Special tools Catalog
<table>
<thead>
<tr>
<th>Category</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A07</td>
<td>HSS reamer</td>
<td>Special high-speed steel tapered-bore straight-cut reamer. Tapered shank.</td>
</tr>
<tr>
<td>A15</td>
<td>HSS reamer</td>
<td>Special high-speed steel cuffed reamer, specifically designed for cycling industry. With bore.</td>
</tr>
<tr>
<td>121</td>
<td>SB stepped reamer</td>
<td>Special coated and brazed stepped reamer with internal lubrication holes. Cylinder-shaped shank.</td>
</tr>
<tr>
<td>131</td>
<td>SB stepped reamer</td>
<td>Special brazed stepped reamer. Tapered shank.</td>
</tr>
<tr>
<td>140</td>
<td>SB stepped reamer</td>
<td>Special brazed grooved stepped reamer. Tapered shank.</td>
</tr>
<tr>
<td>732</td>
<td>MD reamer</td>
<td>Special hot-mounted carbide reamer with internal lubrication holes. Cylinder-shaped shank.</td>
</tr>
<tr>
<td>737</td>
<td>MD stepped reamer</td>
<td>Special carbide cylindrical stepped reamer with internal lubrication holes. Cylinder-shaped shank.</td>
</tr>
</tbody>
</table>
Special high-speed steel tapered-bore straight-cut reamer. Tapered shank.
Special high-speed steel cuffed reamer, specifically designed for cycling industry. With bore.
Special coated and brazed stepped reamer with internal lubrication holes. Cylinder-shaped shank.

Category 121
Special brazed stepped reamer. Tapered shank.
Special brazed grooved stepped reamer. Tapered shank.
Special hot-mounted carbide reamer with internal lubrication holes. Cylinder-shaped shank.
Special carbide cylindrical stepped reamer with internal lubrication holes. Cylinder-shaped shank.
<table>
<thead>
<tr>
<th>Category</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 151</td>
<td>SB stretcher</td>
<td>Special brazed cylindrical machine stretcher with carbide cusp. Cylinder-shaped shank.</td>
</tr>
<tr>
<td>Category 762</td>
<td>MD stretcher</td>
<td>Special coated carbide stepped stretcher. Cylinder-shaped shank.</td>
</tr>
<tr>
<td>Category 764/1</td>
<td>MD stretcher</td>
<td>Special carbide stepped stretcher with internal lubrication holes. Cylinder-shaped shank.</td>
</tr>
<tr>
<td>Category 764/2</td>
<td>MD stretcher</td>
<td>Special carbide stepped stretcher with internal lubrication holes. Cylinder-shaped shank.</td>
</tr>
<tr>
<td>Category 764/3</td>
<td>MD stretcher</td>
<td>Special coated carbide stepped stretcher with internal lubrication holes. Cylinder-shaped shank.</td>
</tr>
</tbody>
</table>
Special brazed cylindrical machine stretcher with carbide cusp.
Cylinder-shaped shank.
MD stretcher

Special coated carbide stepped stretcher. Cylinder-shaped shank.
MD stretcher

Special carbide stepped stretcher with internal lubrication holes. Cylinder-shaped shank.
Special carbide stepped stretcher with internal lubrication holes. Cylinder-shaped shank.
Special coated carbide stepped stretcher with internal lubrication holes. Cylinder-shaped shank.
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<thead>
<tr>
<th>Category V18</th>
<th>HSS broach</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Special high-speed steel broach.</td>
</tr>
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</table>
Special high-speed steel broach.
Category N01

