Corner radius end mills XSpeed-H

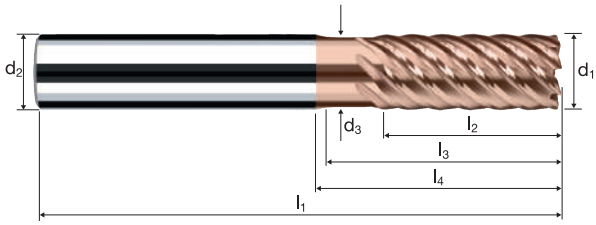
Tolerance r 0/+0.015, 3xd

X-Generation X

II

HM
XA

λ 45°
γ -10°

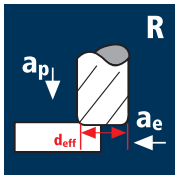


HRC 48-56 | HRC 56-60 | HRC > 60 | HSS

Example: **Order-N°.** Coating **H** Article-N°. **7210** ø-Code **138**

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 H7210
138	2.00	6.00	1.90	57	5.00	6.00	14.31	0.200	8.2°	6	●
178	3.00	6.00	2.80	57	8.00	9.00	15.63	0.200	5.7°	6	●
218	4.00	6.00	3.70	57	11.00	12.00	16.95	0.200	3.6°	6	●
258	5.00	6.00	4.60	57	13.00	15.00	18.27	0.200	1.8°	6	●
297	6.00	6.00	5.50	57	13.00	19.34	20.00	0.200	0.0°	8	●
385	8.00	8.00	7.40	63	19.00	25.29	26.00	0.200	0.0°	8	●
445	10.00	10.00	9.20	72	22.00	30.20	31.00	0.200	0.0°	8	●
496	12.00	12.00	11.00	83	26.00	36.13	37.00	0.200	0.0°	8	●
140	2.00	6.00	1.90	57	5.00	6.00	14.31	0.500	8.2°	6	●
180	3.00	6.00	2.80	57	8.00	9.00	15.63	0.500	5.7°	6	●
220	4.00	6.00	3.70	57	11.00	12.00	16.95	0.500	3.6°	6	●
260	5.00	6.00	4.60	57	13.00	15.00	18.27	0.500	1.8°	6	●
300	6.00	6.00	5.50	57	13.00	19.34	20.00	0.500	0.0°	8	●
388	8.00	8.00	7.40	63	19.00	25.29	26.00	0.500	0.0°	8	●
448	10.00	10.00	9.20	72	22.00	30.20	31.00	0.500	0.0°	8	●
498	12.00	12.00	11.00	83	26.00	36.13	37.00	0.500	0.0°	8	●

Application



Material

Hardened tool steel 56 - 60 HRC

H

d1 [mm]	z	vc [m/min]	fz [mm]	ap [mm]	ae [mm]	deff [mm]	n [min-1]	vf [mm/min]	r [mm]
2.00	6	60	0.014	0.200	1.200	1.80	10610	890	0.50
3.00	6	60	0.021	0.250	1.800	2.87	6655	840	0.50
4.00	6	60	0.028	0.250	2.400	3.87	4935	830	0.50
5.00	6	60	0.035	0.250	3.000	4.87	3920	825	0.50
6.00	8	60	0.042	0.200	3.600	5.80	3295	1105	0.50
8.00	8	60	0.056	0.200	4.800	7.80	2450	1095	0.50
10.00	8	60	0.070	0.200	6.000	9.80	1950	1090	0.50
12.00	8	60	0.084	0.200	7.200	11.80	1620	1090	0.50

Hardened tool steel > 60 HRC

H

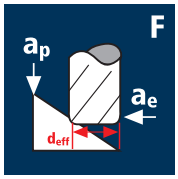
d1 [mm]	z	vc [m/min]	fz [mm]	ap [mm]	ae [mm]	deff [mm]	n [min-1]	vf [mm/min]	r [mm]
2.00	6	50	0.007	0.200	1.200	1.80	8840	370	0.50
3.00	6	50	0.011	0.250	1.800	2.87	5545	365	0.50
4.00	6	50	0.014	0.250	2.400	3.87	4115	345	0.50
5.00	6	50	0.018	0.250	3.000	4.87	3270	355	0.50
6.00	8	50	0.021	0.200	3.600	5.80	2745	460	0.50
8.00	8	50	0.028	0.200	4.800	7.80	2040	455	0.50
10.00	8	50	0.035	0.200	6.000	9.80	1625	455	0.50
12.00	8	50	0.042	0.200	7.200	11.80	1350	455	0.50

