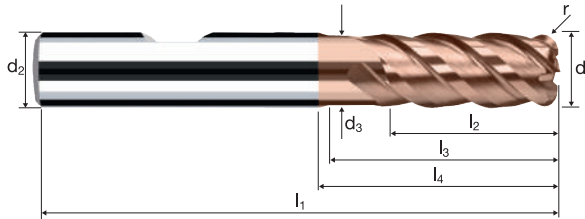
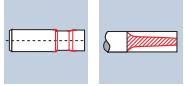


Corner radius end mills HX

Smooth-edged, normal version, short neck
High-performance penetration edge



HM
XA λ 45°
 γ -10°

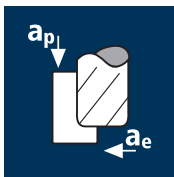


Roughing HPC Roughing HDC Finishing

				HRC 48-56	HRC 56-60	HRC > 60			HSS
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Ø Code	d ₁ 0/-0.01	d ₂ h4	d ₃	l ₁	l ₂	l ₃	l ₄	r 0/+0.015	α	z	Coating		Article-N°		ø-Code		DURO-Si	
											H	8607	178					
178	3.00	6.00	2.80	57	8.00	14.00	20.37	0.200	4.5°	4								●
218	4.00	6.00	3.70	57	11.00	16.00	20.82	0.200	3.0°	4								●
258	5.00	6.00	4.60	57	13.00	18.00	21.27	0.200	1.5°	4								●
297	6.00	6.00	5.50	57	13.00	18.15	20.00	0.200	0.0°	4								●
385	8.00	8.00	7.40	63	19.00	23.63	26.00	0.200	0.0°	4								●
445	10.00	10.00	9.20	72	22.00	27.99	31.00	0.200	0.0°	4								●
496	12.00	12.00	11.00	83	26.00	33.29	37.00	0.200	0.0°	4								●
605	16.00	16.00	15.00	92	32.00	38.73	43.00	0.200	0.0°	4								●
180	3.00	6.00	2.80	57	8.00	14.00	20.37	0.500	4.5°	4								●
220	4.00	6.00	3.70	57	11.00	16.00	20.82	0.500	3.0°	4								●
260	5.00	6.00	4.60	57	13.00	18.00	21.27	0.500	1.5°	4								●
300	6.00	6.00	5.50	57	13.00	18.15	20.00	0.500	0.0°	4								●
388	8.00	8.00	7.40	63	19.00	23.63	26.00	0.500	0.0°	4								●
448	10.00	10.00	9.20	72	22.00	27.99	31.00	0.500	0.0°	4								●
498	12.00	12.00	11.00	83	26.00	33.29	37.00	0.500	0.0°	4								●
606	16.00	16.00	15.00	92	32.00	38.73	43.00	0.500	0.0°	4								●

Application

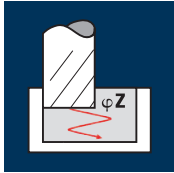


Material

Hardened tool steel
52 - 56 HRC



d1 [mm]	z	v _c [m/min]	f _s [mm]	a _p [mm]	a _e [mm]	n [min ⁻¹]	v _r [mm/min]	Q [cm ³ /min]	q _Z [°]
3.00	4	60	0.012	4.500	1.800	6365	305	2.5	5°
4.00	4	60	0.017	6.000	2.400	4775	325	4.7	5°
5.00	4	60	0.022	7.500	3.000	3820	335	7.5	5°
6.00	4	60	0.027	9.000	3.600	3185	345	11.2	5°
8.00	4	60	0.035	12.000	4.800	2385	335	19.3	5°
10.00	4	60	0.045	15.000	6.000	1910	345	31.1	5°
12.00	4	60	0.055	18.000	7.200	1590	350	45.4	5°
16.00	4	60	0.065	24.000	9.600	1195	310	71.4	5°