HSS spinneret
Special high-speed steel stem-head round spinneret.
Special high-speed steel stem-head round spinneret.
<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>F20</td>
<td>HSS milling cutter</td>
</tr>
<tr>
<td></td>
<td>Special coated high-speed steel cylindrical roughing end mill, with variable-pitch twist.</td>
</tr>
<tr>
<td></td>
<td>Cylinder-shaped shank.</td>
</tr>
<tr>
<td>F21</td>
<td>HSS milling cutter</td>
</tr>
<tr>
<td></td>
<td>Special coated high-speed steel cylindrical roughing end mill, with swarf breaker.</td>
</tr>
<tr>
<td></td>
<td>Special Clarckson cylinder-shaped shank.</td>
</tr>
<tr>
<td>F30</td>
<td>HSS milling cutter</td>
</tr>
<tr>
<td></td>
<td>Special high-speed steel tapered end mill, with swarf breaker.</td>
</tr>
<tr>
<td></td>
<td>Cylinder-shaped shank.</td>
</tr>
<tr>
<td>F55</td>
<td>HSS milling cutter</td>
</tr>
<tr>
<td></td>
<td>Special high-speed steel double-cone prism-angle mill, for wrenches.</td>
</tr>
<tr>
<td></td>
<td>With bore.</td>
</tr>
<tr>
<td>F60</td>
<td>HSS milling cutter</td>
</tr>
<tr>
<td></td>
<td>Special coated high-speed steel steady-profile mill.</td>
</tr>
<tr>
<td></td>
<td>With bore.</td>
</tr>
<tr>
<td>F61</td>
<td>HSS milling cutter</td>
</tr>
<tr>
<td></td>
<td>Special high-speed steel shaped-profile mill.</td>
</tr>
<tr>
<td></td>
<td>Cylinder-shaped shank.</td>
</tr>
<tr>
<td>F64</td>
<td>HSS milling cutter</td>
</tr>
<tr>
<td></td>
<td>Special high-speed steel steady-shaped-profile cutter disc mill.</td>
</tr>
<tr>
<td></td>
<td>With bore.</td>
</tr>
<tr>
<td>F87</td>
<td>HSS milling cutter</td>
</tr>
<tr>
<td></td>
<td>Special high-speed steel alternating-size mill.</td>
</tr>
<tr>
<td></td>
<td>With bore.</td>
</tr>
<tr>
<td>Category</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| F92      | HSS milling cutter
Special high-speed steel shaped-profile cutter disc mill unit.
With bore. |
| F107     | HSS milling cutter
Special high-speed steel roughing pine mill.
ISO 50 tapered shank. |
| F110     | HSS milling cutter
Special high-speed steel end pine mill.
Cylinder-shaped shank. |
| F110/2   | HSS milling cutter
Special coated high-speed steel end pine mill.
Cylinder-shaped shank. |
| F110/3   | HSS milling cutter
Special coated high-speed steel end pine mill.
Cylinder-shaped shank. |
| 211      | SB milling cutter
Special brazed cylindrical end mill.
Tapered shank. |
| 235      | SB milling cutter
Special brazed convergent mill.
Cylinder-shaped shank. |
| 801      | MD milling cutter
Special carbide cylindrical end mill.
Cylinder-shaped shank. |
| 801/2    | MD milling cutter
Special carbide cylindrical end mill.
Cylinder-shaped shank. |
| 801/3    | MD milling cutter
Special carbide cylindrical end mill.
Cylinder-shaped shank. |
| 801/4    | MD milling cutter
Special coated carbide cylindrical end mill.
Cylinder-shaped shank. |
Category 801/5  MD milling cutter
Special coated carbide cylindrical end mill.
Cylinder-shaped shank.

Category 804  MD milling cutter
Special coated carbide radial cylindrical end mill.
Cylinder-shaped shank.

Category 804/2  MD milling cutter
Special coated carbide radial cylindrical end mill.
Cylinder-shaped shank.

Category 804/3  MD milling cutter
Special carbide radial cylindrical end mill.
Cylinder-shaped shank.

Category 804/4  MD milling cutter
Special coated carbide radial cylindrical end mill.
Cylinder-shaped shank.

Category 807  MD milling cutter
Special carbide cylindrical end mill with internal lubrication holes.
Cylinder-shaped shank.

Category 812  MD milling cutter
Special coated carbide tapered mill.
Cylinder-shaped shank.

Category 848  MD milling cutter
Special coated carbide double-cone mill, for wrenches
With bore.

Category 851  MD milling cutter
Special coated carbide shaped-profile cutter disc mill.
With bore.

Category 851/2  MD milling cutter
Special coated carbide shaped-profile cutter disc mill.
With bore.

