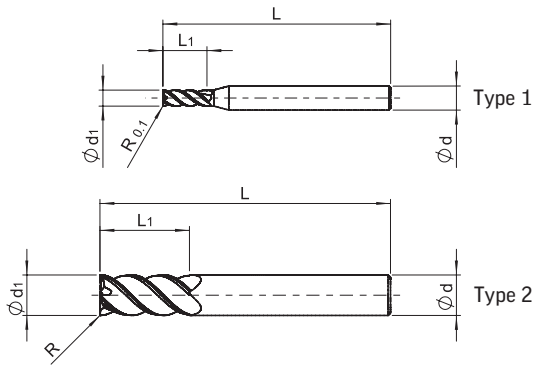
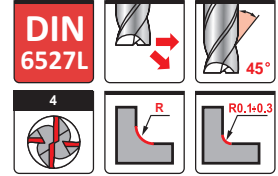


UMT 9224 Z=4
End mills



nano
TEC2

d1 (e8)	L1	d (h6)	L	R(±0.02)	Stock	Type	ART No
3	10	3	38		●	2	9224030003800-2
3	8	6	57		●	1	9224030005700-2
4	11	4	50		●	2	9224040005000-2
4	11	6	57		●	1	9224040005700-2
5	13	5	50		●	2	9224050005000-2
5	13	6	57		●	1	9224050005700-2
6	13	6	57		●	2	9224060005700-2
6	13	6	57	0.5	○	2	9224060005705-2
6	13	6	57	1.0	○	2	9224060005710-2
6	13	6	57	1.5	○	2	9224060005715-2
8	19	8	63		●	2	9224080006300-2
8	19	8	63	0.5	○	2	9224080006305-2
8	19	8	63	1.0	○	2	9224080006310-2
8	19	8	63	1.5	○	2	9224080006315-2
10	22	10	72		●	2	9224100007200-2
10	22	10	72	0.5	○	2	9224100007205-2
10	22	10	72	1.0	○	2	9224100007210-2
10	22	10	72	1.5	○	2	9224100007215-2
10	22	10	72	2.0	○	2	9224100007220-2
12	26	12	83		●	2	9224120008300-2
12	26	12	83	0.5	○	2	9224120008305-2
12	26	12	83	1.0	○	2	9224120008310-2
12	26	12	83	1.5	○	2	9224120008315-2
12	26	12	83	2.0	○	2	9224120008320-2
12	26	12	83	3.0	○	2	9224120008330-2
14	26	14	83		●	2	9224140008300-2
16	32	16	92		●	2	9224160009200-2
16	32	16	92	1.5	○	2	9224160009215-2
16	32	16	92	2.0	○	2	9224160009220-2
16	32	16	92	3.0	○	2	9224160009230-2
16	32	16	92	4.0	○	2	9224160009240-2
18	32	18	92		●	2	9224180009200-2
20	38	20	104		●	2	9224200010400-2
20	38	20	104	3.0	○	2	9224200010430-2
20	38	20	104	4.0	○	2	9224200010440-2
20	38	20	104	5.0	○	2	9224200010450-2

- In stock
- Produced to order only

Recommended cutting conditions for end mills 9224 - Shoulder milling

Work material			Cutting speed V _c (m/min)	d ₁ - diameter in mm						f _z - feed per tooth in mm	
	Ap	Ae		nanoTEC2	Ø3 - Ø6	Ø6 - Ø8	Ø8 - Ø10	Ø10 - Ø14	Ø14 - Ø16	Ø16 - Ø20	
P Carbon steel and Alloy steel < 25 HRC	<1.5d ₁	<0.2d ₁	90-100	0.01-0.03	0.03-0.06	0.04-0.08	0.045-0.10	0.06-0.12	0.07-0.14		
Alloy steel and Tool steel 25-45 HRC	<1.5d ₁	<0.2d ₁	40-60	0.01-0.02	0.025-0.05	0.035-0.065	0.04-0.08	0.045-0.08	0.055-0.10		
M Stainless steel	<1.5d ₁	<0.1d ₁	50-60	0.01-0.02	0.025-0.05	0.035-0.065	0.04-0.08	0.045-0.08	0.055-0.10		
K Cast iron GG	<1.5d ₁	<0.2d ₁	90-110	0.01-0.03	0.03-0.06	0.04-0.08	0.045-0.10	0.06-0.12	0.07-0.14		
Nodular cast iron GGG	<1.5d ₁	<0.1d ₁	80-100	0.01-0.02	0.025-0.05	0.035-0.065	0.04-0.08	0.045-0.08	0.055-0.10		
S Titanium alloy	<1.5d ₁	<0.1d ₁	50-60	0.01-0.02	0.025-0.05	0.035-0.065	0.04-0.08	0.045-0.08	0.055-0.10		

For high alloyed steel (> 12% Cr), INOX, titanium alloy, cutting speed must be reduced by 20-30% when used emulsion

Recommended cutting conditions for end mills 9224 - Slotting

Work material			Cutting speed V _c (m/min)	d ₁ - diameter in mm						f _z - feed per tooth in mm	
	Ap			nanoTEC2	Ø3 - Ø6	Ø6 - Ø8	Ø8 - Ø10	Ø10 - Ø14	Ø14 - Ø16	Ø16 - Ø20	
P Carbon steel and Alloy steel < 25 HRC	<1d ₁		70-80	0.008-0.02	0.018-0.04	0.02-0.05	0.025-0.06	0.03-0.07	0.04-0.08		
Alloy steel and Tool steel 25-45 HRC	<1d ₁		30-50	0.006-0.018	0.015-0.03	0.02-0.04	0.02-0.05	0.025-0.06	0.03-0.07		
M Stainless steel	<0.5d ₁		40-50	0.006-0.02	0.015-0.03	0.02-0.04	0.02-0.05	0.025-0.06	0.03-0.07		
K Cast iron GG	<1d ₁		90-110	0.01-0.025	0.02-0.05	0.025-0.07	0.03-0.07	0.035-0.08	0.035-0.11		
Nodular cast iron GGG	<1d ₁		80-100	0.01-0.02	0.02-0.04	0.02-0.06	0.026-0.07	0.027-0.07	0.03-0.10		
S Titanium alloy	<0.5d ₁		40-50	0.003-0.015	0.005-0.04	0.008-0.04	0.01-0.05	0.015-0.06	0.015-0.08		

For high alloyed steel (> 12% Cr), INOX, titanium alloy, cutting speed must be reduced by 20-30% when used emulsion