Hardened tool steel
> 60 HRC



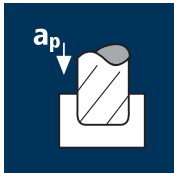
d1 [mm]	z	v _c [m/min]	f _s [mm]	a _p [mm]	a _e [mm]	n [min ⁻¹]	v _r [mm/min]	Q [cm ³ /min]	q _Z [°]
3.00	4	25	0.006	3.750	1.800	2655	65	0.4	3°
4.00	4	25	0.008	5.000	2.400	1990	65	0.8	4°
5.00	4	25	0.010	6.250	3.000	1590	65	1.2	5°
6.00	4	25	0.012	7.500	3.600	1325	65	1.8	5°
8.00	4	25	0.015	10.000	4.800	995	60	2.9	5°
10.00	4	25	0.020	12.500	6.000	795	65	4.9	5°
12.00	4	25	0.025	15.000	7.200	665	65	7.0	5°
16.00	4	25	0.030	20.000	9.600	495	60	11.5	5°

High speed steel,
hardened
64 - 70 HRC



d1 [mm]	z	v _c [m/min]	f _s [mm]	a _p [mm]	a _e [mm]	n [min ⁻¹]	v _r [mm/min]	Q [cm ³ /min]	q _Z [°]
3.00	4	15	0.005	3.000	0.750	1590	30	0.1	3°
4.00	4	15	0.009	4.000	1.000	1195	45	0.2	4°
5.00	4	15	0.012	5.000	1.250	955	45	0.3	5°
6.00	4	15	0.009	6.000	3.600	795	30	0.6	5°
8.00	4	15	0.012	8.000	4.800	595	30	1.2	5°
10.00	4	15	0.015	10.000	6.000	475	30	1.8	5°
12.00	4	15	0.018	12.000	7.200	400	30	2.6	5°
16.00	4	15	0.023	16.000	9.600	300	30	4.6	5°

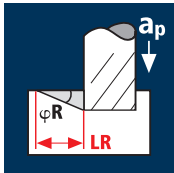
Application



Hardened tool steel
52 - 56 HRC



d1 [mm]	z	v _c [m/min]	f _s [mm]	a _p [mm]	a _e [mm]	n [min ⁻¹]	v _r [mm/min]	Q [cm ³ /min]	q _R [°]	LR [mm]
3.00	4	50	0.013	3.000	3.000	5305	275	2.5	5°	34.3
4.00	4	50	0.017	4.000	4.000	3980	270	4.3	5°	45.7
5.00	4	50	0.022	5.000	5.000	3185	280	7.0	5°	57.2
6.00	4	50	0.027	6.000	6.000	2655	285	10.3	5°	68.6
8.00	4	50	0.035	8.000	8.000	1990	280	17.9	5°	91.4
10.00	4	50	0.045	10.000	10.000	1590	285	28.5	5°	114.3
12.00	4	50	0.055	12.000	12.000	1325	290	41.8	5°	137.2
16.00	4	50	0.080	8.000	16.000	995	320	41.0	5°	91.4



Hardened tool steel
> 60 HRC



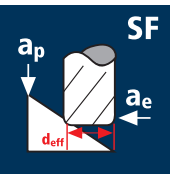
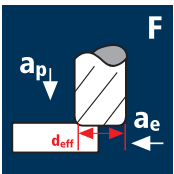
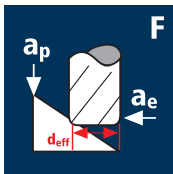
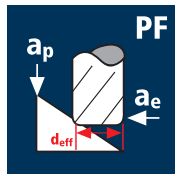
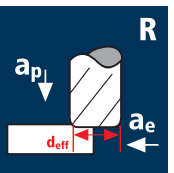
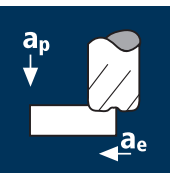
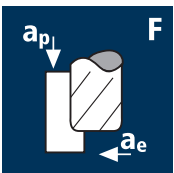
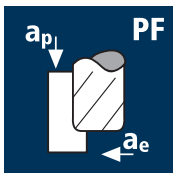
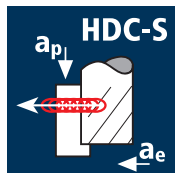
d1 [mm]	z	v _c [m/min]	f _s [mm]	a _p [mm]	a _e [mm]	n [min ⁻¹]	v _r [mm/min]	Q [cm ³ /min]	q _R [°]	LR [mm]
3.00	4	20	0.007	3.000	3.000	2120	60	0.5	3°	57.2
4.00	4	20	0.010	4.000	4.000	1590	65	1.0	4°	57.2
5.00	4	20	0.013	5.000	5.000	1275	65	1.6	5°	57.2
6.00	4	20	0.016	6.000	6.000	1060	70	2.5	5°	68.6
8.00	4	20	0.021	8.000	8.000	795	65	4.2	5°	91.4
10.00	4	20	0.026	10.000	10.000	635	65	6.5	5°	114.3
12.00	4	20	0.032	12.000	12.000	530	70	10.1	5°	137.2
16.00	4	20	0.050	8.000	16.000	400	80	10.2	5°	91.4

