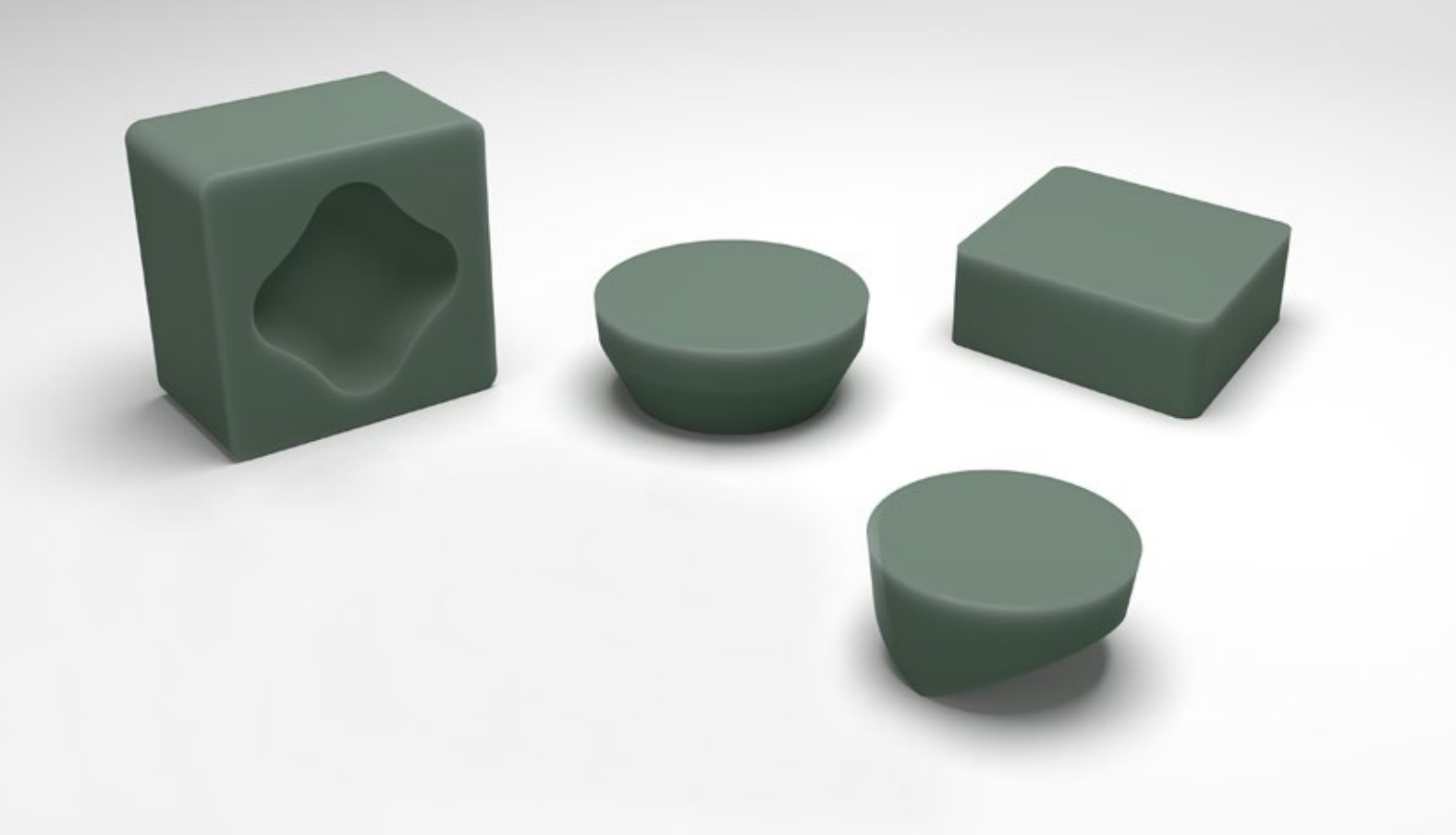




CUTTING TOOLS

Silicon nitride ceramics for turning
of cast iron materials

LKT 100



Different, even at first glance

Silicon nitride ceramics are regarded as extremely productive and tough all-rounders among cutting materials. With the development of LKT100, we have redefined the possibilities of this material. The result is a cutting material that is very process-reliable and at the same time enormously wear-resistant. Both properties guarantee an outstanding cost-benefit ratio when turning GJL materials.

