

# GUHRING

RF 100

 **SPEED**

- High-performance roughing even at high cutting depths
- Great running smoothness and high metal removal rate
- HPC milling in tough, low- and high-alloyed steels and difficult-to-machine special materials

 Ratio<sup>®</sup> 

## RF 100 Speed



GUHRING - YOUR WORLD-WIDE PARTNER







**i**machining®

## **RF 100 Speed in application //**

RF 100 Speed 6761 20 mm on machine component

### **Application:**

HPC roughing; dry machining  
in 42CrMo4 (1.7225 with 900 N/mm<sup>2</sup>)  
in HPC clamping chuck with PinLock pull-out safety

### **Cutting parameters:**

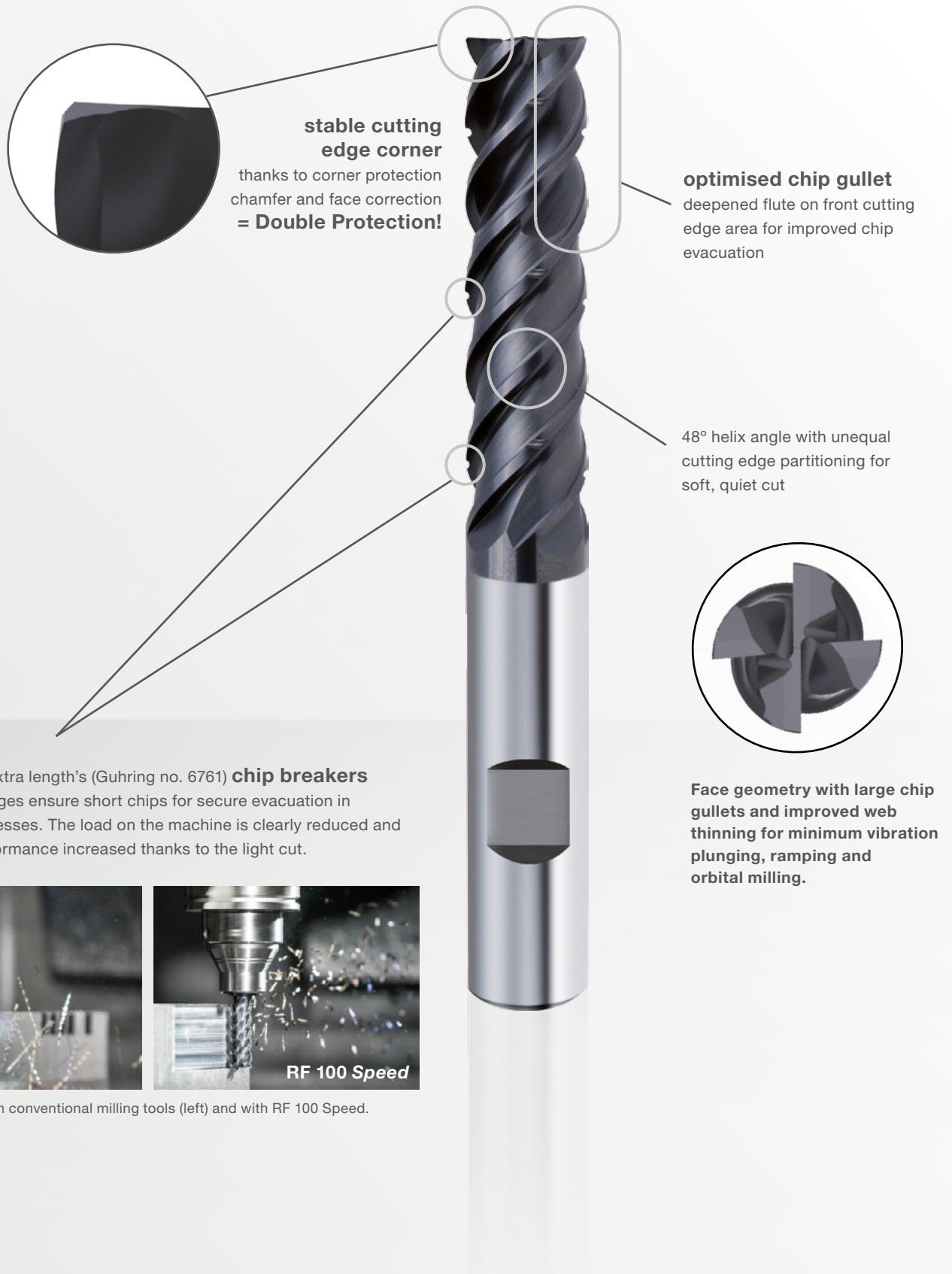
$a_p$ : 60 mm     $a_e$ : up to 1 mm  
 $v_c$ : 270 m/min     $S$ : 4300 min<sup>-1</sup>  
 $f_z$ : to 0,21 mm     $v_f$ : up to 3715 mm/min

**Metal removal rate Q = 222 cm<sup>3</sup>/min**

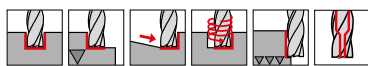
**Tool life above 278 min. for roughing operations!**

# RF 100 Speed

HPC milling in steel and VA

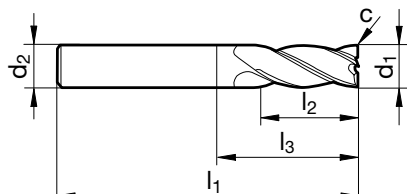


# RF 100 Speed



P	•
M	•
K	•
N	•
S	•
H	•

with centre cutting  
core jump from Ø 6 mm



Tool material **Solid Carbide**

Surface **A**

Type **RF 100 Speed**

Shank design	HA	HB
Discount group	106	106



Guhring no.

