NSA

New Solution Announcement

Customer:

MEVO

PRECISION TECHNOLOGY

Mega Alu Power Test

CLICK HERE FOR THE VIDEO

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CUSTOMER

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MEVO Precision Technology

Mevo Precision Technology specializes in producing fine mechanical components and assembling complete products for the high-tech industry. The high quality products which Mevo manufactures are used for measurement and control instruments, optical instruments, special machine construction, in the automobile industry and the medical industry. The majority of Mevo's products are made of stainless steel. In addition, aluminum, bronze, brass, titanium, hastelloy and monel are also processed.

MEVO
PRECISION TECHNOLOGY

MEVO
Spoorstraat 9
7261 AE, Ruurlo
The Nederland

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Member IMO Group

TEST SUPERVISOR

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ALEXANDER DE WINDT
(Iscar)
Technical Sales

PETER VAN GENT
(Iscar/UOP)
Product Manager Solidtools

STEPHAN SLINGERLAND
(Iscar)
Technical Sales

JOERI VERHAEGH
(Mevo)
CAD/CAM programming

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HORIZONTAL CENTER NEXUS 5000-II

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CAPACITY	Maximum workpiece diameter	800 mm
	Maximum workpiece height	1,000 mm
	X-axis travel (column right and left)	730 mm
	Y-axis travel (spindle up and down)	730 mm
	Z-axis travel (table back and forth)	800 mm
SPINDLE (standard)	Spindle taper hole	7/14 cono No. 40
	Spindle speed maximum	18,000 min[1]
	Main motor (40% ED rating)	35.0 kW
	Main motor (continuous rating)	26.0 kW
FEED RATES	Rapid traverse (X/Y/Z)	60,000 mm/min
TABLE & PALLET	Pallet width	500 mm
	Pallet length	500 mm
ATC TOOL MAGAZINE	No. of tool pockets (standard)	40
	Tool shank	DIN69871 - ISO40
MACHINE SIZE	Width	2,444 mm
	Length	4,943 mm

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OUR SOLUTION

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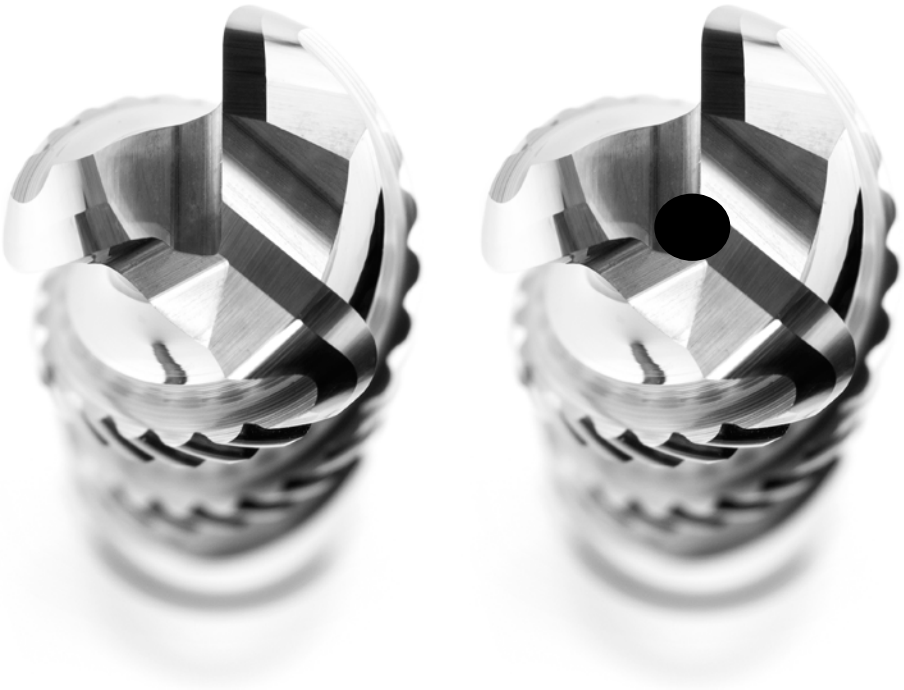

