



Einsatzempfehlung

Usage recommendation

Der HACHENBACH-AluStar ist besonders für weiche, langspannende Aluminium-Legierungen sowie für unterschiedliche Kunststoffe geeignet

- Spannt komplett poliert - Anhaftungen werden deutlich reduziert
- Dämpfungsfase mit SuperFinish (SF): Optimale Voraussetzungen für noch bessere Sichtflächen
- Unbeschichtete Ausführung: Besonders geeignet für die Bearbeitung von Kupfer-Werkstoffen

Geeignete Bearbeitungsprozesse: Besäumen, Vollschnitt, Trochoidal-Fräsen, Bohrzirkular-Fräsen, sowie Rampen bis zu max. 25°.

The HACHENBACH-AluStar is particularly suitable for soft, long-chipping aluminum alloys as well as for various plastics.

- Completely polished flute - adhesions are significantly reduced
- Damping chamfer with SuperFinish (SF): Optimum conditions for even better visible surfaces
- Uncoated version: Particularly suitable for machining copper materials

Suitable machining processes: Side milling, slotting, trochoidal milling, helical milling, as well as ramps up to max. 25°.

V_c [m/min]

	P1 <700*	P2 <1000*	P3 <1300*	M1 <900*	M2 >900*	K1 >400*	K2 >750*	N1 lang	N2 kurz	N3 Cu	S1 >850*	S2 Ni	H1 <52 HRC	H2 <60 HRC	H3 >60 HRC
Vc (ae ≤ 0,3xD)	0	0	0	0	0	0	0	375	400	175	0	0	0	0	0
Vc (ae > 0,3xD)	0	0	0	0	0	0	0	250	275	110	0	0	0	0	0

* N/mm²

f_z [mm]

d_t	l_f	hm	$a_e = 0,1xD$		$a_e = 0,2xD$		$a_e = 0,3xD$		$a_e = 0,6xD$		$a_e = 1,0xD$	
			f_z	a_p	f_z	a_p	f_z	a_p	f_z	a_p	f_z	a_p
2,0	3,0	0,018	0,057	3,0	0,040	3,0	0,033	3,0	0,023	3,0	0,029	2,0
2,0	7,0	0,025	0,079	7,0	0,056	7,0	0,046	7,0	0,032	3,0	0,035	2,0
3,0	4,0	0,025	0,079	4,0	0,056	4,0	0,045	4,0	0,032	4,0	0,040	3,0
3,0	8,0	0,029	0,092	8,0	0,065	8,0	0,053	8,0	0,037	4,5	0,041	3,0
4,0	5,0	0,032	0,100	5,0	0,071	5,0	0,058	5,0	0,041	5,0	0,050	4,0
4,0	11,0	0,033	0,104	11,0	0,074	11,0	0,060	11,0	0,043	6,0	0,046	4,0
5,0	6,0	0,038	0,121	6,0	0,086	6,0	0,070	6,0	0,049	6,0	0,061	5,0
5,0	13,0	0,037	0,117	13,0	0,083	13,0	0,068	13,0	0,048	7,5	0,052	5,0
6,0	7,0	0,045	0,142	7,0	0,101	7,0	0,082	7,0	0,058	7,0	0,072	6,0
6,0	13,0	0,041	0,130	13,0	0,092	13,0	0,075	13,0	0,053	9,0	0,057	6,0
8,0	9,0	0,058	0,185	9,0	0,131	9,0	0,107	9,0	0,075	9,0	0,094	8,0
8,0	19,0	0,049	0,155	19,0	0,110	19,0	0,089	19,0	0,063	12,0	0,069	8,0
10,0	11,0	0,072	0,227	11,0	0,161	11,0	0,131	11,0	0,093	11,0	0,115	10,0
10,0	22,0	0,057	0,180	22,0	0,127	22,0	0,104	22,0	0,074	15,0	0,080	10,0
12,0	12,0	0,085	0,270	12,0	0,191	12,0	0,156	12,0	0,110	12,0	0,137	12,0
12,0	26,0	0,065	0,206	26,0	0,145	26,0	0,119	26,0	0,084	18,0	0,091	12,0
14,0	26,0	0,073	0,231	26,0	0,163	26,0	0,133	26,0	0,094	21,0	0,102	14,0
16,0	16,0	0,112	0,355	16,0	0,251	16,0	0,205	16,0	0,145	16,0	0,180	16,0
16,0	32,0	0,081	0,256	32,0	0,181	32,0	0,148	32,0	0,105	24,0	0,113	16,0
18,0	32,0	0,089	0,281	32,0	0,199	32,0	0,162	32,0	0,115	27,0	0,125	18,0
20,0	20,0	0,139	0,440	20,0	0,311	20,0	0,254	20,0	0,180	20,0	0,223	20,0
20,0	38,0	0,097	0,307	38,0	0,217	38,0	0,177	38,0	0,125	30,0	0,136	20,0

* hm = Mittlere Spandicke / Average chip thickness