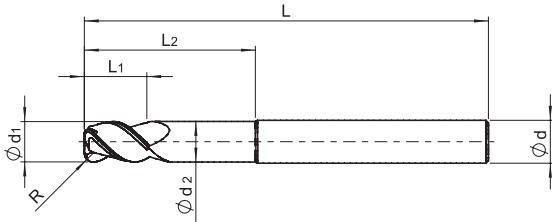
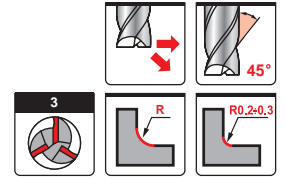


**UMT 9453 Z=3**

End mills with short cutting length and relieved neck for aluminium



**HM**

d1 (e8)	L1	L2	d2	d (h6)	L	R(±0.02)	Stock	ART No
6	10	26	5.6	6	75		●	9453060007500-0
6	10	26	5.6	6	75	0.5	○	9453060007505-0
6	10	26	5.6	6	75	1.0	○	9453060007510-0
8	12	34	7.4	8	75		●	9453080007500-0
8	12	34	7.4	8	75	0.5	○	9453080007505-0
8	12	34	7.4	8	75	1.0	○	9453080007510-0
10	15	42	9.4	10	100		●	9453100010000-0
10	15	42	9.4	10	100	0.5	○	9453100010005-0
10	15	42	9.4	10	100	1.0	○	9453100010010-0
10	15	42	9.4	10	100	2.0	○	9453100010020-0
12	18	50	11.4	12	100		●	9453120010000-0
12	18	50	11.4	12	100	0.5	○	9453120010005-0
12	18	50	11.4	12	100	1.0	○	9453120010010-0
12	18	50	11.4	12	100	2.0	○	9453120010020-0
16	24	65	15.2	16	115		●	9453160011500-0
16	24	65	15.2	16	115	1.0	○	9453160011510-0
16	24	65	15.2	16	115	2.0	○	9453160011520-0
16	24	65	15.2	16	115	3.0	○	9453160011530-0
20	30	82	18.0	20	150		●	9453200015000-0
20	30	82	18.0	20	150	1.0	○	9453200015010-0
20	30	82	18.0	20	150	2.0	○	9453200015020-0
20	30	82	18.0	20	150	3.0	○	9453200015030-0

● In stock  
○ Produced to order only

**Recommended cutting conditions for end mills 9453 - Shoulder milling**

Work material	Cutting speed		High Speed Cutting			d1 - diameter in mm			fz - feed per tooth in mm			
	Ap Ae	Vc (m/min)	Ap Ae	Vc (m/min)								
	Ap	Ae	HM	Ap	Ae	HM	Ø6	Ø8	Ø10	Ø12	Ø16	Ø20
<b>N</b> Aluminium alloy Si<8%	<1.2d1	<0.1d1	165-175	<1d1	<0.1d1	270-310	0.05	0.08	0.10	0.12	0.16	0.18
Cast aluminium Si>8%	<1.2d1	<0.1d1	135-145	<1d1	<0.1d1	250-270	0.045	0.07	0.09	0.11	0.14	0.16
Copper alloy	<1.2d1	<0.1d1	105-120	<1d1	<0.1d1	195-215	0.045	0.07	0.09	0.11	0.14	0.16

**Recommended cutting conditions for end mills 9453 - Slotting**

Work material	Cutting speed		High Speed Cutting		d1 - diameter in mm			fz - feed per tooth in mm		
	Ap	Vc (m/min)	Ap	Vc (m/min)						
	Ap	HM	Ap	HM	Ø6	Ø8	Ø10	Ø12	Ø16	Ø20
<b>N</b> Aluminium alloy Si<8%	<0.8d1	135-145	<0.4d1	270-290	0.04	0.06	0.07	0.08	0.11	0.125
Cast aluminium Si>8%	<0.8d1	120-130	<0.4d1	220-230	0.04	0.05	0.06	0.07	0.09	0.11
Copper alloy	<0.8d1	100-110	<0.4d1	160-180	0.04	0.05	0.06	0.07	0.09	0.11

1. The figures to be adjusted according to machining shape, rigidity of machine and work clamping
2. If the overhang length is more than 4d, cutting speed should be reduced
3. In case of ramping, reduction of the above data by 30-60% is recommended