Category 851/3  MD milling cutter
Special coated carbide shaped-profile cutter disc mill.
With bore.
<table>
<thead>
<tr>
<th>Category</th>
<th>MD milling cutter</th>
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<tbody>
<tr>
<td>851/4</td>
<td>Special coated carbide shaped-profile cutter disc mill.</td>
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<tr>
<td></td>
<td>With bore.</td>
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<tr>
<td>852</td>
<td>Special integral carbide cutter disc mill.</td>
</tr>
<tr>
<td></td>
<td>With bore.</td>
</tr>
<tr>
<td>852/2</td>
<td>Special coated integral carbide cutter disc mill with alternating peripheral cutting.</td>
</tr>
<tr>
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<td>With bore.</td>
</tr>
<tr>
<td>855</td>
<td>Special integral carbide mill.</td>
</tr>
<tr>
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<td>Cylinder-shaped shank.</td>
</tr>
<tr>
<td>855/2</td>
<td>Special integral carbide mill.</td>
</tr>
<tr>
<td></td>
<td>Cylinder-shaped shank.</td>
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<tr>
<td>855/3</td>
<td>Special integral carbide mill.</td>
</tr>
<tr>
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<td>Cylinder-shaped shank.</td>
</tr>
<tr>
<td>885</td>
<td>Special coated carbide roughing pine mill with internal lubrication holes.</td>
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<tr>
<td></td>
<td>Cylinder-shaped shank.</td>
</tr>
<tr>
<td>890</td>
<td>Special coated carbide end pine mill.</td>
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<tr>
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<td>Cylinder-shaped shank.</td>
</tr>
<tr>
<td>890/2</td>
<td>Special coated carbide end pine mill.</td>
</tr>
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<td>Cylinder-shaped shank.</td>
</tr>
<tr>
<td>890/3</td>
<td>Special carbide end pine mill.</td>
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<tr>
<td></td>
<td>Cylinder-shaped shank.</td>
</tr>
<tr>
<td>890/4</td>
<td>Special coated carbide end pine mill with internal lubrication holes.</td>
</tr>
<tr>
<td></td>
<td>Cylinder-shaped shank.</td>
</tr>
</tbody>
</table>
HSS milling cutter

Special coated high-speed steel cylindrical roughing end mill, with variable-pitch twist. Cylinder-shaped shank.
Special coated high-speed steel cylindrical roughing end mill, with swarf breaker. Special Clarckson cylinder-shaped shank.
Special high-speed steel tapered end mill, with swarf breaker. Cylinder-shaped shank.
Special high-speed steel double-cone prism-angle mill, for wrenches.
With bore.
HSS milling cutter

Special coated high-speed steel steady-profile mill. With bore.

Category F60
HSS milling cutter

Special high-speed steel shaped-profile mill.
Cylinder-shaped shank.

Category F61
Special high-speed steel steady-shaped-profile cutter disc mill. With bore.
Special high-speed steel alternating-size mill.
With bore.

Category F87
Special high-speed steel shaped-profile cutter disc mill unit.
With bore.
Special high-speed steel roughing pine mill.
ISO 50 tapered shank.
HSS milling cutter

Special high-speed steel end mill. Cylinder-shaped shank.

Category F110
Special coated high-speed steel end mill. Cylinder-shaped shank.
Special coated high-speed steel end mill.
Cylinder-shaped shank.
Special brazed cylindrical end mill. Tapered shank.
Special brazed convergent mill. Cylinder-shaped shank.
Special carbide cylindrical end mill. Cylinder-shaped shank.
Special carbide cylindrical end mill. Cylinder-shaped shank.
Special carbide cylindrical end mill.
Cylinder-shaped shank.
Special carbide cylindrical end mill. Cylinder-shaped shank.
Special coated carbide cylindrical end mill. Cylinder-shaped shank.
Special coated carbide radial cylindrical end mill. Cylinder-shaped shank.
Special coated carbide radial cylindrical end mill. Cylinder-shaped shank.
Special carbide radial cylindrical end mill. Cylinder-shaped shank.
Special coated carbide radial cylindrical end mill. Cylinder-shaped shank.
Special carbide cylindrical end mill with internal lubrication holes. Cylinder-shaped shank.

Category 807
Special coated carbide tapered mill.
Cylinder-shaped shank.
Special coated carbide double-cone mill, for wrenches
With bore
Special coated carbide shaped-profile cutter disc mill.
With bore.
Special coated carbide shaped-profile cutter disc mill. With bore.
Special coated carbide shaped-profile cutter disc mill. With bore.
Special coated carbide shaped-profile cutter disc mill. With bore.
Special integral carbide cutter disc mill. With bore.
Special coated integral carbide cutter disc mill with alternating peripheral cutting. With bore.
Special integral carbide mill. Cylinder-shaped shank.

