HIGH FEED MILLING CUTTER

Very smooth cutting insert geometry •
4-edged inserts •
4 different insert geometries in 6 different carbide grades •
Available as shell-type and screw-type milling cutters •
Tools diameters Ø 25 - 85 mm •

NEW HIGH FEED MILLING CUTTER 15G1F/5G_F
## Product Overview

New high feed milling cutters for rough milling in a diameter range of Ø 25 – 85 mm. Different insert geometries for machining of steel, cast iron and materials of the material groups M (stainless steel), S (heat resistant alloys and titanium alloys) and hardened materials of material group H up to 48 HRC.

The new series will be available as screw-type end mills in the diameters Ø25 / Ø30 / Ø32 / Ø35 / Ø40 / Ø42 mm and as shell-type mills in the diameters Ø50 / Ø52 / Ø63 / Ø66 / Ø80 / Ø85 mm. In order to be able to react to the different requirements, the both close pitch and coarse pitch shell-type mills will be available as standard tools.

## Application Range

Range of application of the new GoldQuadF-series are face and contour milling in mechanical engineering, mould and die industry as well as aerospace industry.

## Technical Features

4-edged inserts for cutting depths up to 1.5 mm. Different geometries for stable and unstable conditions. Neutral and positive geometries in 6 different carbide grades covering a wide range of different applications enable the maximum cutting volume to be achieved, even for difficult applications.

Thanks to the wiper being 90° adjacent to the cutting diameter, 90° shoulders can be machined without problem. Unlike the series with the 13 mm and 19 mm insert in this new 9 mm series the effective diameter is maintained even when the changeover from neutral to positive cutting edge takes place. The nominal diameter is thus also the effective diameter for programming purposes. The programming radius is R2.5.

For details of the recommended cutting data, refer to the manual for cutting data for milling and boring tools.

## Advantages

- Smooth cutting, axially positive mounting position
- Cutting depths up to 1.5 mm
- 4-edged insert
- 4 different insert geometries in 6 different solid carbide grades
- Available as shell-type and screw-type milling cutters
- Tool diameter range Ø25 – Ø85 mm - in close and coarse pitch
- No changes in diameter when different insert geometries are used
- Wiper for machining 90° shoulders
**HIGH FEED MILLING CUTTER 15G1F...X**

**SCREW-IN TYPE ADAPTION**

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<th>L</th>
<th>a</th>
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Programming radius R2.5

**SDXS0904MPR-MR**

- **SDXS0904MPR-MR**
  - 0,50/1,50 neutral geometry, convex, chamfered

**SDXS0904MPR-MRH**

- **SDXS0904MPR-MRH**
  - 0,50/1,50 neutral geometry, convex, chamfered

**SDXS0904MPR-MR1**

- **SDXS0904MPR-MR1**
  - 0,50/1,50 neutral geometry convex, sharp

**SDXS0904MPR-MM**

- **SDXS0904MPR-MM**
  - 0,50/1,50 positive geometry, convex, chamfered

**Spare Parts**

- **SM30-075-RD (2,4Nm) DS-T09S**
  - Insert screw
  - Screw driver
### HIGH FEED MILLING CUTTER 5G_F

#### ADAPTION ACC. TO DIN 8030

**Designation** | D | d | d1 | L | a | Z | ØD | ØD1 | Ød | a | Z | Ød
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**Programming radius R2.5**

1) close pitch

### SPARE PARTS

- SM30-075-R0 (2,4Nm) | DS-T09S

** = Insert screw  ● = Screw driver
**Tips & Parameters**

<table>
<thead>
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<th>insert:</th>
<th>SDXS0904MPR-MR</th>
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<th>SDXS0904MPR-MR1</th>
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**Recommended cutting data:**

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<th>cutting speed</th>
<th>Vc [m/min]</th>
<th>1st choice dry machining resp. wear resistant carbide</th>
<th>1st choice wet machining resp. tough carbide</th>
<th>recommended cutting depth ap [mm]</th>
<th>feed per tooth fz [mm]</th>
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<td>unalloyed steel</td>
<td>IN2505 / IN4005 160 - 220</td>
<td>IN4030 130 – 180</td>
<td>0.8 - 1.5</td>
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<td>alloyed steel 800 N/mm²</td>
<td>IN2505 / IN4005 140 - 200</td>
<td>IN4030 110 – 160</td>
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<td>alloyed steel 1100 N/mm²</td>
<td>IN2505 / IN4005 120 – 180</td>
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**Tips**

- The worse the material machining, the smaller the tool engagement should be chosen.
- The smaller the cutting tool diameter, the higher the cutting speed can be.
- The starting feed rate should be reduced by 30%.
- 4-edged insert

**Ramping data and circular interpolation:**

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<th>tool diameter [mm]</th>
<th>max. ramping angle [°]</th>
<th>min. bore dia. [mm]</th>
<th>max. ap/rev [mm]</th>
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**General information - insert SDXS09…:**

- insert screw: SM30-075-R0
- torque: 2.4 Nm
- torque wrench: DTNV005 with bit DS-T09TB

Successful machining results depend on many factors, so cutting data recommendations can only be a rough guideline. Therefore in any case of doubt do not hesitate to contact your Ingersoll partner.