Solutions for Rotary Drill Stem Connections

Unique insert design with strengthened cutting edge and increased tool life for the following Rotary Drill stem connections:

- NC - Number Connection
- REG - Regular Style
- FH - Full Hole
- IF - Internal Flash

Solutions for Pipes and Couplings

Vardex’s advanced threading solutions for the oil and gas industry now include specialized solutions for tough and challenging applications in the following insert profiles:

- APIRD
- Buttress
- Extreme Line
- VAM
- New VAM
- Hughes H-90

V-CAP Toolholders

Now Available for Internal & External Thread Turning Applications

Features and Benefits

- Suited to 3/8” (16mm) sized inserts
- Polygon shaped shank
- ISO compliance with standard 26623
- For all industrial sectors

Available in sizes: C3, C4, C5, C6.
Special sizes available upon request.
Thread Mill for Deep Holes

TMSD

Newly Extended TMSD Line
- Full Profile (ISO, UN, NPT)
- TMSD Vertical

TMSD Inserts for Full Profile
Now available as standard items

<table>
<thead>
<tr>
<th>Insert Sizes</th>
<th>Pitch Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Buttress</td>
<td>ISO, UN, NPT</td>
</tr>
<tr>
<td>5.0L, 3/8&quot;L, 5/8&quot;V</td>
<td>16-2.5 tpi</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Insert Sizes</th>
<th>Pitch Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weldon Shank</td>
<td>ISO, UN, NPT</td>
</tr>
<tr>
<td>5.0L, 1/4&quot;U, 3/8&quot;U, 1/2&quot;U</td>
<td>ISO 1.0-2.0 mm; UN 18-12 tpi; NPT 18-8 tpi</td>
</tr>
</tbody>
</table>

TMSD Vertical
3 flutes for more efficient machining in smaller diameter applications

Min. Thread Size: M11.5x0.5 (1/2-28UNEF)
Tool Overhang (L1) max 65
Cutting Dia. (D2) 10.5-20.8
No. of Flutes (Z) 3

Redefining the Threading Benchmark

New Multipurpose Thread Turning Grade for Stronger Wear Resistance and Improved Productivity

Features and Benefits
- AlTiN Alloyed PVD Coating
- Higher Oxidation Temperature
- Improved Adhesion to Substrate
- Improved Resistance to Plastic Deformation
- Multipurpose Grade
Fixed Clamping System

- Nickel coating for better wear resistance and anti-corrosion protection
- All internal toolholders come with coolant thru
- Inserts available in IC 1/2" F (13.3 mm) Standard and Multi+ styles
- Unique toolholder support suited for high loads
- Anti-Rotation Stopper
- Reinforced anvil - Extra support for the cutting corner

NEW Nickel Coated Toolholders

- Internal
- External
For Gear, Spline & Rack Manufacturing

Solid Carbide

Solid Carbide Tool Benefits

Small Tool Cutting Diameter
- Excellent solution for applications that require cutting close to the shoulder
- High RPM and fast feed

Solid Carbide Tool
- Guarantees higher accuracy

Multi-flute Tool
- Enables fast machining

Tool Range
- Cutting Diameter Range: 5.9-19.9 mm (.17"-.75")
- Module: 0.5-2.5

Standard Inserts for Gear Milling

According to Standard DIN 3972 Basic Profile 1, 4 different modules are available:
- 1.0
- 1.5
- 2.0
- 2.5

For each module, there are 8 different types of inserts to select, according to the number of teeth on the gear.

<table>
<thead>
<tr>
<th>Milling Cutter No.</th>
<th>No. of Teeth on Gear</th>
</tr>
</thead>
<tbody>
<tr>
<td>N1</td>
<td>12-13</td>
</tr>
<tr>
<td>N2</td>
<td>14-16</td>
</tr>
<tr>
<td>N3</td>
<td>17-20</td>
</tr>
<tr>
<td>N4</td>
<td>21-25</td>
</tr>
<tr>
<td>N5</td>
<td>26-34</td>
</tr>
<tr>
<td>N6</td>
<td>35-54</td>
</tr>
<tr>
<td>N7</td>
<td>55-134</td>
</tr>
<tr>
<td>N8</td>
<td>135 and up</td>
</tr>
</tbody>
</table>
MEGALINE
For Extra Large Pitches

New Standard Line for Heavy Duty Applications with Extra Large Pitches up to 25mm or 1 tpi

Offering a wide range of profiles for internal and external applications:
- ISO
- Round 20400
- Trapez DIN 103
- ACME
- Stub ACME
- American Buttress
- SAGE DIN 513
- Specials

Unique Design for Heavy Duty Applications

VKX - Vargus Tough Submicron Grade Inserts

Anti-Rotation Stopper

Toolholder Support Tailored to Insert Profile

External

Internal

VARGUS
Tool Selector and CNC Program Generator

The most popular and advanced Thread Turning and Thread Milling software on the market today

Now available in 3 Versions at www.vargus.com

VARGUS GENius™ ONLINE
VARGUS GENius™ DESKTOP
VARGUS GENius™ setup.exe