MD milling cutter

Category 885
MD milling cutter

Special integral carbide mill.
Cylinder-shaped shank.
MD milling cutter

Special integral carbide mill.
Cylinder-shaped shank.
Special coated carbide roughing pine mill with internal lubrication holes. Cylinder-shaped shank.
Special coated carbide end mill. Cylinder-shaped shank.
Special coated carbide end mill.
Cylinder-shaped shank.

Category 890

Aeronautics  Automotive  Defense  Power  Rail  Mechanics  Medicine  Navigation  Research

BRAZER  HSS  PKD  SOLID CARBIDE

MD milling cutter
Special coated carbide end mill.
Cylinder-shaped shank.

Category 890
Special coated carbide end mill with internal lubrication holes. Cylinder-shaped shank.
Thread mills

Category F109
HSS thread mill
Special coated high-speed steel pine thread mill for automatic lathes.
With bore.

Category 865
MD thread mill
Special carbide thread mill.
Cylinder-shaped shank.

Category 865/2
MD thread mill
Special carbide thread mill.
Cylinder-shaped shank.

Category 865/1
MD thread mill
Special carbide thread mill.
Cylinder-shaped shank.
Special coated high-speed steel pine thread mill for automatic lathes. With bore.
Special carbide thread mill.
Cylinder-shaped shank.
MD thread mill

Special carbide thread mill. Cylinder-shaped shank.
MD thread mill

Special carbide thread mill. Cylinder-shaped shank.
<table>
<thead>
<tr>
<th>Category</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>M04</td>
<td>HSS jack</td>
<td>Special coated high-speed steel left-handed twist-cut machine jack. Reduced ripper. Cylinder-shaped shank.</td>
</tr>
<tr>
<td>M04/2</td>
<td>HSS jack</td>
<td>Special coated high-speed steel left-handed twist-cut machine jack. Reduced ripper. Cylinder-shaped shank.</td>
</tr>
<tr>
<td>M13</td>
<td>HSS jack</td>
<td>Special high-speed steel straight-cut cuffed jack. With bore.</td>
</tr>
<tr>
<td>M15</td>
<td>HSS jack</td>
<td>Special high-speed steel straight-cut “Innespan” cuffed jack. Cylinder-shaped bore.</td>
</tr>
<tr>
<td>996</td>
<td>SB jack</td>
<td>Special brazed toothed jack, specifically designed for taps and fittings.   Tapered shank.</td>
</tr>
</tbody>
</table>
Special coated high-speed steel left-handed twist-cut machine jack. Reduced ripper. Cylinder-shaped shank.
HSS jack

Special coated high-speed steel left-handed twist-cut machine jack. Reduced ripper. Cylinder-shaped shank.
Special high-speed steel straight-cut cuffed jack. With bore.
HSS jack

Special high-speed steel straight-cut “Innespan” cuffed jack. Cylinder-shaped bore.
Special brazed toothed jack, specifically designed for taps and fittings. Tapered shank.
Category P15  HSS drill
Special high-speed steel, ground, independent-twist stepped drill.
Tapered shank.

Category P16  HSS drill
Special coated high-speed steel, ground, independent-twist stepped drill.
Tapered shank.

Category P30  HSS drill
Special high-speed steel spot drill.
Cylinder-shaped shank.

Category P30/2  HSS drill
Special coated high-speed steel spot drill.
Cylinder-shaped shank.

Category P30/3  HSS drill
Special coated high-speed steel spot drill.
Cylinder-shaped shank.

Category P60  HSS drill
Special high-speed steel single-flute drill.
Cylinder-shaped shank.

Category 902  MD drill
Special coated carbide cylindrical twist drill.
Cylinder-shaped shank.

Category 902/2  MD drill
Special carbide cylindrical twist drill.
Cylinder-shaped shank.
Category 902/3
MD drill
Special carbide cylindrical twist drill.
Cylinder-shaped shank.

Category 912
MD drill
Special carbide cylindrical stepped drill.
Cylinder-shaped shank.

Category 912/2
MD drill
Special carbide cylindrical stepped drill.
Cylinder-shaped shank.

