



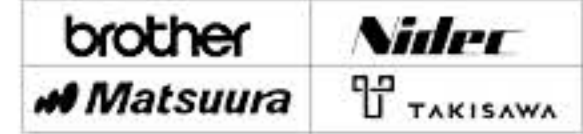
MACHINERY




TOOLING



AUTOMATION



# CUTTING TOOLS

**WORLD LEADER IN CUTTING TOOLS**  
Threading-Drilling-Milling-Indexable

- ➔ From Light Production to High Production
- ➔ Easy or Difficult to Machine Materials
- ➔ A Cutting Tool for Every Application




**LEADING EDGE PERFORMANCE**  
Extensive Line-up of Turning, Milling, and Drilling Products

- ➔ Various Grades Various Dimensions and Chip Beakers
- ➔ Fully Supporting the Machining Needs of Customers in a Wide Variety of Industries




**KYOCERA HIGH PERFORMANCE CUTTING TOOLS**

- ➔ Facing Tools
- ➔ Heads
- ➔ Grooving Tools
- ➔ Tool Inserts
- ➔ Milling Cutters
- ➔ Indexable
- ➔ Solid Carbide
- ➔ Drilling
- ➔ Reaming
- ➔ Milling
- ➔ Engraving



**ALLIED MACHINE & ENGINEERING**  
Holemaking Solutions for Today's Manufacturing

**LEADERS IN HOLE MAKING TECHNOLOGY**

- ➔ Hole-making and finishing systems
- ➔ Drilling
- ➔ Boring
- ➔ Reaming
- ➔ Threading
- ➔ Burnishing
- ➔ Custom Tooling




**MIKRON TOOL CRAZY MIKRON TOOL QUALITY**

- ➔ Smallest Flexible carbide drill with integrated cooling
- ➔ Flexibility deep hole drilling



**UNION TOOL CO. UNIMAX CARBIDE END MILLS**

- ➔ Excellent Performance in High Speed Milling
- ➔ Extensive Product Line Starts With Micro Diameters



**VEGA CUTTING TOOLS HIGH QUALITY COST EFFECTIVE TAPPING TOOLS FOR EVERY MATERIAL**

**EXCLUSIVELY AVAILABLE**



**MAPAL INNOVATE CUSTOM TOOLING SOLUTIONS**

- ➔ Reaming ➔ Fine boring ➔ Drilling
- ➔ Boring ➔ Countersinking ➔ Milling
- ➔ Turning ➔ Clamping ➔ Actuating
- ➔ Setting ➔ Measuring ➔ Dispensing
- ➔ NC and CNC Multi Heads



**INTERNAL TOOL EXPANDING YOUR TOOLING POSSIBILITIES**

- ➔ Custom Mill & Lathe Carbide Tools
- ➔ Dovetail Cutters
- ➔ Engraving