Mega Alu Power

part of Megatool

DISCOVER THE ENTIRE MEGATOOL RANGE
BEST SOLUTIONS FOR ALUMINIUM AND METAL CUTTING

www.megatool.it

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6 X Ø SEMI-STANDARD

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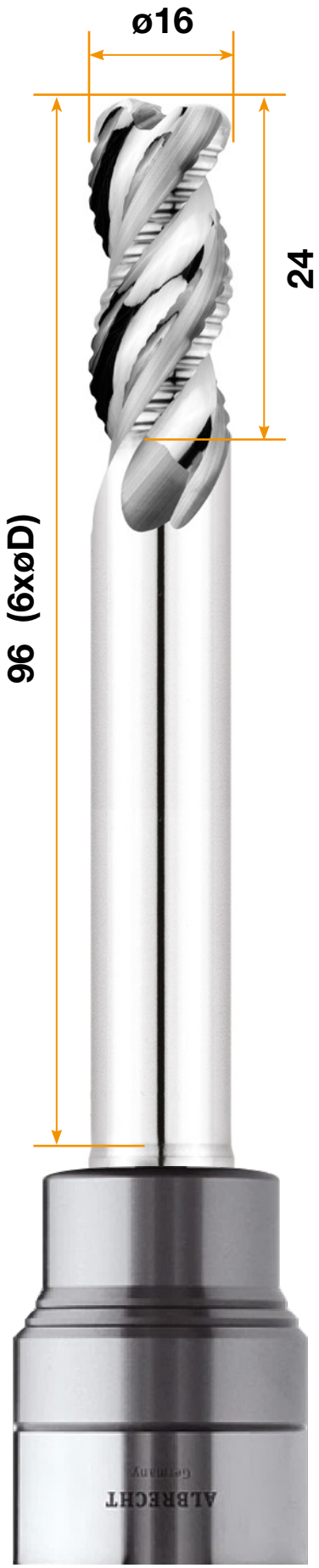
Mega Alu Power



MEGA ALU POWER

(Internal Coolant)

6 x Ø IC (Semi Standard)
797ALUCBICR081602 KM

5 x Ø IC
797ALUCBICR081601 KM

4 x Ø IC
797ALUCBICR081600 KM

4 x Ø IC (Semi Standard Ap:55)
797ALUCBICR081600XXX KM

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STEP #1 (4 X Ø)

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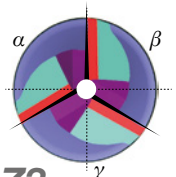
MEGA ALU POWER
Ø16 4xØ IC
(Internal Coolant)

Clamping Din 69871 ISO40 Albrecht power chuck
Dø16 64 / 35 R:0,8
797ALUCBICR081600 KM

Alu
Power
797ALUCBIC



Z3
IRREGULAR
DIVISION

TECHNICAL DATA

PARAMETERS	FULL SLOT	60% x Ø shoulder
Ø (diameter)	16	16
Z (teeth)	3	3
A_p (mm)	24 mm	24 mm
A_e (mm)	16 mm	10 mm
N (omw/min)	17.500	17.500
f_z (mm/tooth)	0,12	0,12
V_f (mm/min)	6.000	6.000
Q (cm^3/min)	2.304	1.440

98% max power machine

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STEP #2 (4 X Ø)

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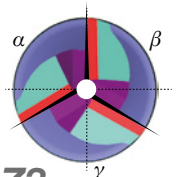
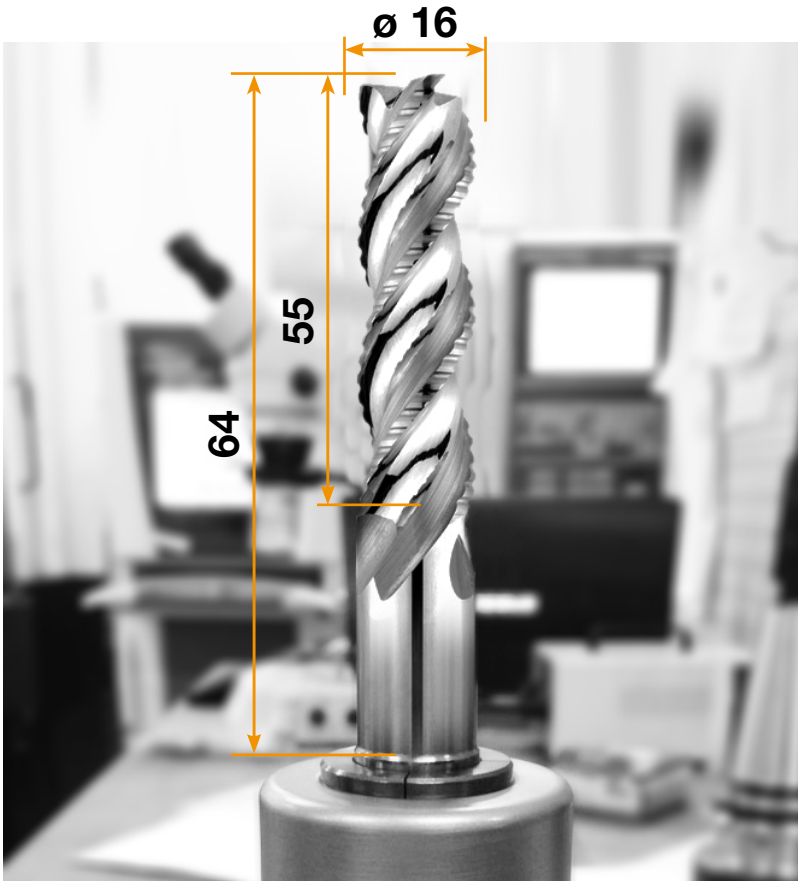
MEGA ALU POWER
Ø16 4xØ IC SEMI-STANDARD
(Internal Coolant)

