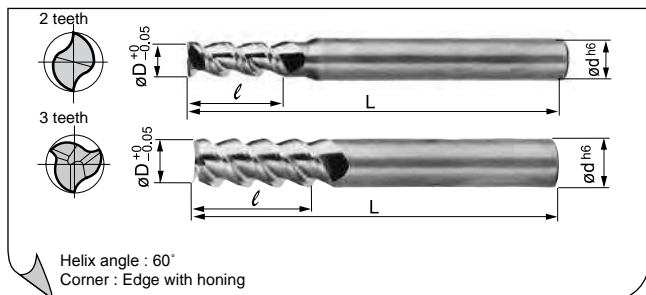


Fast Helix Spiral Endmills

HSM 2000/3000/4000 Type

Carbide grade: A1 (Micrograin)



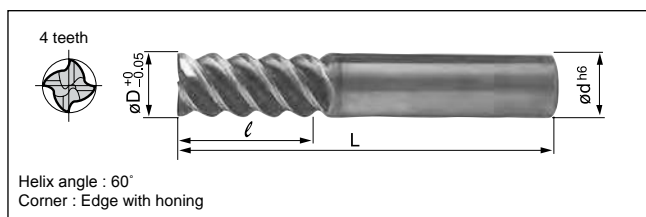
Endmills

(mm)

	Cat. No.	Stock	øD	ℓ	L	ød
2	HSM 2020		2,0	6	40	4
	HSM 2030		3,0	8	45	6
	HSM 2040		4,0	10	45	6
	HSM 2050		5,0	12	50	6

3	HSM 3030		3,0	12	45	6
	HSM 3040		4,0	12	45	6
	HSM 3045		4,5	12	45	6
	HSM 3050	□	5,0	12	50	6
	HSM 3060	□	6,0	12	50	6
	HSM 3070		7,0	18	60	8
	HSM 3080		8,0	18	60	8
	HSM 3090		9,0	20	65	10
	HSM 3100	□	10,0	25	70	10
	HSM 3110		11,0	25	75	12
	HSM 3120	□	12,0	30	75	12
	HSM 3130		13,0	30	80	16
	HSM 3140	□	14,0	30	90	16
	HSM 3150		15,0	30	95	16
	HSM 3160		16,0	35	95	16
	HSM 3180		18,0	40	110	20
	HSM 3200		20,0	40	110	20

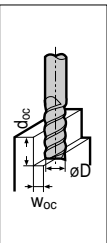
4	HSM 4200		20,0	40	110	20
	HSM 4320		32,0	55	130	32



Recommended conditions

(Shoulder processing) $d_{oc} = 1,5 \times \phi D$
 $w_{oc} = 0,1 \times \phi D$

øD	Material	Carbon steel, Alloy steel			Cast iron
		(BelowHRC30)	(BelowHRC40)	(BelowHRC45)	
1 ~ 2,9	v_c	40-50-60	30-40-50	20-30-40	40-50-60
	f_t	0,009~0,024	0,009~0,024	0,004~0,011	0,018~0,040
3 ~ 5,9	v_c	40-50-60	30-40-50	20-30-40	40-50-60
	f_t	0,040~0,050	0,040~0,050	0,020~0,025	0,060~0,070
6 ~ 12,9	v_c	40-50-60	30-40-50	20-30-40	40-50-60
	f_t	0,055~0,110	0,055~0,110	0,028~0,055	0,080~0,220
13 ~ 19,9	v_c	40-50-60	30-40-50	20-30-40	40-50-60
	f_t	0,120~0,180	0,120~0,180	0,060~0,090	0,250~0,350
20 ~	v_c	40-50-60	30-40-50	20-30-40	40-50-60
	f_t	0,216~0,245	0,216~0,245	0,127~0,132	0,321~0,546

 $v_c = \text{m/min}$ $f_t = \text{mm/tooth}$ 

▲ = To be replaced by new item
□ = Delivery on request

www.sumitomo-tools.ruдля заказа - sumitomo@sumitomo-tools.ru