



STARTEC ICE

Resin bonded grinding wheels for HSS tool manufacturing

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The new STARTEC ICE assortment was developed together with TYROLIT experts and is dedicated to all HSS precision cutting tool manufacturers. A new approach to development enables results to be achieved in terms of economic efficiency and "cool" grinding that were previously unheard of.

The new specifications cover the flute and relieve grinding on all types of round cutting tools and sets new standards throughout the industry.

Application:
Flute grinding, HSS step drill



+ **Optimized economic efficiency:** Longer dressing cycles and short grinding times significantly reduce the manufacturing costs per component.

+ **High stock removal rate:** The innovative specification enables high stock removal rates and a good profile retention.



+ **Cool grinding:** The use of new grain qualities and the new high strength bond system guarantees particularly cool grinding.

Example application

Flute grinding process
Workpiece: HSS drill d=6mm, z=2, flute length=57mm
Machine: CNC flute grinder, 30kW spindle power, oil coolant 10 bar



Conclusion: 45% reduction of the cycle time. Surface quality meets the customers requirements.

Product range
To meet the expectations on different performance levels TYROLIT offers two specifications for flute and relieve grinding.

	Standard Q'w ≤ 100 mm ³ / s mm	High performance Q'w > 100 mm ³ / s mm
Flute grinding	STARTEC ICE	STARTEC ICE
Relieve grinding	SI95-A 60 Q4 B25	HY-A 30 R5 B109