Clamping Din 69871 ISO40 Albrecht power chuck
Dø16 64 / **55** R:0,8
797ALUCBICR081600**XXX** KM

Alu
Power
797ALUCBIC



Z3
IRREGULAR
DIVISION



TECHNICAL DATA

PARAMETERS	FULL SLOT	60% x Ø shoulder
Ø (diameter)	16	16
Z (teeth)	3	3
A_p (mm)	48 mm	48 mm
A_e (mm)	16 mm	10 mm
N (omw/min)	17.500	17.500
f_z (mm/tooth)	0,058	0,058
V_f (mm/min)	3.000	3.000
Q (cm^3/min)	2.304	1.440

120% max power machine

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STEP #3 (5 X Ø)

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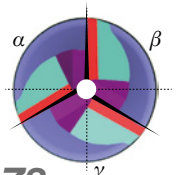
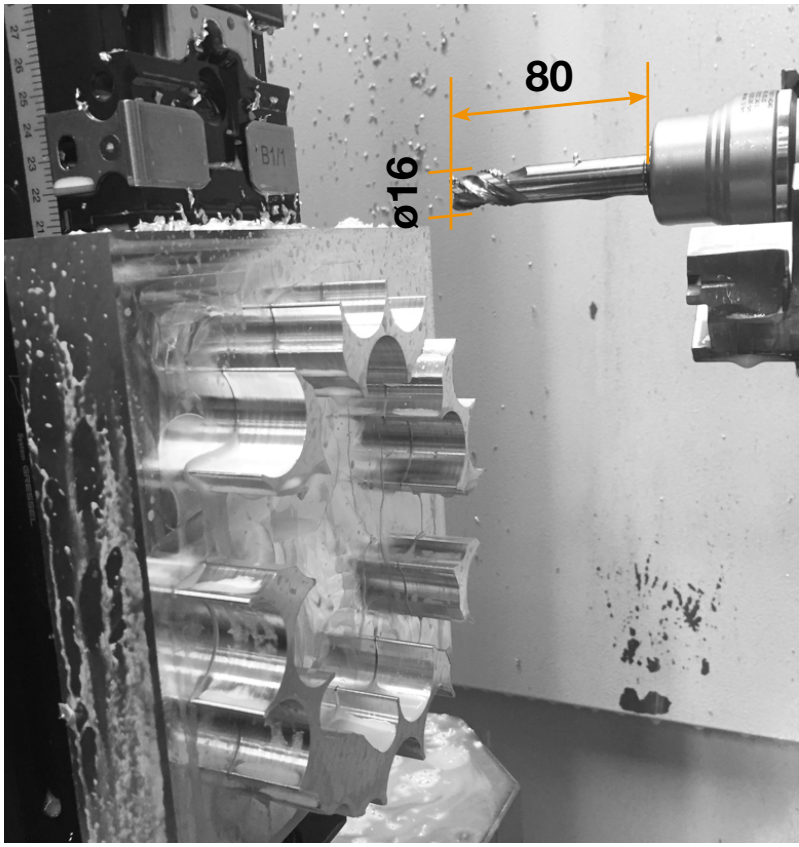
MEGA ALU POWER
Ø16 5xØ IC
(Internal Coolant)

Clamping Din 69871 ISO40 Albrecht power chuck
Dø16 80 / 24 R:0,8
797ALUCBICR081601 KM

Alu
Power
797ALUCBIC



Z3
IRREGULAR
DIVISION



TECHNICAL DATA

PARAMETERS	FULL SLOT	60% x Ø shoulder
Ø (diameter)	16	16
Z (teeth)	3	3
A_p (mm)	24 mm	24 mm
A_e (mm)	16 mm	10 mm
N (omw/min)	17.500	17.500
f_z (mm/tooth)	0,067	0,067
V_f (mm/min)	3.500	3.500
Q (cm^3/min)	1.344	840

74% max power machine

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STEP #4 (6 X Ø)