High speed steel, hardened 64 - 70 HRC

H

d1 [mm]	z	vc [m/min]	fz [mm]	ap [mm]	ae [mm]	deff [mm]	n [min-1]	vf [mm/min]	r [mm]
2.00	6	20	0.004	0.200	1.200	1.80	3535	85	0.50
3.00	6	20	0.006	0.250	1.800	2.87	2220	80	0.50
4.00	6	20	0.008	0.250	2.400	3.87	1645	80	0.50
5.00	6	20	0.010	0.250	3.000	4.87	1305	80	0.50
6.00	8	20	0.012	0.200	3.600	5.80	1100	105	0.50
8.00	8	20	0.016	0.200	4.800	7.80	815	105	0.50
10.00	8	20	0.020	0.200	6.000	9.80	650	105	0.50
12.00	8	20	0.024	0.200	7.200	11.80	540	105	0.50

Application



Material

Hardened tool steel 56 - 60 HRC

H

d1 [mm]	z	vc [m/min]	fz [mm]	ap [mm]	ae [mm]	deff [mm]	n [min-1]	vf [mm/min]	β [°]
2.00	6	180	0.020	0.090	0.030	1.98	28935	3470	45°
3.00	6	180	0.028	0.090	0.030	2.98	19225	3230	45°
4.00	6	180	0.035	0.090	0.050	3.98	14395	3025	45°
5.00	6	180	0.041	0.090	0.050	4.98	11505	2830	45°
6.00	8	180	0.042	0.090	0.075	5.98	9580	3220	45°
8.00	8	180	0.048	0.090	0.075	7.98	7180	2755	45°
10.00	8	180	0.050	0.090	0.100	9.98	5740	2295	45°
12.00	8	180	0.048	0.090	0.100	11.98	4785	1835	45°

Hardened tool steel > 60 HRC

H

d1 [mm]	z	vc [m/min]	fz [mm]	ap [mm]	ae [mm]	deff [mm]	n [min-1]	vf [mm/min]	β [°]
2.00	6	120	0.020	0.090	0.030	1.98	19290	2315	45°
3.00	6	120	0.028	0.090	0.030	2.98	12820	2155	45°
4.00	6	120	0.035	0.090	0.050	3.98	9595	2015	45°
5.00	6	120	0.041	0.090	0.050	4.98	7670	1885	45°
6.00	8	120	0.042	0.090	0.075	5.98	6385	2145	45°
8.00	8	120	0.048	0.090	0.075	7.98	4785	1840	45°
10.00	8	120	0.050	0.090	0.100	9.98	3825	1530	45°
12.00	8	120	0.048	0.090	0.100	11.98	3190	1225	45°

High speed steel, hardened 64 - 70 HRC

H

d1 [mm]	z	vc [m/min]	fz [mm]	ap [mm]	ae [mm]	deff [mm]	n [min-1]	vf [mm/min]	β [°]
2.00	6	80	0.020	0.090	0.030	1.98	12860	1545	45°
3.00	6	80	0.028	0.090	0.030	2.98	8545	1435	45°
4.00	6	80	0.035	0.090	0.050	3.98	6400	1345	45°
5.00	6	80	0.041	0.090	0.050	4.98	5115	1260	45°
6.00	8	80	0.042	0.090	0.075	5.98	4260	1430	45°
8.00	8	80	0.048	0.090	0.075	7.98	3190	1225	45°
10.00	8	80	0.050	0.090	0.100	9.98	2550	1020	45°
12.00	8	80	0.048	0.090	0.100	11.98	2125	815	45°

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