High speed steel,
hardened
64 - 70 HRC



d1 [mm]	z	v _c [m/min]	f _s [mm]	a _p [mm]	a _e [mm]	n [min ⁻¹]	v _r [mm/min]	Q [cm ³ /min]	q _R [°]	LR [mm]
3.00	4	10	0.004	1.500	3.000	1060	15	0.1	3°	28.6
4.00	4	10	0.006	2.000	4.000	795	20	0.2	4°	28.6
5.00	4	10	0.008	3.750	5.000	635	20	0.4	5°	42.9
6.00	4	10	0.009	4.500	6.000	530	20	0.5	5°	51.4
8.00	4	10	0.012	6.000	8.000	400	20	1.0	5°	68.6
10.00	4	10	0.015	7.500	10.000	320	20	1.5	5°	85.7
12.00	4	10	0.020	9.000	12.000	265	20	2.2	5°	102.9
16.00	4	10	0.030	8.000	16.000	200	25	3.2	5°	91.4

Precise cutting data for other applications and materials can be found in the cutting data software **ToolExpert 2.0**

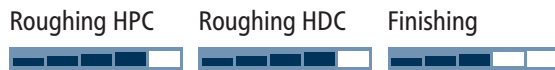
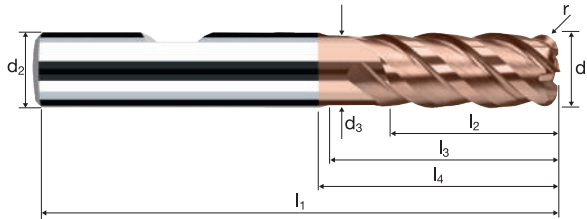
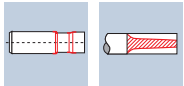


Corner radius end mills HX

Smooth-edged, normal version, short neck
High-performance penetration edge



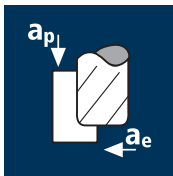
HM
XA λ 45°
 γ -10°



				HRC 48-56	HRC 56-60	HRC > 60			HSS
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Ø Code	d ₁ 0/-0.01	d ₂ h4	d ₃	l ₁	l ₂	l ₃	l ₄	r 0/+0.015	α	z	DURO-Si	
											H8607	H8507
302	6.00	6.00	5.50	57	13.00	18.15	20.00	1.000	0.0°	4	●	
391	8.00	8.00	7.40	63	19.00	23.63	26.00	1.000	0.0°	4	●	
450	10.00	10.00	9.20	72	22.00	27.99	31.00	1.000	0.0°	4	●	
501	12.00	12.00	11.00	83	26.00	33.29	37.00	1.000	0.0°	4	●	
608	16.00	16.00	15.00	92	32.00	38.73	43.00	1.000	0.0°	4	●	
304	6.00	6.00	5.50	57	13.00	18.15	20.00	1.500	0.0°	4	●	
395	8.00	8.00	7.40	63	19.00	23.63	26.00	2.000	0.0°	4	●	
457	10.00	10.00	9.20	72	22.00	27.99	31.00	2.500	0.0°	4	●	
507	12.00	12.00	11.00	83	26.00	33.29	37.00	3.000	0.0°	4	●	

