

HIGH PRECISION CUTTING TOOLS

ALUMINIUM MACHINING SOLUTIONS

MACHINING HAS NEVER BEEN EASIER

PIRANHA 
PERFORMANCE REDEFINED™

www.piranhamill.com



MANY TOOLS FOR ALUMINUM MACHINING



OP2



- Progressive helix
- Polished flutes
- With or without chip breakers
- Offered sharp or with corner radius
- Wiper flat

OP3



- Variable waved helix
- Unequal indexing
- Polished flutes
- With or without chip breakers
- Offered sharp or with corner radius
- Wiper flat

OPSN



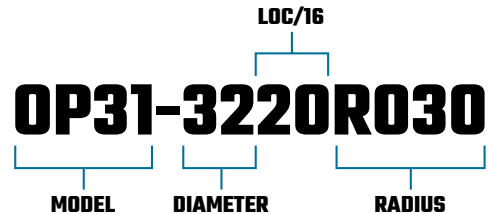
- 3 flutes center cutting
- Unequal indexing
- Double rake
- Polished flutes
- With or without chip breakers
- Offered sharp or with corner radius
- Wiper flat
- Edge prep



Once we were manufacturers of cutting tools, today we are a value creation partner for our customers.

Our team will create a prototype using 2D or 3D tool drawing software and perform a technical trial if necessary. Knowing that your tools and equipment have a direct impact on your manufacturing costs, we offer the possibility of combining multiple cutting tools into one.

EASY WAY TO CREATE YOUR PART NUMBER



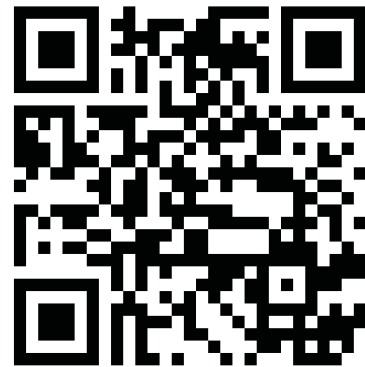
Piranha offers a 24-hour service if needed and we are available to serve you 24/7. Our CNC generated customized tool, combined with our team of courteous and experienced professionals guarantee our performance and your satisfaction.

OPC

- Spiral point
- Fluting with helix design
- Offered in 2; 3; 4; 5 flute
- Offered with 60 or 90 degree point angle
- For improved surface finish

OPXA

- Extreme design of chip evacuation
- Double rake, double gashing
- Wiper flat and eccentric relief.
- Offered in 4 & 5 flute
- Unequal indexing
- Profiling, slotting and roughing applications



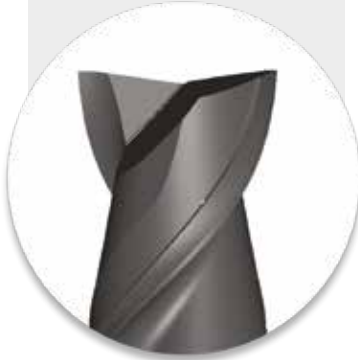
SCAN TO VIEW ALL OUR ALUMINUM END MILLS



CHARACTERISTICS FOR SUCCESS

Waved flute Series: OP2/OP3

Reduce harmonics and reduce tool pressure. Increased feed rate.



Wiper flat Series: OP2/OP3/ OPXA/OPSN

Leave superior surface finish.



Spiral point Series: OPC

Less chattering and provide better surface finish. Increase feed rate.



THE RIGHT COATING FOR THE RIGHT JOB

Many surface preparation solutions are available for tools with faster chip flow, reduction of chatter-marks and longer tool life.

We run our own PVD coating equipment for a high level of consistency.



We want to solve YOUR problems quickly and easily. Our engineering department works with an innovative mindset and is constantly looking for new ways to help improve your machining processes.

If our product line does not meet your needs, our approach is to work together to develop a solution targeted to your machining conditions.

Double Gashing
Series: OPXA/OPSN

Allows the tool to do ramping while machining.



Chip evacuator
Series: OPXA

Unique fluting design to rapidly evacuate the chip.



3 centered flutes
Series: OPSN

Allows the tool to do plunging and ramping while machining.



Polished - Prevent chip from sticking inside the tool, enhancing material removal rate and machining speed.



ZrN - Zirconium Nitrid coating reduce the friction coefficient on the flute surface.



DLC - Diamond Like Carbon coating. Higher wear resistance when used in abrasive material such as silicon aluminum alloys



EXCELLENCE IN EFFICIENCY



SURFACE FINISH

OPXA serie

3X faster. Sharp edge and high rake angles help to separate the chip from the material. Flutes are specially designed for easy chip movement away from the cutting zone and help the reduction of the built-up edge (BUE : accumulation of workpiece material on the cutting edge).



CHAMFER FINISH

OPC serie

The spiral geometry ensures that the tool leaves less tooling marks and is three times faster than a straight flute tool.



Our proactive approach to quality ensures that we meet the requirements of the most demanding large manufacturers and allows us to remain a long-term leader in a wide range of sectors.

Our department will be pleased to validate with you the additional processes that could be adapted to your needs.



AGGRESSIVE RAMPING

OPSN serie

The geometry optimisation ensures maximum efficiency in reduced heat at the cutting edge for great chip evacuation and tool stability.

3 flutes center cutting make it possible to reach a maximum ramping angle between 10 and 20 to avoid rubbing.



MATERIAL REMOVAL

5 flutes vs 3 flutes

More passes with higher speed while reducing the forces on the tool.

Excellent performance in high efficiency milling (HEM).

Material removal
OPXA 152 inch³/min
OP31 45 inch³/min
1.250 Axial engagement
.156 Radial engagement
.012" per teeth

SURPASSING EXPECTATIONS

STOCK INVENTORY

Your tools and custom-designed products will be available in inventory, stored at your local regional distributor. Substantial savings on unused inventory.

DISTRIBUTOR LOCATOR

Use the powerful search tool on our website to locate your regional distributor anywhere in Canada, the United States and Mexico.



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