LKT100 is different, even at first glance: In a new manufacturing process, we have been able to reduce the additive content in the outer functional zone of the inserts. An external indication of the additional machining step developed for this purpose is the fine colour nuances of the surface. This does not reduce the cutting performance. On the contrary: with LKT100, we offer you toughness typical of silicon nitride ceramics combined with even greater wear resistance - especially with interrupted cuts and large chip cross-sections.

Squaring the circle



„With the optimisation of the outer functional zone of LKT100, we have tried to square the circle and the result is impressive: LKT100 offers very good toughness with excellent wear resistance. This makes our new cutting material ideally suited for continuous as well as heavily interrupted cuts.“

*Dipl.-Ing. Johannes Schneider,
Senior Product Manager Cutting Tools at CeramTec*

Three questions & answers about the silicon nitride ceramic LKT100:

1 What cutting data can I run?

- $v_c = 400 - 1.000 \text{ m/min}$
- $a_p = 0,3 - 2,0 \text{ mm}$
- $f = 0,15 - 0,5 \text{ mm}$

2 What can I machine and how?

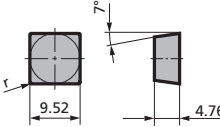
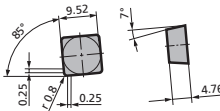
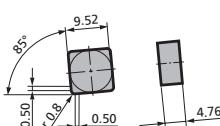
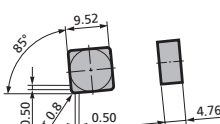
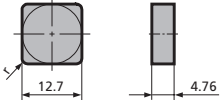
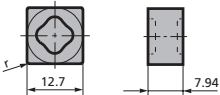
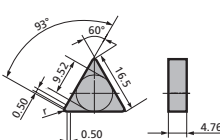
- for turning and boring GJL materials in continuous to heavily interrupted cut
- roughing and rough-finishing with constant and varying machining allowances
- creates high chip cross-sections

3 What is the bottom line?

- excellent wear resistance, especially notch wear resistance
- allows large metal removal rates
- shortens machining times
- enables very good cost-per-part machining results

[illegible]

K		cast iron	H		Hard materials	S		HSRA	P		steel	Main application		Secondary application	
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			K																H			S	P						
INSERT	DESIGNATION	GRADE	GJL				GJS				ADI		SI GJS		GJV			HARD STEEL	CHILLED CAST IRON	DIE CASTING	HRSA	STEEL	SPK-REF. NO.						
			EN-GJL 150	EN-GJL 200	EN-GJL 250	EN-GJL 300	EN-GJL 350	EN-GJS 400-15	EN-GJS 500-7	EN-GJS 600-3	EN-GJS 700-2	EN-GJS 800-2	EN-GJS 800-8	EN-GJS 1000-5	EN-GJS 1200-2	EN-GJS 1400-0	EN-GJS 450-18							EN-GJS 500-14	EN-GJS 600-10	EN-GJV 300	EN-GJV 350	EN-GJV 400	EN-GJV 450
	SCGN 09 04 12 F	LKT 100	◆	◆	◆	◆									◇	◇	◇												23.12.093.06.6
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	SCGN 09 04 08 F - 85Z025	LKT 100	◆	◆	◆	◆	◆								◇	◇	◇												23.12.299.06.6
	SNGN 09 04 08 T 85Z050	LKT 100	◆	◆	◆	◆	◆								◇	◇	◇												23.10.346.04.6
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	TNGN 16 04 08 T00520-93Z050	LKT 100	◆	◆	◆	◆	◆								◇	◇	◇												23.30.177.03.6

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