



End mills for Aluminium machining

Mega | Alu Power **Mega** | Alu **Mega** | Alu LFF

part of **MegaTool**

OUR BEST SOLUTIONS



FOR THE MACHINING OF ALUMINIUM
AND ALUMINIUM ALLOYS



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Power
797ALUCB



Mega | Alu
Power
797ALUCBIC



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797ALU



Mega | Alu
797ALUIC

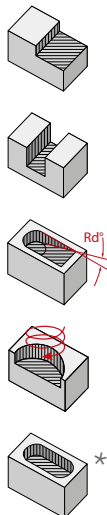


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ROUGHING OPERATIONS

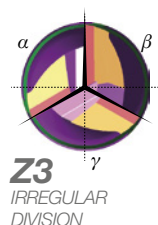
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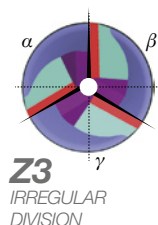
* Only 797ALUCB



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TECHNICAL DATA

Irregular division Designed to reduce resonance when machining Aluminium and Aluminium alloys.

Different helices to reduce vibration even in complex tool paths.

Rounded flute.

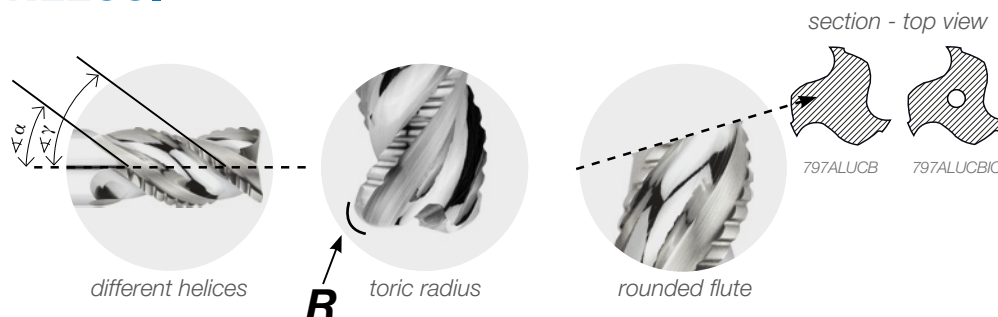
Asymmetric Chip Breaker.

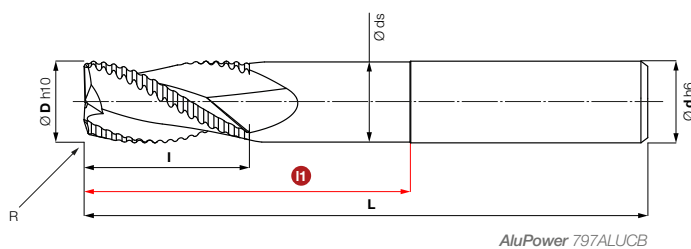
Mirror grinding.

Internal coolant hole.

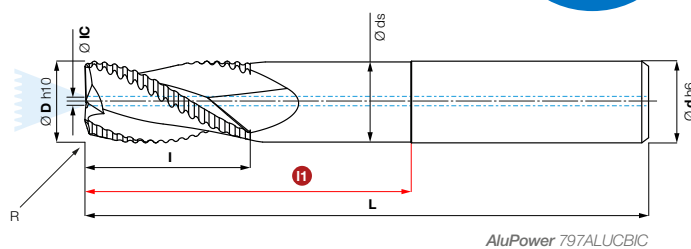
(MegaAluPower 797ALUCBIC)

OPTIMAL CHIP CONTROL IN HIGH METAL REMOVAL RATE MACHINING. VIBRATIONLESS.




