



The Tool Holders

Cylindrical and tapered toolholders include the longest reach profiling tools available as standard catalog items. Tool holders are inherently balanced for high spindle speeds. Machine with confidence at the increased speeds and velocities dictated by modern high velocity machining. Super intelligent machine controls with high speed data transfer, rapid advances in cutting edge materials and coating technologies enable ever faster machining speeds and increased productivity. Millstar tools are designed to keep pace.

Carbide Long Reach

Long Reach + Stiffness = High Speed Precision Milling MILLSTAR® Solid Carbide Long Reach Tool Shanks and Precision Profile Milling Inserts are designed for aggressive and high speed milling of a wide variety of materials. They provide the perfect solution for difficult milling operations in die and mold making, aerospace and many other demanding applications requiring fast metal removal rates, precision tolerances and smoothest surface finishes. User benefits:

- Increased stiffness for more aggressive metal removal and long reach, deep milling.
- Large cutting insert choice the variety of available cutting geometry, tool coatings, and insert shapes and sizes assures best milling results at lowest machining cost per part.
- Minimized deflection to machine closer to net shape & tight tolerance.
- Vibration reducing for smoother surface finish, improved tool life, longer spindle life.

- Minimized cutter run out improved milling results in soft to fully hardened (to 65 HRc) materials.
- Smaller shank to cutter diameter several sizes have full-length side clearance to machine straight walls.
- · Safe high speed milling highest tool stiffness and least deflection when compared with steel and heavy metal tool shanks result in process reliability and highest safety for operator and machine.
- Shank diameters (h6) all tool shanks are heat shrink-fit tool adapter compatible.

Button Cutter

High Performance Milling from Heavy Roughing to Fine Finishing.

Millstar face mills are equally useful on newer high velocity machines and older slower equipment and will optimize milling performance of all your machine tools. The hardened tool bodies can be run at aggressive spindle speed and feed rates, when used with Millstar's precision ground, strong and thick, round inserts with proven hard, high performance TLN or HSN tool coating.

The tools provide for precision finish results, minimal tool deflection and run-out. Excellent milling results can be achieved in roughing, semi finishing and fine finishing in Z-level, profiling or

