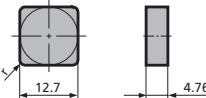
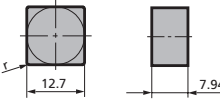


Program extension Inserts AKT 180

Inserts	Type	Grade	K																H	S	P	SPK- Ref. No.												
			GJL				GJS				ADI				SI GJS								GJV				HARD STEEL	CHILLED CAST IRON	DIE CASTING	HSRA	STEEL			
SNMN 12 04 .. T 	SNMN 12 04 12 T02020	AKT 180	EN-GJL 150	EN-GJL 200	EN-GJL 250	EN-GJL 300	EN-GJL 350	EN-GJS 400-15	EN-GJS 400-17	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	EN-GJV 500									
			♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦								♦	♦	♦	♦	♦								
SNMN 12 07 .. T 	SNMN 12 07 16 T02020	AKT 180	EN-GJL 150	EN-GJL 200	EN-GJL 250	EN-GJL 300	EN-GJL 350	EN-GJS 400-15	EN-GJS 400-17	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	EN-GJV 500									36.14.004.04.6
			♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦								♦	♦	♦	♦	♦								



CUTTING TOOLS

For Poly-V Grooving
and Turning

Program Expansion
Oxide Ceramic AKT 180



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SPKCuttingTools

DE / 2407 / IM



We have developed the AKT 180 cutting material for the reliable machining of cast iron materials, especially those produced using the centrifugal casting process. This cutting material is a zirconium oxide-reinforced oxide ceramic. The composition ensures further increased wear resistance and gives the cutting material matrix increased toughness. The high heat resistance is maintained at a high level. The matrix reinforcement makes it possible to achieve very high cutting values with the cutting material, with increased process reliability. The achievable metal removal rate and the reproducible wear and cutting behavior justify the high cost-effectiveness of this cutting material. Particularly in series production of medium to high quantities, its significantly improved properties enable a stable cutting process with high output and reliability.

- Cutting data turning:
 $v_c = 400 - 1200 \text{ m/min}$
 $a_p = 0,2 - 4 \text{ mm}$
 $f = 0,15 - 0,5 \text{ mm}$
- Cutting data poly-v grooving:
 $v_c = 250 - 800 \text{ m/min}$
 $f = 0,08 - 0,2 \text{ mm}$
- Materials: Cast iron materials; specially manufactured using the centrifugal casting process
- Type of machining: Turning and grooving
- Roughing and finishing in continuous cuts, without coolant

Hardness (HB)	Cutting speed v_c (m/min)		Cutting depth a_p (mm)	Feed rate f (mm)		Grade
	Reference value	Total range		Reference value	Total range	
 Roughing in a continuous cut						
140 - 210	600	300 - 1000	1,0 - 4,0	0,30	0,20 - 0,50	AKT 180
220 - 240	500	200 - 800	1,0 - 4,0	0,30	0,20 - 0,50	AKT 180
250 - 280	300	100 - 400	1,0 - 4,0	0,30	0,20 - 0,50	AKT 180
 Finishing in a continuous cut						
140 - 210	750	400 - 1200	0,2 - 1,0	0,20	0,15 - 0,40	AKT 180
220 - 240	550	300 - 800	0,2 - 1,0	0,20	0,15 - 0,40	AKT 180
250 - 280	350	150 - 450	0,2 - 1,0	0,20	0,15 - 0,40	AKT 180
Poly-V grooving						
140 - 210	500	250 - 800	-	0,15	0,08 - 0,20	AKT 180
220 - 240	400	200 - 600	-	0,10	0,08 - 0,15	AKT 180
250 - 280	300	200 - 500	-	0,08	0,06 - 0,12	AKT 180

[illegible]

K		Cast Iron	H		Hard materials	S		HSRA	P		Steel	Main application		Secondary application	
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