6765

6760

d1 h10	d2 h6	l1	l2	l3	c	z	Code no.	Availability	
mm	mm	mm	mm	mm	mm x 45°				
3,000	6,000	57,00	8,00	21,00	0,045	4	3,000	•	•
4,000	6,000	57,00	11,00	21,00	0,060	4	4,000	•	•
5,000	6,000	57,00	13,00	21,00	0,075	4	5,000	•	•
6,000	6,000	57,00	15,00	21,00	0,090	4	6,000	•	•
8,000	8,000	63,00	20,00	27,00	0,120	4	8,000	•	•
10,000	10,000	72,00	24,00	32,00	0,150	4	10,000	•	•
12,000	12,000	83,00	28,00	38,00	0,180	4	12,000	•	•
16,000	16,000	92,00	36,00	44,00	0,240	4	16,000	•	•
20,000	20,000	104,00	45,00	54,00	0,300	4	20,000	•	•

	Hardness	Cutting depth* ap	Cutting width ae	Cutting speed vc	fz (mm/z) with nom. Ø							
					3	6	8	10	12	16	20	25
P	≤ 850 N/mm²	2 x d	0.3 x d	280	0.015	0.04	0.05	0.06	0.07	0.1	0.12	0.14
	850 - 1400 N/mm²	2 x d	0.25 x d	180	0.015	0.03	0.05	0.06	0.07	0.1	0.1	0.13
M	≤ 750 N/mm²	2 x d	0.2 x d	150	0.015	0.03	0.04	0.05	0.06	0.07	0.09	0.12
	≥ 750 N/mm²	2 x d	0.15 x d	100	0.015	0.03	0.04	0.05	0.06	0.07	0.09	0.12
S	≤ 1300 N/mm²	2 x d	0.15 x d	130	0.016	0.025	0.035	0.05	0.06	0.08	0.1	0.12
	≥ 1300 N/mm²	2 x d	0.1 x d	35	0.01	0.015	0.025	0.035	0.042	0.05	0.08	0.12

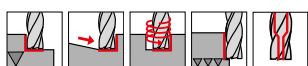
"Gührojet" peripheral cooling is recommended for optimal cooling and tool life.

\* With slotting up to ap 0.8xd vc and fz are to be reduced by 30%.



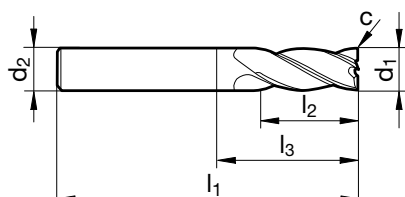


## RF 100 Speed



P	•
M	•
K	•
N	•
S	•
H	•

with centre cutting  
with chip breaker from Ø 5 mm  
core jump from Ø 6 mm



Tool material **Solid Carbide**

Surface **A**

Type **RF 100 Speed**

Shank design **HA** **HB**

Discount group **106** **106**



Guhring no.

6766

6761

d1 h10	d2 h6	l1	l2	l3	c	z	Code no.
mm	mm	mm	mm	mm	mm x 45°		
3,000	6,000	57,00	12,00	21,00	0,045	4	3,000
4,000	6,000	65,00	16,00	29,00	0,060	4	4,000
5,000	6,000	65,00	20,00	29,00	0,075	4	5,000
6,000	6,000	65,00	24,00	29,00	0,090	4	6,000
8,000	8,000	75,00	32,00	39,00	0,120	4	8,000
10,000	10,000	90,00	40,00	50,00	0,150	4	10,000
12,000	12,000	100,00	46,00	55,00	0,180	4	12,000
16,000	16,000	108,00	55,00	60,00	0,240	4	16,000
20,000	20,000	126,00	65,00	76,00	0,300	4	20,000

Availability

	Hardness	Cutting depth $a_p$	Cutting width $a_e$	Cutting speed $v_c$	fz (mm/z) with nom. Ø							
					3	6	8	10	12	16	20	25
P	≤ 850 N/mm <sup>2</sup>	3 x d	0.2 x d	280	0.015	0.04	0.05	0.06	0.07	0.1	0.12	0.14
	850 - 1400 N/mm <sup>2</sup>	3 x d	0.15 x d	180	0.015	0.03	0.05	0.06	0.07	0.1	0.1	0.13
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	≥ 750 N/mm <sup>2</sup>	3 x d	0.1 x d	100	0.015	0.03	0.04	0.05	0.06	0.07	0.09	0.12
S	≤ 1300 N/mm <sup>2</sup>	3 x d	0.1 x d	130	0.016	0.025	0.035	0.05	0.06	0.08	0.1	0.12
	≥ 1300 N/mm <sup>2</sup>	3 x d	0.05 x d	35	0.01	0.015	0.025	0.035	0.042	0.05	0.08	0.12

"Gührojet" peripheral cooling is recommended for optimal cooling and tool life.

DRILLING

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FLUTELESS TAPPING

MILLING

REAMING

PCD



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SERVICES

# GUHRING

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