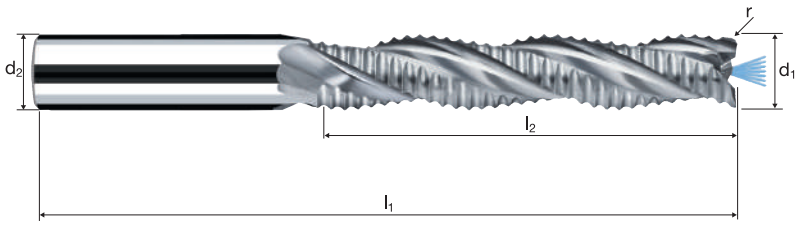
Cylindrical end mills AX-FPS

Profiled, extra-long version 5.2xd
High-performance penetration edge, central cooling channel

X-Generation

HM MG10	λ 30° γ 20°



Roughing

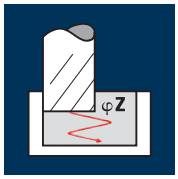
Finishing

			Al Aluminium > 99%	Al Aluminium Alloy	Al Aluminium Cast		Cu Copper	Plastic Thermoplast	

Example: **Order-N°.** Coating: **15507** Article-N°.: **300** ø-Code

Ø Code	d_1 e8	d_2 h5	l_1	l_2	r	z	15607	15507
300	6.00	6.00	73	32.00	0.100	3	●	
391	8.00	8.00	84	42.00	0.150	3	●	
450	10.00	10.00	100	53.00	0.200	3	●	
501	12.00	12.00	117	63.00	0.200	3	●	
610	16.00	16.00	144	84.00	0.200	3	●	
682	20.00	20.00	169	105.00	0.200	3	●	

Application



Material

Wrought aluminium Construction aluminium

d1 [mm]	z	v_c [m/min]	f_z [mm]	a_p [mm]	a_e [mm]	n [min⁻¹]	v_f [mm/min]	φZ [°]
6.00	3	300	0.065	32.000	5.400	15915	3105	5°
8.00	3	300	0.080	42.000	7.200	11935	2865	5°
10.00	3	350	0.095	53.000	9.000	11140	3175	5°
12.00	3	350	0.110	63.000	10.800	9285	3065	5°
16.00	3	400	0.130	84.000	14.400	7960	3105	5°
20.00	3	400	0.145	105.000	18.000	6365	2770	5°

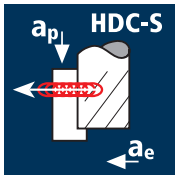
Cast aluminium

d1 [mm]	z	v_c [m/min]	f_z [mm]	a_p [mm]	a_e [mm]	n [min⁻¹]	v_f [mm/min]	φZ [°]
6.00	3	270	0.065	32.000	5.400	14325	2795	5°
8.00	3	270	0.080	42.000	7.200	10745	2580	5°
10.00	3	315	0.095	53.000	9.000	10025	2860	5°
12.00	3	315	0.110	63.000	10.800	8355	2755	5°
16.00	3	360	0.130	84.000	14.400	7160	2795	5°
20.00	3	360	0.145	105.000	18.000	5730	2490	5°

Unalloyed copper

d1 [mm]	z	v_c [m/min]	f_z [mm]	a_p [mm]	a_e [mm]	n [min⁻¹]	v_f [mm/min]	φZ [°]
6.00	3	240	0.052	32.000	5.400	12730	1985	4°
8.00	3	240	0.064	42.000	7.200	9550	1835	4°
10.00	3	280	0.076	53.000	9.000	8915	2030	4°
12.00	3	280	0.088	63.000	10.800	7425	1960	4°
16.00	3	320	0.104	84.000	14.400	6365	1985	4°
20.00	3	320	0.116	105.000	18.000	5095	1770	4°

Application



Material

Wrought aluminium Construction aluminium

d1 [mm]	z	v_c [m/min]	f_z [mm]	a_p [mm]	a_e [mm]	n [min⁻¹]	v_f [mm/min]	Q [cm³/min]
6.00	3	300	0.106	32.000	0.600	15915	5060	97.2
8.00	3	350	0.153	42.000	0.800	13925	6390	214.8
10.00	3	400	0.174	53.000	1.000	12730	6645	352.3
12.00	3	400	0.211	63.000	1.200	10610	6715	507.8
16.00	3	500	0.214	84.000	1.600	9945	6385	858.3
20.00	3	500	0.241	105.000	2.000	7960	5755	1208.2

Cast aluminium

d1 [mm]	z	v_c [m/min]	f_z [mm]	a_p [mm]	a_e [mm]	n [min⁻¹]	v_f [mm/min]	Q [cm³/min]
6.00	3	270	0.106	32.000	0.600	14325	4555	87.5
8.00	3	315	0.153	42.000	0.800	12535	5755	193.3
10.00	3	360	0.174	53.000	1.000	11460	5980	317.0
12.00	3	360	0.211	63.000	1.200	9550	6045	457.0
16.00	3	450	0.214	84.000	1.600	8950	5745	772.5
20.00	3	450	0.241	105.000	2.000	7160	5180	1087.4

Unalloyed copper

d1 [mm]	z	v_c [m/min]	f_z [mm]	a_p [mm]	a_e [mm]	n [min⁻¹]	v_f [mm/min]	Q [cm³/min]
6.00	3	240	0.085	32.000	0.600	12730	3240	62.2
8.00	3	280	0.122	42.000	0.800	11140	4090	137.5
10.00	3	320	0.139	53.000	1.000	10185	4255	225.4
12.00	3	320	0.169	63.000	1.200	8490	4300	325.0
16.00	3	400	0.171	84.000	1.600	7960	4085	549.3
20.00	3	400	0.193	105.000	2.000	6365	3680	773.3

Use **ToolExpert AX-FPS** to determine the best possible cutting data for your machining environment!