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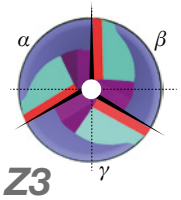
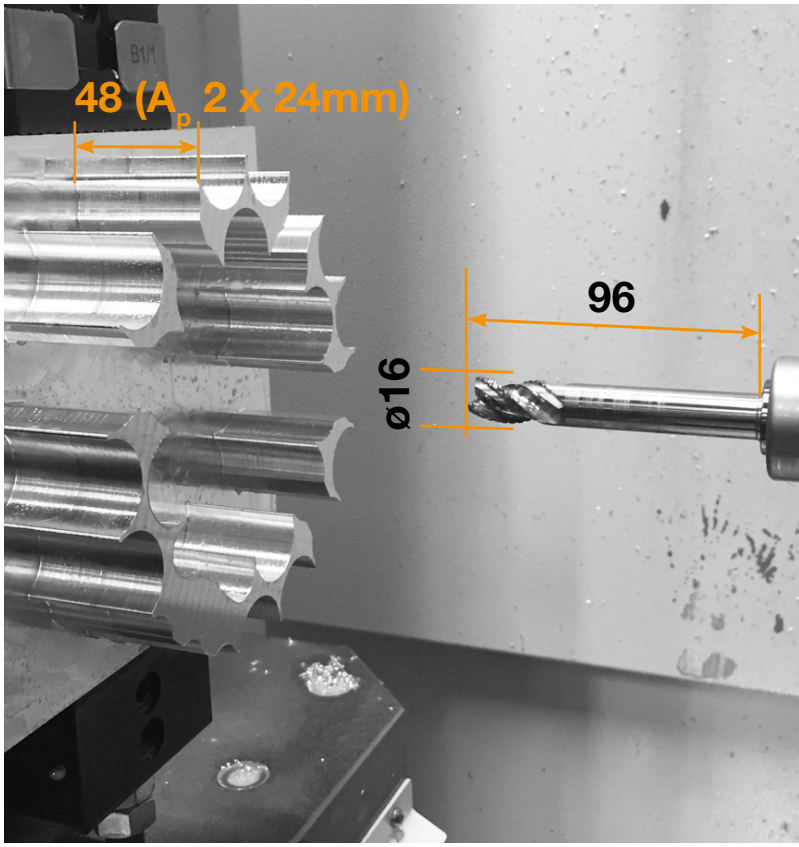
MEGA ALU POWER
Ø16 6xØ IC SEMI-STANDARD
(Internal Coolant)

Clamping Din 69871 ISO40 Albrecht power chuck
Dø16 96 / 24 R:0,8
797ALUCBICR081602**XXX** KM

Alu
Power
797ALUCBIC



Z3
IRREGULAR
DIVISION



TECHNICAL DATA

PARAMETERS	FULL SLOT	60% x Ø shoulder
Ø (diameter)	16	16
Z (teeth)	3	3
A_p (mm)	24 mm	24 mm
A_e (mm)	16 mm	10 mm
N (omw/min)	17.500	17.500
f_z (mm/tooth)	0,067	0,067
V_f (mm/min)	3.500	3.500
Q (cm^3/min)	1.344	840

74% max power machine

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MEGA ALU POWER END MILLS CHARACTERISTICS AND BENEFITS

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Mega Alu Power

- *Noise reduction*
- *Resonance reduction*
- *Vibrationless* *(due to a unique geometry)*
- *High chip removal rate* *(overhang up to 6xD)*
- *Perfect control of chip evacuation*
  (thanks to the combination of mirror ground flutes and internal coolant feeding)
- *Less power required*

ASYMMETRIC CHIPBREAKER

The bigger the chips, the more difficult it is to evacuate them.Thinner and shorter chips weigh less than standard chips, which helps the coolant system to remove chips from the pocket, even in low coolant pressure conditions.
A clean pocket is an advantage for tools in order to avoid chip jamming.

MEGA ALU POWER CHIP SIZE

STANDARD CHIP SIZE

Mega Alu Power

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FINAL RESULTS

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DESCRIPTION OF THE WORKED PIECE

This product is used for blood analysis equipment.
In the pockets which are shown, several tubes are inserted which contain blood. On the other side, tubes with reagents are inserted.
A fully automated machine uses a needle to suck the reagents from one tube and add it to the blood filled tubes. Using this method, 360 blood tests per hour can be performed.
Since a lot of material has to be removed during the manufacturing of this product, there is a chance that the product will bend.
To avoid this from happening, the product is being made from ACP5080.

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Mega Alu Power Mega Alu Mega Alu LFF part of Mega Tool

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