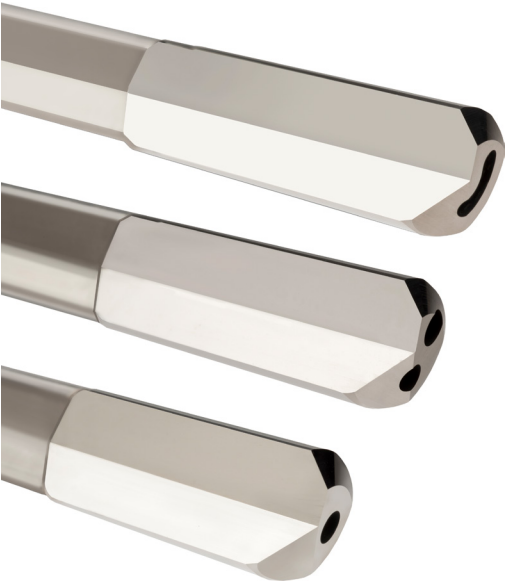




## Deep Hole Drilling Solutions

*single flute gundrills, solid carbide single flute gundrills,  
double jet gundrills, solid carbide twist drills, double crimp gundrills,  
two flute two hole gundrills, push & pull reamers, and rifle buttons*

# Gundrills



Coolant Hole Styles: Kidney Shaped Hole (top), Dual Hole Configuration (middle), Single Hole (bottom)

## Single Flute Gundrills

The single flute gundrill has the ability to machine straight deep holes and hold excellent finishes. This tool is a general purpose drill designed for deep hole drilling in virtually any material, can be custom fit to each application, and is available in a variety of carbide grades & coatings to help optimize tool life and chip evacuation/formation. The tool length ranges from 0.093" (2.4mm) - 1.5" (38.1mm) and also in custom lengths. The single flute gundrill is available in our 24 and 72 hour expedited shipping program, see website for more information.

### Coolant Hole Style Configurations

- **Kidney Shaped Hole (KDS)**  
Recommended for cutting diameters under 0.315" (8mm)
- **Dual Hole Configuration (TCH)**  
Recommended for cutting diameters 0.315" (8mm) and greater.
- **Single Hole (GDS)**  
Recommended for diameters 0.551" (14mm) and greater.

## Solid Carbide Single Flute Gundrills

Solid carbide drills are a deep hole drill that can run at much higher feeds rates than conventional gundrills. They do not require whip support for lengths up to 80 x the cutting diameter, and are highly polished, aiding in maximizing chip evacuation. These tools can be designed with special end forms to meet your custom requirements. Additionally, special coatings are chosen, based on the application, to enhance overall tool performance.

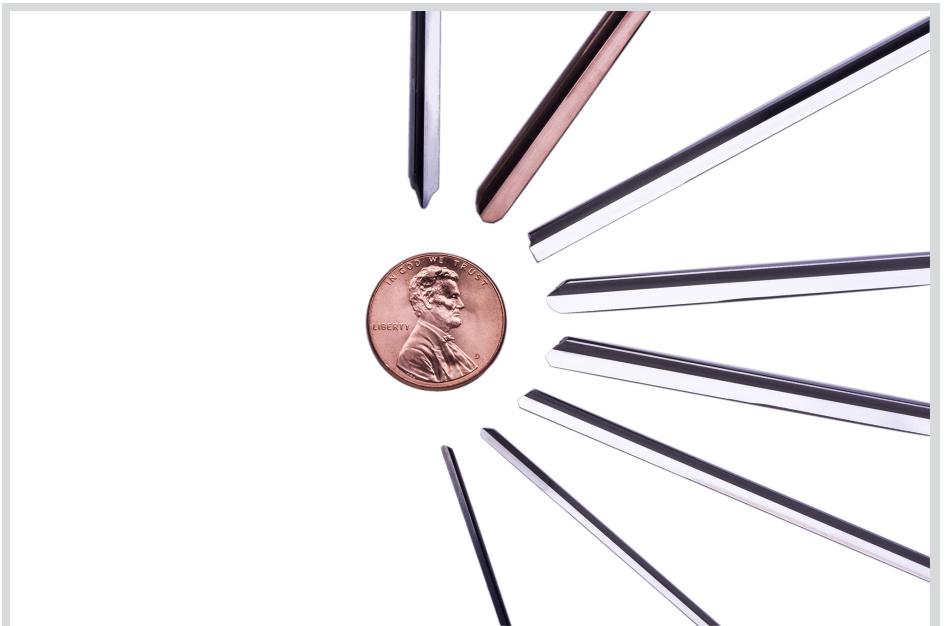
### Specifications

#### Diameter Range

- .039" [1.00mm] - .060" [1.52mm]
- .061" [1.53mm] - .070" [1.78mm]
- .071" [1.79mm] - .200" [5.08mm] and greater