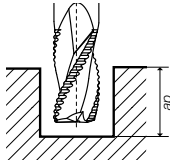
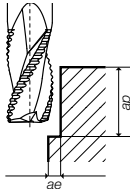


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CUTTING PARAMETERS

Materials	Slotting $ap = 1 - 2\phi$	Shoulder Milling $ap = 1 - 2\phi$ $ae = 0,7 - 0,10\phi$		
				
Group and description	Vc (mt /min.)	Vc (mt /min.)		
Aluminium alloys	150 - 1000	150 - 1000		
D	FEED mm/tooth			
	$ap = 2\phi$	$ap = 1\phi$	$ae > 0,4\phi$	$ae < 0,4\phi$
6*	0,02 - 0,04	0,03 - 0,05	0,03 - 0,045	0,05 - 0,10
8*	0,02 - 0,05	0,04 - 0,06	0,03 - 0,05	0,05 - 0,10
10*	0,03 - 0,06	0,04 - 0,07	0,04 - 0,06	0,05 - 0,12
12	0,04 - 0,08	0,04 - 0,12	0,05 - 0,12	0,08 - 0,20
14*	0,05 - 0,10	0,05 - 0,12	0,06 - 0,13	0,08 - 0,20
16	0,05 - 0,14	0,05 - 0,14	0,08 - 0,14	0,08 - 0,20
20	0,06 - 0,15	0,06 - 0,16	0,08 - 0,15	0,08 - 0,20
25	0,06 - 0,16	0,06 - 0,16	0,08 - 0,16	0,08 - 0,20

A tool holder with heavy duty clamping or a shrink holder are recommended. The abundant use of coolant is recommended.

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ASYMMETRIC CHIPBREAKER



Standard chip size

VS



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CENTRAL COOLANT HOLE

The use of internal coolant allows for:

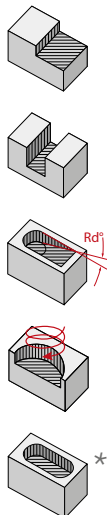
- temperature control in the cutting area.
 - optimal chip evacuation, thus resulting in a clean work area.
- It is recommended for heavy duty machining (deep pockets, complex profiles, etc.)

where external refrigeration is obstructed or insufficient.



ROUGHING OPERATIONS

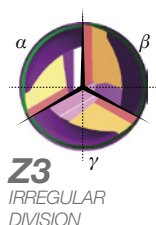
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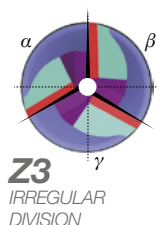
* Only 797ALU



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TECHNICAL DATA

Irregular division Designed to reduce resonance when machining Aluminium and Aluminium alloys.

Different helices to reduce vibration even in complex tool paths.

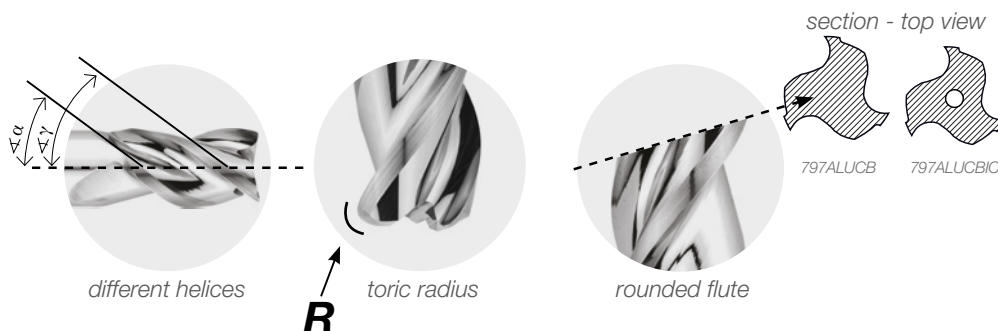
Rounded flute.

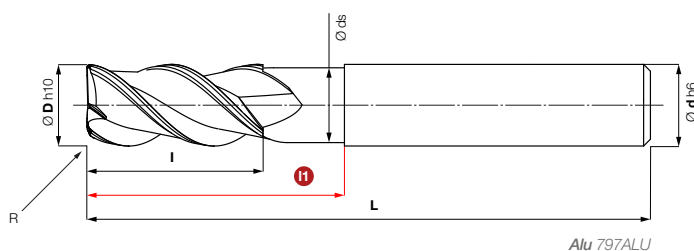
Mirror grinding.