Application

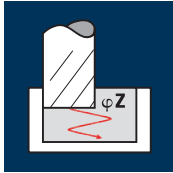


Material

Hardened tool steel
52 - 56 HRC



d1 [mm]	z	v _c [m/min]	f _s [mm]	a _p [mm]	a _e [mm]	n [min ⁻¹]	v _f [mm/min]	Q [cm ³ /min]	φZ [°]
6.00	4	60	0.027	9.000	3.600	3185	345	11.2	5°
8.00	4	60	0.035	12.000	4.800	2385	335	19.3	5°
10.00	4	60	0.045	15.000	6.000	1910	345	31.1	5°
12.00	4	60	0.055	18.000	7.200	1590	350	45.4	5°
16.00	4	60	0.065	24.000	9.600	1195	310	71.4	5°



Hardened tool steel
> 60 HRC



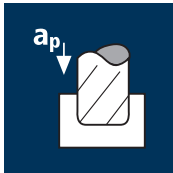
6.00	4	25	0.012	7.500	3.600	1325	65	1.8	5°
8.00	4	25	0.015	10.000	4.800	995	60	2.9	5°
10.00	4	25	0.020	12.500	6.000	795	65	4.9	5°
12.00	4	25	0.025	15.000	7.200	665	65	7.0	5°
16.00	4	25	0.030	20.000	9.600	495	60	11.5	5°

High speed steel,
hardened
64 - 70 HRC



6.00	4	15	0.009	6.000	3.600	795	30	0.6	5°
8.00	4	15	0.012	8.000	4.800	595	30	1.2	5°
10.00	4	15	0.015	10.000	6.000	475	30	1.8	5°
12.00	4	15	0.018	12.000	7.200	400	30	2.6	5°
16.00	4	15	0.023	16.000	9.600	300	30	4.6	5°

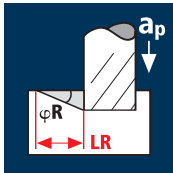
Application



Hardened tool steel
52 - 56 HRC



d1 [mm]	z	v _c [m/min]	f _s [mm]	a _p [mm]	a _e [mm]	n [min ⁻¹]	v _f [mm/min]	Q [cm ³ /min]	φR [°]	LR [mm]
6.00	4	50	0.027	6.000	6.000	2655	285	10.3	5°	68.6
8.00	4	50	0.035	8.000	8.000	1990	280	17.9	5°	91.4
10.00	4	50	0.045	10.000	10.000	1590	285	28.5	5°	114.3
12.00	4	50	0.055	12.000	12.000	1325	290	41.8	5°	137.2
16.00	4	50	0.080	8.000	16.000	995	320	41.0	5°	91.4



Hardened tool steel
> 60 HRC



6.00	4	20	0.016	6.000	6.000	1060	70	2.5	5°	68.6
8.00	4	20	0.021	8.000	8.000	795	65	4.2	5°	91.4
10.00	4	20	0.026	10.000	10.000	635	65	6.5	5°	114.3
12.00	4	20	0.032	12.000	12.000	530	70	10.1	5°	137.2
16.00	4	20	0.050	8.000	16.000	400	80	10.2	5°	91.4

High speed steel,
hardened
64 - 70 HRC



6.00	4	10	0.009	4.500	6.000	530	20	0.5	5°	51.4
8.00	4	10	0.012	6.000	8.000	400	20	1.0	5°	68.6
10.00	4	10	0.015	7.500	10.000	320	20	1.5	5°	85.7
12.00	4	10	0.020	9.000	12.000	265	20	2.2	5°	102.9
16.00	4	10	0.030	8.000	16.000	200	25	3.2	5°	91.4



Precise cutting data for other applications and materials can be found in the cutting data software **ToolExpert 2.0**

