



Jongen Werkzeugtechnik GmbH & Co. KG

Internal product Information

The New Insert

FP 278 R 2,0 + R 3,0

A completion to the product range

FP 77

1. TECHNICAL DESCRIPTION

Precision sintered insert with chip-breaker groove and edge radius R 2,0 and 3,0, is available in quality HT50. Applicable in our step mills, type 77

2. APPLICATION AREAS

Step milling of all current materials with requested radius on workpiece.

3. COATING QUALITIES

HT50[®]

Application Areas: 1, 2, 3, 4, 5


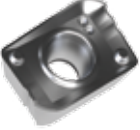
Code 22, Iso-code P30-P35

Very tough carbide type with a new developed TIALN-coating for middle up to high cutting speeds for high tooth feed rates. Suitable for dry and wet milling. Application areas are roughing and finishing of almost all materials, such as tool steel, structural steel, heat-treatable steels, unalloyed steels, low alloyed steels and high alloyed steels, as well as stainless steels, cast iron with globular graphite and grey cast iron etc.

ATTENTION: Cassette holders should be additionally profiled before the inserts with edge radius are applied.



4. TECHNICAL DATA

	<p>FP 278 R2,0 HT50 7,95 €/pcs.</p>	<p>Measures: 12,7 x 8,5 x 3,9 r=2,0 - Insert seat: B13 Precision sintered insert with chip-breaker groove, chamfered and rounded cutting edge, supporting surface and plane cutting edge ground Packing units: 20 pcs.</p>
	<p>FP 278 R3,0 HT50 7,95 €/pcs.</p>	<p>Measures: 12,7 x 8,5 x 3,9 r=3,0 - Insert seat: B13 Precision sintered insert with chip-breaker groove, chamfered and rounded cutting edge, supporting surface and plane cutting edge ground Packing units: 20 pcs.</p>

*net prices

5. CUTTING DATA RECOMMENDATIONS

Appl. area	Material	Hardness	Coating Type	Cutting speed v_c (m/min)	Feed rates per tooth f_z (mm)
1	Unalloyed steel, structural steel	≤ 280 HB	HT50	250 (150-350)	0,25 (0,1-0,4)
2	Low alloy steel	≤ 35 HRC	HT50	220 (120-320)	0,25 (0,1-0,4)
3	High alloyed steel	≤ 43 HRC	HT50	180 (170-320)	0,15 (0,1-0,4)
4	Stainless steel, high grade steel	≤ 800 N/mm ²	HT50	200 (80-400)	0,20 (0,1-0,3)
5	Grey cast iron	≤ 800 N/mm ²	HT50	250 (180-350)	0,30 (0,1-0,4)
6	Grey cast iron with globular graphite	≤ 800 N/mm ²	HT50	220 (130-280)	0,20 (0,1-0,4)

The above indicated figures are starting parameters.

Adjustments top-down as well as bottom-up with regard to v_c and f_z can be necessary depending on milling operation and holding fixture types.