Internal coolant hole.

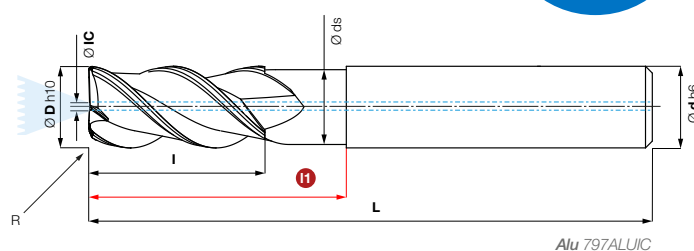
(MegaAluPower 797ALUIC)

HIGHLY STABLE PROCESS EVEN WITH OVERHANG UP TO 50. VIBRATIONLESS.




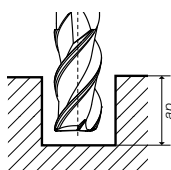
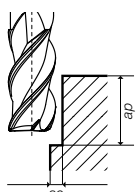
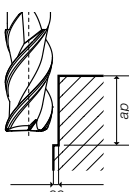


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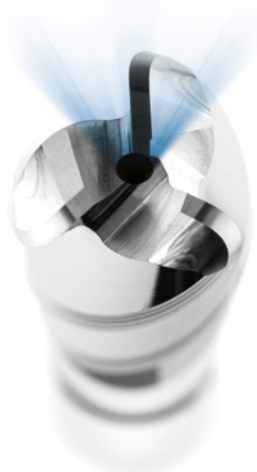
CUTTING PARAMETERS

Materials	Slotting $ap = 1 - 1,5\phi$	Shoulder Milling $ap = 1,5\phi$ $ae = 0,25 - 0,1\phi$	Finishing $ap = 1,5\phi$ $ae = 0,075 - 0,025\phi$
			
Group and description	Vc (mt /min.)	Vc (mt /min.)	Vc (mt /min.)
Aluminium alloys	150 - 1000	150 - 1000	150 - 1000

D	FEED mm/tooth								
	$ap=1,5\phi$	$ap=1\phi$	$ae=0,25\phi$	$ae=0,2\phi$	$ae=0,15\phi$	$ae=0,1\phi$	$ae=0,075\phi$	$ae=0,05\phi$	$ae=0,025\phi$
2*	0,015	0,018	0,022	0,023	0,025	0,031	0,034	0,041	0,058
3*	0,018	0,021	0,025	0,026	0,029	0,036	0,040	0,048	0,067
4*	0,021	0,024	0,029	0,030	0,034	0,041	0,046	0,055	0,077
5*	0,024	0,028	0,034	0,035	0,039	0,048	0,053	0,064	0,090
6	0,028	0,031	0,037	0,039	0,043	0,053	0,059	0,071	0,099
8	0,032	0,035	0,042	0,044	0,049	0,060	0,067	0,081	0,112
10	0,036	0,040	0,048	0,050	0,056	0,068	0,076	0,092	0,128
12	0,040	0,043	0,052	0,054	0,060	0,073	0,082	0,099	0,138
16	0,045	0,050	0,060	0,063	0,070	0,085	0,095	0,115	0,160
20	0,048	0,050	0,060	0,063	0,070	0,085	0,095	0,115	0,160
25	0,050	0,052	0,062	0,065	0,073	0,088	0,099	0,120	0,166

A tool holder with heavy duty clamping or a shrink holder are recommended. The abundant use of coolant is recommended.

*Only 797ALU



CENTRAL COOLANT HOLE

The use of internal coolant allows for:

- temperature control in the cutting area.
 - optimal chip evacuation, thus resulting in a clean work area.
- It is recommended for heavy duty machining (deep pockets, complex profiles, etc.) where external refrigeration is obstructed or insufficient.



