Cutting Edge Precision
Laser Focused

Laser Assisted Machining of Tungsten Carbide

Diamond turn tungsten carbide like never before.
### Standard C2 Grade (6-10% Cobalt)

- Diameter: Ø10mm, 15mm
- Concave: 3-5nm, 0.11μm, 10 Passes, 60 Sec
- Finish: 300 μm

### High Grade - Deep Sag Mold (<2% Cobalt)

- Diameter: Ø19mm, 6mm
- Concave: 3-4nm, 0.30μm, 8 Passes, 90 Sec
- Finish: 300 μm

### High Grade - Small Mold Pin (<2% Cobalt)

- Diameter: Ø3.5mm, 3.5mm
- Concave: 1-3nm, 0.15μm, 20 Passes, 20 Sec
- Finish: 300 μm
High Grade - Binderless Diffractive Mold (<2% Cobalt)

- **Diameter**: 8 mm
- **Concave**: 7 mm
- **Convex**: 3-5 nm
- **Finish**: 0.30 μm
- **Form PV**: 8 Passes
- **Time/Pass**: 40 Sec
- **Tool**: 50 μm
- **Diffractive**:

High Grade - Large Radius Mold (<2% Cobalt)

- **Diameter**: 26 mm
- **Concave**: 256 mm
- **Convex**: 3-4 nm
- **Finish**: 0.17 μm
- **Form PV**: 10 Passes
- **Time/Pass**: 130 Sec
- **Tool**: 300 μm

High Grade - Binderless Mold (<1% Cobalt)

- **Diameter**: 3 mm
- **Concave**: 1 mm
- **Convex**: 1-3 nm
- **Finish**: 0.10 μm
- **Form PV**: 30 Passes
- **Time/Pass**: 20 Sec
- **Tool**: 100 μm

High Grade - Large Radius Mold (<2% Cobalt)

- **Diameter**: 26 mm
- **Concave**: 256 mm
- **Convex**: 3-4 nm
- **Finish**: 0.17 μm
- **Form PV**: 10 Passes
- **Time/Pass**: 130 Sec
- **Tool**: 300 μm
The Patented Solution

- Issued patent with over twenty claims
- Innovative solution proven through extensive research & development
- Laser delivered precisely at tool-workpiece interface
- The laser passes through an optically transparent diamond tool

Tool Wear Comparison

Conventional

Micro-LAM

200X (1 pass)

200X (5 passes)