#### Range of overall length of flute

- Up to 7" [178mm]
- Up to 10" [254mm]
- Up to 11.25" [286mm]



## Double Jet Gundrills

The Double Jet Gundrill boasts a unique design that keeps constant coolant on the cutting edge during the entry, in the cut, and breakthroughs while machining. This tool also allows the jet of the coolant fluid to assist in breaking the chip. The diameter range of the double jet gundrill is 0.250" (6.35mm) - 1.5" (38.1mm) and is available in customer specific lengths.

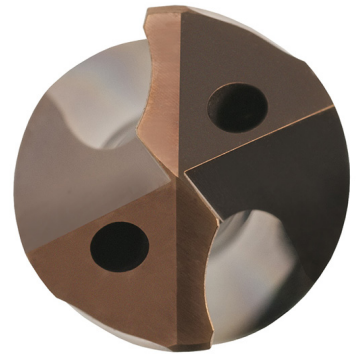


Double Jet Gundrill

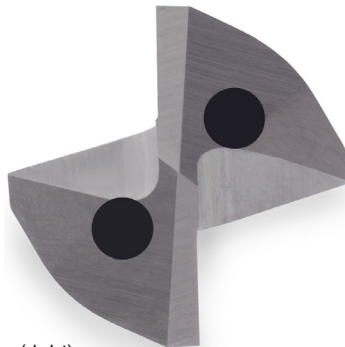
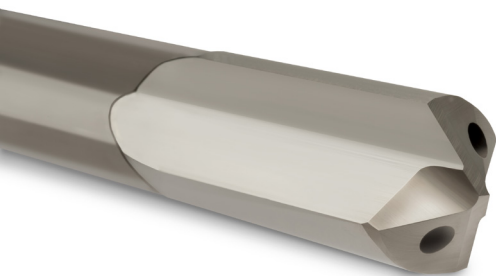
## Solid Carbide Twist Drills

Deep Hole Twist Drills are available in lengths up to 30x diameter and to custom lengths, and are reversed engineered for your specific application.

- Sculptured flute geometry for superior chip control
- Polished beyond cutting area flutes for enhanced chip evacuation
- Standard h6 tolerance on shank and cutting diameter
- Proper speeds and feeds result in longer tool life and better chip evacuation
- Geometries vary based on materials being machined
- Coolant feed range: 0.075" (0.9mm) and up.



Top View (above),  
Twist Drill side view (bottom)



Double Crimp Gundrill side view (left), top view (right)

## Double Crimp Gundrills

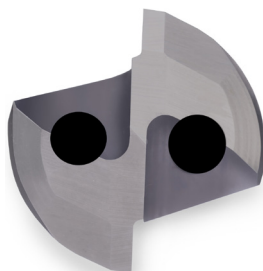
The double crimp gundrill can obtain double the feed rate compared to the single flute gundrill. Based on the combinations of geometric angles, clearances and back taper, the double crimp gundrill is able to reduce chip load by 50% and achieve higher penetration.

### Size Range

- Diameters 0.188" (4.78mm) - 0.563" (14.3mm)
- Available in custom lengths

### Common materials machined

- Aluminum
- Iron



Two-Flute Two-Hole Side View (top)  
Top View (bottom)

## Two-Flute Two-Hole Gundrills

Like the double crimp gundrill, the Two Flute Two Hole Milled Style Gundrill is used for high penetration deep hole applications. The body of this tool is milled out of bar stock which maximizes the rigidity reducing the body deflection at higher RPM.

### Size Range

- Diameters .25" (6.35mm) - 2.0" (50.80mm)
- Custom lengths up to 48" (1219.2mm)



Push and Pull Reamers

## Push and Pull Reamers

Firearm push and pull reamers are manufactured from the special carbide grades, chosen during the design phase, ensuring high quality cutting edges. These reamers ensure tight tolerances and are products range between 17-50 caliber, including some shotgun gages.

## Rifle Buttons

Star SU offers a high quality, competitive cost alternative as a manufacturer of high precision rifle buttons made to your specific manufacturing needs.



Rifle Buttons

### Advantages

- Improved part quality achieved with good finishes
- Button to button performance consistency
- Excellent lead times
- Size range: 17-50 caliber including common shotgun gages



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