

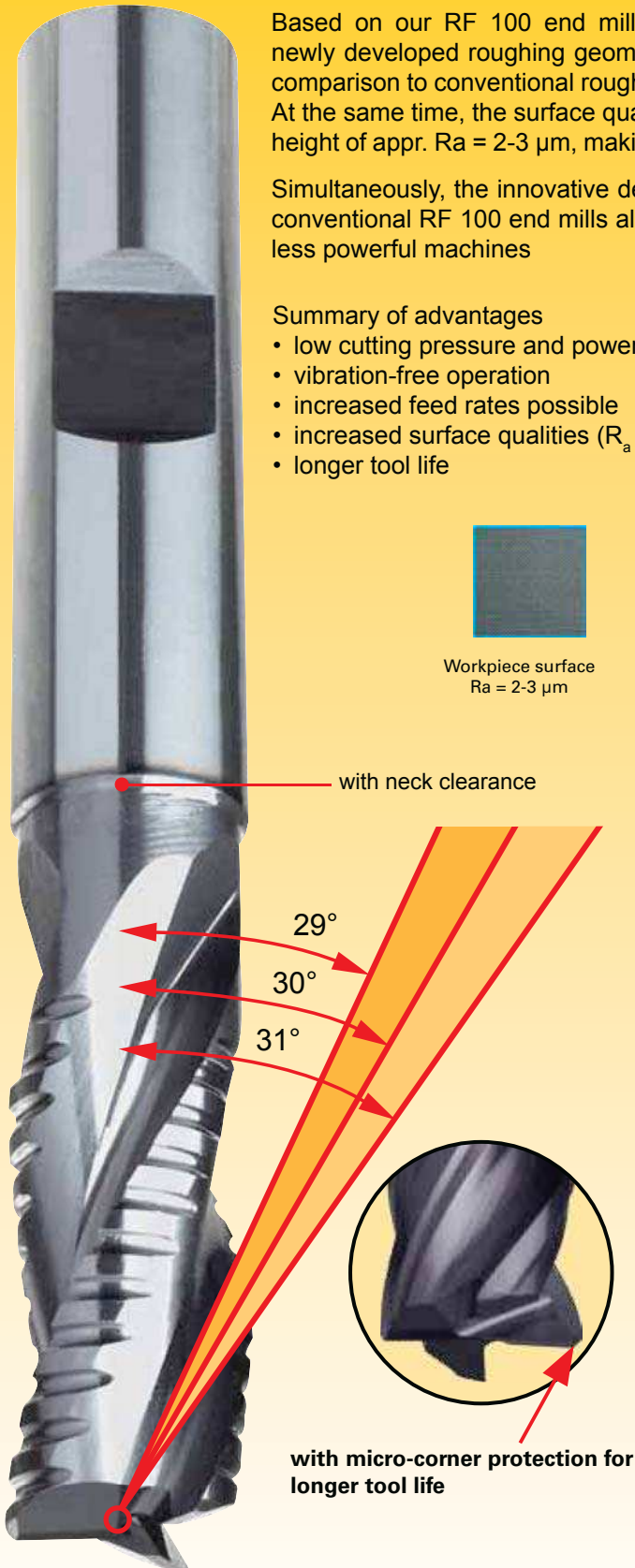
RF 100 A/WF - high-performance roughing end mills for aluminium and Al-alloys



Based on our RF 100 end mill with unequal helix angles in combination with a newly developed roughing geometry. The result is a dramatic increase in tool life in comparison to conventional rough milling cutters with round or flat knuckle-type teeth. At the same time, the surface quality of the workpiece is improved to a peak-to-valley height of appr. $R_a = 2-3 \mu\text{m}$, making in many cases finishing operations unnecessary.

Simultaneously, the innovative design reduces power consumption in comparison to conventional RF 100 end mills allowing the application in unstable conditions and on less powerful machines

Summary of advantages

- low cutting pressure and power consumption
- vibration-free operation
- increased feed rates possible
- increased surface qualities ($R_a = 2-3 \mu\text{m}$)
- longer tool life



Type	Roughing end mill	RF 100 A/WF
Performance index	100%	140%
Workpiece surface	$R_a = 9-10 \mu\text{m}$ 	$R_a = 2-3 \mu\text{m}$ 
Tool life index	100%	180%
Power consumption	100%	130%
Cutting pressure	100%	125%

Material	Alloyed Steel		Tool Steel		Cast Iron		Stainless steel		Aluminium		Ti-special alloys		H	
	up to 28HRC	over 28HRC	up to 180 HB 30	over 180 HB 30	up to 28HRC	over 28HRC	up to 3% Si	over 3% Si	Ti-based	Ni-based	up to 52 HRC	above 52 HRC		
RF 100 U	○	●	●	●						●	○			
RF 100 U/HF	○	●	●	●						○	○			
RF 100 F	●	○	○		○	●		○	○	●				
RF 100 VA	●	○	○	○	●	●		○	●	○				
RF 100 VA/NF	●	○	○	○	●	●			●	○				
RF 100 A								●	●					
RF 100 A/WF								●	●					
RF 100 Ti	○	●	○	○						●	○	○		
RF 100 H		○		○									●	
RF 100 SF	●	●	●	●	●	●	○	○	●	●	○			

● = optimal suitability

○ = limited suitability