Category 924
MD drill
Special coated carbide twist-cut cylindrical stepped drill with internal lubrication holes.
Cylinder-shaped shank.

Category 924/2
MD drill
Special coated carbide twist-cut cylindrical stepped drill with internal lubrication holes.
Cylinder-shaped shank.

Category 924/3
MD drill
Special coated carbide twist-cut cylindrical stepped drill with internal lubrication holes.
Cylinder-shaped shank.

Category 924/4
MD drill
Special coated carbide twist-cut cylindrical stepped drill with internal lubrication holes.
Cylinder-shaped shank.

Category 924/5
MD drill
Special carbide stepped twist drill with internal lubrication holes.
Cylinder-shaped shank.

Category 942
MD drill
Special coated carbide straight-cut drill with internal lubrication holes.
Cylinder-shaped shank.

Category 943
MD drill
Special carbide straight-cut cylindrical stepped drill with internal lubrication holes.
Cylinder-shaped shank.

Category 943/2
MD drill
Special carbide straight-cut cylindrical stepped drill with internal lubrication holes.
Cylinder-shaped shank.
Category 943/3

MD drill
Special carbide straight-cut cylindrical stepped drill with internal lubrication holes.
Cylinder-shaped shank
Special high-speed steel, ground, independent-twist stepped drill. Tapered shank.
Special coated high-speed steel, ground, independent-twist stepped drill. Tapered shank.
Special high-speed steel spot drill. Cylinder-shaped shank.
Special coated high-speed steel spot drill.
Cylinder-shaped shank.
Special high-speed steel single-flute drill. Cylinder-shaped shank.
Special high-speed steel single-flute drill. Cylinder-shaped shank.
Special coated carbide cylindrical twist drill.
Cylinder-shaped shank.
Special carbide cylindrical twist drill. Cylinder-shaped shank.
Special carbide cylindrical twist drill. Cylinder-shaped shank.
Special carbide cylindrical stepped drill. Cylinder-shaped shank.
Special carbide cylindrical stepped drill.
Cylinder-shaped shank.
Special coated carbide twist-cut cylindrical stepped drill with internal lubrication holes. Cylinder-shaped shank.
Special coated carbide twist-cut cylindrical stepped drill with internal lubrication holes. Cylinder-shaped shank.
Special coated carbide twist-cut cylindrical stepped drill with internal lubrication holes. Cylinder-shaped shank.
Special coated carbide twist-cut cylindrical stepped drill with internal lubrication holes. Cylinder-shaped shank.
Special carbide stepped twist drill with internal lubrication holes.
Cylinder-shaped shank
Special coated carbide straight-cut drill with internal lubrication holes. Cylinder-shaped shank.
MD drill

Special carbide straight-cut cylindrical stepped drill with internal lubrication holes. Cylinder-shaped shank.
Special carbide straight-cut cylindrical stepped drill with internal lubrication holes. Cylinder-shaped shank.
Special carbide straight-cut cylindrical stepped drill with internal lubrication holes. Cylinder-shaped shank.
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<thead>
<tr>
<th>Category</th>
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</thead>
<tbody>
<tr>
<td>Category U10</td>
<td>HSS circular tool. Special coated high-speed steel circular profiler tool.</td>
</tr>
<tr>
<td></td>
<td>Generic coupling.</td>
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<tr>
<td>Category U10/2</td>
<td>HSS circular tool. Special coated high-speed steel circular profiler tool.</td>
</tr>
<tr>
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<td>Generic coupling.</td>
</tr>
<tr>
<td>Category U10/3</td>
<td>HSS circular tool. Special coated high-speed steel circular profiler tool.</td>
</tr>
<tr>
<td></td>
<td>Generic coupling.</td>
</tr>
</tbody>
</table>
Special coated high-speed steel circular profiler tool.
Generic coupling.
HSS circular tool

Special coated high-speed steel circular profiler tool.
Generic coupling.
Special coated high-speed steel circular profiler tool. Generic coupling.

Category U10
Tangential tools

Category T01
HSS tangential tool
Special high-speed steel tangential tool.

Category T02
HSS tangential tool
Special coated high-speed steel tangential tool.
Special high-speed steel tangential tool.
Special coated high-speed steel tangential tool.