Innovative Grooving & Turning Solutions

Advanced Threading Solutions

GROOVEX
Innovative Grooving & Turning Solutions
Thread Turning
External Toolholders with Coolant Thru

Features and Benefits
• Precise coolant thru, designed to efficiently cool down the cutting edge
• Suitable for high pressure coolant (up to 70 bar)
• Reduced cutting edge temperature for better tool life
• Better chip evacuation and improved chip control and flow
• External holders with coolant are fully supported by VARGUS GENius™, the most advanced Tool Selector and CNC Program Generator in the metal cutting tools industry
Introducing the VARGUS GENius™ App

The most popular and advanced thread turning and thread milling software on the market today available in 4 versions at www.vargus.com

Features and Benefits

• High Precision - Designed for jobs where tight tolerances are vital
• Special Geometry - For minimal burrs on the finished thread
• Improved Adhesion to Substrate - Extends tool life
• Internal and External Inserts
• Compatible with standard VARDEX toolholders
• The HP-Line is fully supported by VARGUS GENius™, the most advanced Tool Selector and CNC Program Generator in the metal cutting tools industry.

Insert Sizes

HP-Line Inserts are available in:
• External: 3/8” (16mm), 1/2” (22mm)
• Internal: 1/4” (11mm), 3/8” (16mm), 1/2” (22mm)

Standards

• ISO Metric
• American UN
• Whitworth BSP (G)
• NPT
• MJ

* Additional standards are available upon request.
**Features and Benefits**

- TMDR tools drill, thread and chamfer all in one tooling operation
- Pre-drilled holes are no longer required!
- Tools also work on components with pre-drilled holes, such as, blind holes, through holes, and even semi-finished holes
- Thread Lengths: 2xDo and 2.5xDo (Thread Diameter)
- Thread standards:
  - ISO Metric: From M3x0.5 up to M18x2.5
  - American UN: From No. 4-40 up to 3/8”x16
- The TMDR is available in VTS grade

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**TMDR - Operating Cycle**

1. **Start point.** Position at center of hole
2. **Move to helical starting position**
3. **Drill & thread with helical interpolation**
4. **When desired thread is complete, move to center, then exit hole**
5. **Chamfer**
6. **Return to start point**

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**TM Solid HCN For Long Threads**

**NEW**

Up to 3xDo (Thread Diameter)

**Features and Benefits**

- Maximum thread length: 3xDo (Thread Diameter)
- Relief neck for reduced cutting forces
- Multi-tooth geometry
- Reduced machining times for long threads
- The HCN is available in VTH grade
External Machining
Modular V-Cap Bodies with High Pressure Coolant Thru for VG-Cut and GrooVical Modules

Features & Benefits
• Quick change, polygon shaped V-Cap holders with High Pressure Coolant (up to 100 bar)
• Better chip formation and evacuation for longer tool life
• Parallel and 90° holders are available in sizes C4, C5 and C6
• Suitable for all VG-Cut radial grooving and face grooving modules for parting off, deep grooving, turning, profiling, face grooving and face turning applications
• Suitable for NEW GrooVical GVN26 and GVN29 modules for precise grooving, turning, and parting off applications
• Groovex V-Cap holders are according to ISO 26623
External Machining

**GrooVical** Modules with High Pressure Coolant Thru

**Features & Benefits**
- Quick change modules for GrooVical GVN26 and GVN29 inserts for precise grooving, turning and parting off
- High pressure coolant up to 100 bar
- Modules are suitable for **VG-Cut** parallel and 90° modular square bodies and the NEW GROOVEX polygon shaped V-CAP holders (C4, C5, C6)

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Internal Machining

**V-CAP Holders for micrOscope & Mini-V** Products for precise turning, grooving, threading & face grooving

**Features & Benefits**
- Quick change, polygon shaped V-Cap holders with High Pressure Coolant
- Improved shrink clamping technology for vibration reduction
- Longer tool life
- **micrOscope** V-CAP holders are available for all inserts in 4mm to 7mm insert shank diameter
- **Mini-V** V-CAP holders are available for all shanks in 6mm and 8mm diameter
- Groovex V-Cap holders are according to ISO 26623