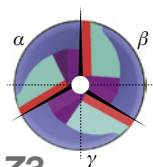
ROUGHING OPERATIONS



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Z3
IRREGULAR
DIVISION

Long
Flute
Finishers

TECHNICAL DATA

Irregular division Designed to reduce resonance when machining Aluminium and Aluminium alloys.

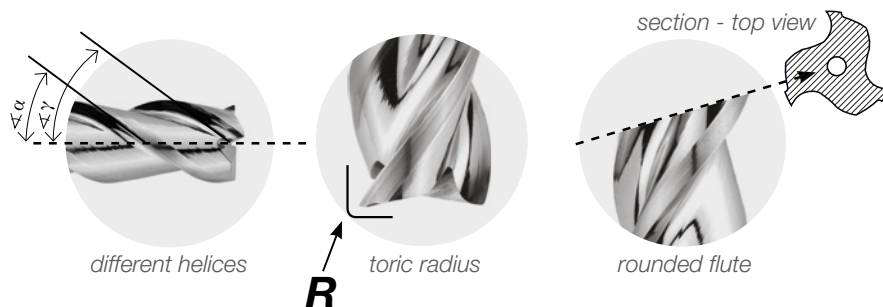
Different helices to reduce vibration even in complex tool paths.

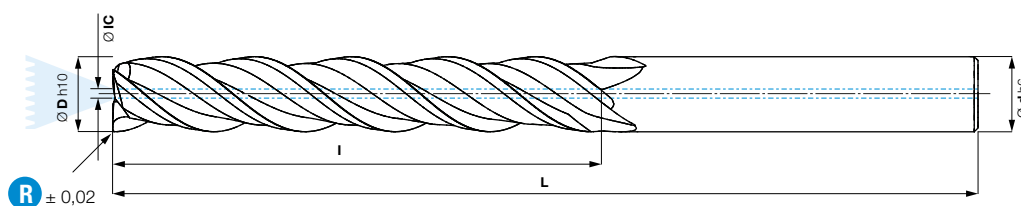
Rounded flute.

Mirror grinding.


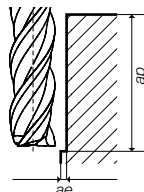
Internal coolant hole.

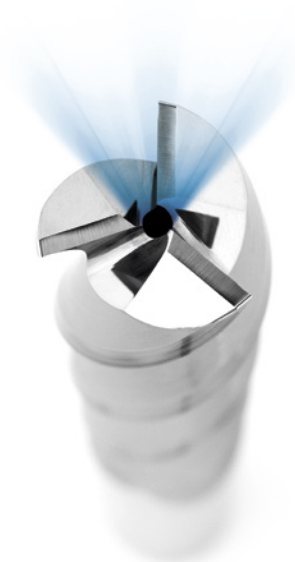
**HIGHLY STABLE PROCESS EVEN WITH
AN AXIAL WIDTH OF CUT UP TO 6Ø.
VIBRATIONLESS.**





CUTTING PARAMETERS

Materials		Finishing $ap = 4 - 6 \varnothing$ $ae = 0,005 - 0,03 \varnothing$
 Group and description Aluminium alloys		
		Vc (mt /min.) 150 - 1000
		FEED mm/tooth $ae = 0,01 - 0,02 \varnothing$
D		0,04 - 0,08
6		0,04 - 0,08
8		0,05 - 0,10
10		0,05 - 0,12
12		0,06 - 0,12
14		0,06 - 0,15
16		0,06 - 0,15
20		0,06 - 0,15
25		0,06 - 0,15



CENTRAL COOLANT HOLE

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- temperature control in the cutting area.
- optimal chip evacuation, thus resulting in a clean work area.

It is recommended for heavy duty machining (complex profiles, etc.) where external refrigeration is obstructed or insufficient.





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