

Radius Endmill for Exotic Alloys

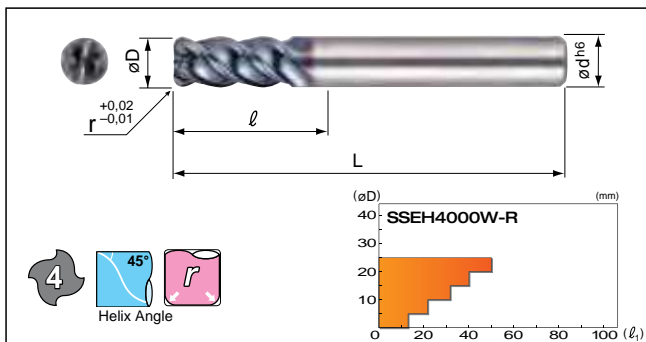
SSEH 4000W-R Type



4 Flutes Endmills with Radius Corner and

HAIMER's SAFE-LOCK™ Applicable Endmills

Coated Carbide	GS HARD	Structural Steel	Carbon Steel	Alloy Steel	Pre-hardened Steel	Tempered Die Steel	Hardened Steel	Stainless Steel	Ti Alloy / Heat Resistant Alloy	Cast Iron	Al Alloy	Cu Alloy	Graphite
		○	○	○	○	○	○	○	○	○	○	○	○
Grades	Coating												



Grade: ACW52

SAFE-LOCK™

Applicable Endmills



Endmills

(mm)

Cat. No.	Stock	øD	l ₁	l ₂	L	ød
SSEH 4045W-R05	●	4,5	0,5	12	50	6
SSEH 4045W-R10	●	4,5	1,0	12	50	6
SSEH 4050W-R05	●	5,0	0,5	13	60	6
SSEH 4050W-R10	●	5,0	1,0	13	60	6
SSEH 4060W-R10	●	6,0	1,0	13	60	6
SSEH 4080W-R10	●	8,0	1,0	19	80	8
SSEH 4100W-R10	●	10,0	1,0	22	90	10
SSEH 4100W-R30	●	10,0	3,0	22	90	10
SSEH 4120W-R10	●	12,0	1,0	26	90	12
SSEH 4120W-R30	●	12,0	3,0	26	90	12
SSEH 4160W-R10	●	16,0	1,0	32	115	16
SSEH 4160W-R30	●	16,0	3,0	32	115	16
SSEH 4200W-R10	□	20,0	1,0	40	125	20
SSEH 4200W-R30	□	20,0	3,0	40	125	20
SSEH 4250W-R10	□	25,0	1,0	50	140	25
SSEH 4250W-R30	□	25,0	3,0	50	140	25

Endmills

(mm)

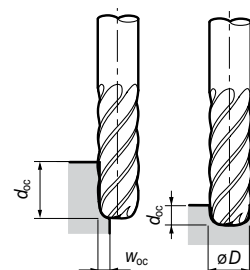
Cat. No.	Stock	øD	l ₁	l ₂	L	ød
SSEH 4120WS-R10	□	12,0	1,0	26	90	12
SSEH 4120WS-R30	□	12,0	3,0	26	90	12
SSEH 4160WS-R10	□	16,0	1,0	32	115	16
SSEH 4160WS-R30	□	16,0	3,0	32	115	16
SSEH 4200WS-R10	□	20,0	1,0	40	125	20
SSEH 4200WS-R30	□	20,0	3,0	40	125	20
SSEH 4250WS-R10	□	25,0	1,0	50	140	25
SSEH 4250WS-R30	□	25,0	3,0	50	140	25

Diameter and Corner Radius Selection Range

øD	r0,5	r1,0	r3,0
ø 4,5	●	●	
ø 5	●	●	
ø 6		●	
ø 8		●	
ø 10		●	●
ø 12		●	●
ø 16		●	●
ø 20		□	□
ø 25		□	□

Recommended cutting conditions

- For stable machining, a more rigid machine is recommended.
- Wet machining is recommended for stainless steel and heat resistant alloy applications.
- If cutting noise and vibration are present, please change the cutting conditions accordingly.



Shoulder Milling

Work Material	Stainless Steel		Titanium Alloy		Heat Resistant Steel	
	Spindle Speed (rpm)	Feed Rate (mm/min)	Spindle Speed (rpm)	Feed Rate (mm/min)	Spindle Speed (rpm)	Feed Rate (mm/min)
øD (mm)						
4,5	3.500	350	3.500	280	2.100	170
5,0	3.200	380	3.200	320	1.900	190
6,0	2.700	430	2.700	320	1.600	190
8,0	2.000	400	2.000	280	1.200	170
10,0	1.600	380	1.600	260	1.000	160
12,0	1.300	360	1.300	230	800	140
16,0	1.000	320	1.000	200	600	120
20,0	800	260	800	160	480	100
25,0	640	200	640	130	380	80
Shoulder cutting	1,5 D		1,5 D		1,5 D	
d _{oc}	0,1 D		0,05 D		0,05 D	
w _{oc}	0,1 D		0,05 D		0,05 D	

Grooving

Work Material	Stainless Steel		Titanium Alloy		Heat Resistant Steel	
	Spindle Speed (rpm)	Feed Rate (mm/min)	Spindle Speed (rpm)	Feed Rate (mm/min)	Spindle Speed (rpm)	Feed Rate (mm/min)
øD (mm)						
4,5	4,200	200	3,900	270	1,400	100
5,0	3,800	240	3,500	300	1,300	120
6,0	3,200	260	2,900	300	1,100	140
8,0	2,400	240	2,200	270	800	120
10,0	1,900	220	1,700	250	650	110
12,0	1,600	200	1,400	230	550	100
16,0	1,200	130	1,100	200	400	80
20,0	950	95	890	90	320	60
25,0	760	75	700	70	250	50
Grooving	0,3 D		0,2 D		0,15 D	
d _{oc}	0,3 D		0,2 D		0,15 D	