

High Performance In High-Alloy Aluminiums!

Thanks to its double-action double flute technology, optimised corner radius, unique geometry and coating, 133 Series brings lots of advantages with it in alloyed aluminiums.



General Engineering



Aviation Aerospace



Defence



Finish Rough

Various corner radius alternatives better for aviation applications.

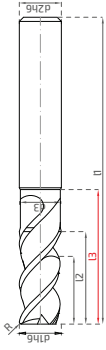
High Chip-Removal In High Speed Machining.

Better Surface Roughness by comparisons with equivalents.

Longer Tool Life

new *product*

CHATTER FREE



Stock	Code	dH6	d2H6	d3	U1	U2	U3	R
*	133303015	3	6	2.8	58	8	13	0.15
*	133304015	4	6	3.8	58	11	15,4	0.15
*	133305015	5	6	4.8	58	13	21	0.15
*	133306002	6	6	5.5	58	13	21	0.2
*	133306005	6	6	5.5	58	13	21	0.5
*	133308025	8	8	7.5	64	21	27	0.25
*	133308005	8	8	7.5	64	21	27	0.5
*	133308010	8	8	7.5	64	21	27	1
*	133310003	10	10	9.5	73	22	32	0.3
*	133310005	10	10	9.5	73	22	32	0.5
*	133310010	10	10	9.5	73	22	32	1
*	133312003	12	12	11.5	82	26	38	0.3
*	133312005	12	12	11.5	82	26	38	0.5
*	133312010	12	12	11.5	82	26	38	1
*	133316004	16	16	15.5	93	36	44	0.4
*	133316010	16	16	15.5	93	36	44	1
*	133316020	16	16	15.5	93	36	44	2
*	133320005	20	20	19.5	105	41	54	0.5
*	133320020	20	20	19.5	105	41	54	2

Material	Cutting Parameters	
	Slotting ap=100/ ae=1x0 Vc (m/min)	Shoulder Milling ap=100/ ae=0.5x0 Vc (m/min)
Aluminum Alloys	<46 Si <4% Ti Si >4% Ti Si	380-430 330-380 200-250 140-180
Copper Alloys		



Material	Feed Per Tooth (mm/tooth)	
	ap=10	ae=0.300
0	0.050	0.061
3	0.050	0.061
4	0.056	0.068
5	0.062	0.076
6	0.068	0.080
8	0.072	0.083
10	0.075	0.088
12	0.084	0.093
16	0.090	0.103
20	0.100	0.112



Material	Recommended	Acceptable	Not Recommended
Steel	○	○	○
Stainless Steel	○	○	○
Hardened Steel <54 HRC	○	○	○
Hardened Steel >54 HRC	○	○	○
Cast Iron	○	○	○
Graphite	○	○	○
Non-Ferrous Material	○	○	○
HSSA	○	○	○
Titanium	○	○	○