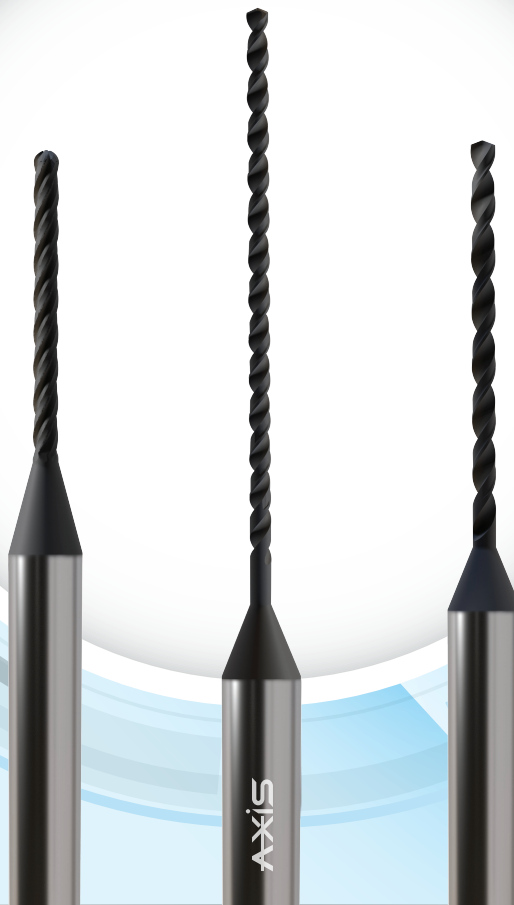
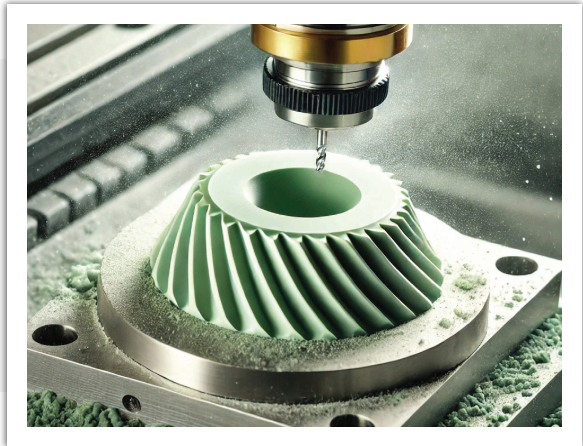


NexGen High Precision Tools Green Stage Ceramic Machining



NexGen High Precision Tools for Green Stage Ceramic Machining

Machining Green Stage Ceramics demands the highest levels of precision, as these materials are both delicate and brittle. To ensure you achieve the best results without compromising the integrity of your workpieces, AXIS Tools offers a complete range of High-Precision Tools designed specifically for Green Stage Ceramic Machining.



Key Challenges in Green Ceramics Machining

- **Material Fragility & Chipping** : Green Ceramics are brittle and prone to chipping or cracking during machining.
- **Tool Wear & Breakage** : The abrasiveness of ceramic particles can cause rapid tool wear.
- **Dust Generation & Contamination** : Fine Ceramic dust can affect machine performance and operator safety.
- **Dimensional Accuracy & Surface Finish** : Achieving tight tolerances is challenging due to the material's low strength before sintering.

AXIS Solutions

Sharp Cutting Edges

Custom-finished tips allow for smooth, precise machining without causing chipping or fragmentation

Reduced Tool Wear

Coated with advanced materials to resist the harsh abrasiveness of green ceramics

Precision Geometry

Designed with cutting-edge geometry to minimize edge wear and ensure cleaner cuts

Variety of Sizes and Designs

Available in a range of sizes, tailored for different hole depths, diameters, and geometries



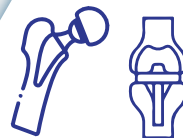
Applications



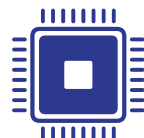
Aerospace
Components



Automotive
Parts



Medical
Devices



Electronics and
Semiconductors

...Many more

Tools Range

AXIS introduces wide range of high precision tools with designs optimized for Green Stage Ceramic Machining.

Long standing experience in high Precision tool manufacturers coupled with in-depth application experience, enables us to offer tools to obtain close machining tolerances, improved surface quality and reduced rejections of advanced ceramics.

Square Flute End Mills



Ball Ended Drills



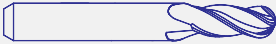
Coolant Hole Drills



Drills With Long Flute



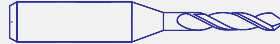
Ball End Mills



Taper Drills



Drills with Special Angle



Step Drills



Green Ceramics Materials

Ceramics | Zirconia | Graphite | Alumina | MACOR® | Silicon | Glass-Ceramics

NexGen CVD Diamond Coatings

AXIS CVD Diamond Coated Tools are engineered for High-Precision machining of **Green Ceramics**, ensuring superior surface finish and extended Tool life. The ultra-hard Diamond Coating provides exceptional wear resistance, minimizing tool degradation while maintaining sharp cutting edges. These tools effectively reduce chipping, cracking, and material waste, making them ideal for delicate and complex ceramic components. Whether for Aerospace, Medical, or electronics applications, AXIS CVD Diamond Coated Tools deliver unmatched performance and reliability in Green Ceramics machining.

High Exceptional Performance

Advanced **m**ICRO Geometry

Fine and Keen Cutting Edge

High Hardness

Precise Cutting and
Exceptional Wear Resistance

Optimised Tool Design

Enhanced Chip Space and
Efficient Chip Removal

mICRO-Fine Carbide

Increased Edge Strength and
High Surface Finish



Green Stage Ceramic Machining



IND-SPHINX PRECISION LTD (Unit B)

1 Taksal Road Parwanoo - Kasauli Marg
Parwanoo Himachal Pradesh India 173220

☎ +91 1792 232860 / 352600

✉ info@axis-microtools.com www.axis-microtools.com



AXIS Europe GmbH

Danziger Str. 3, 88250 Weingarten

☎ +49 (0)751 560 1589 - 0

✉ info@axis-europe.eu www.axis-europe.eu



QUALITY • PRECISION • CONSISTENCY

