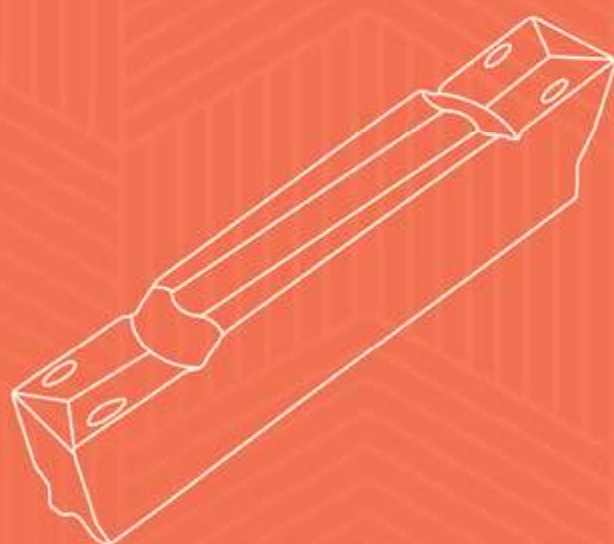
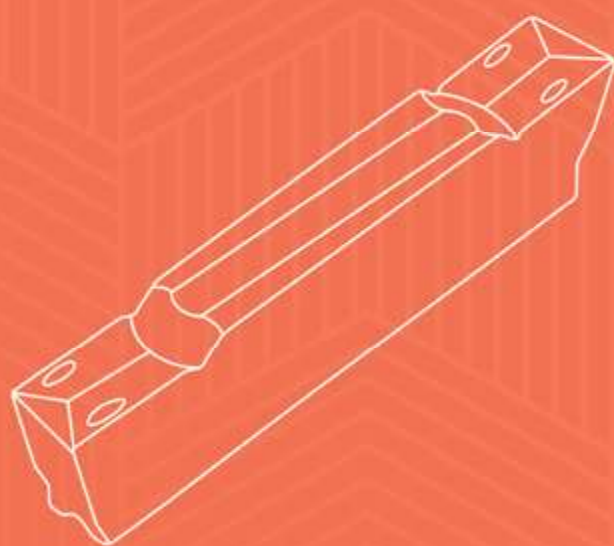




GROOVING /

carbide /185
PCBN /207
diamond /211
holders /215





GROOVING/**CARBIDE**

CARBIDE /GROOVING

GRADES

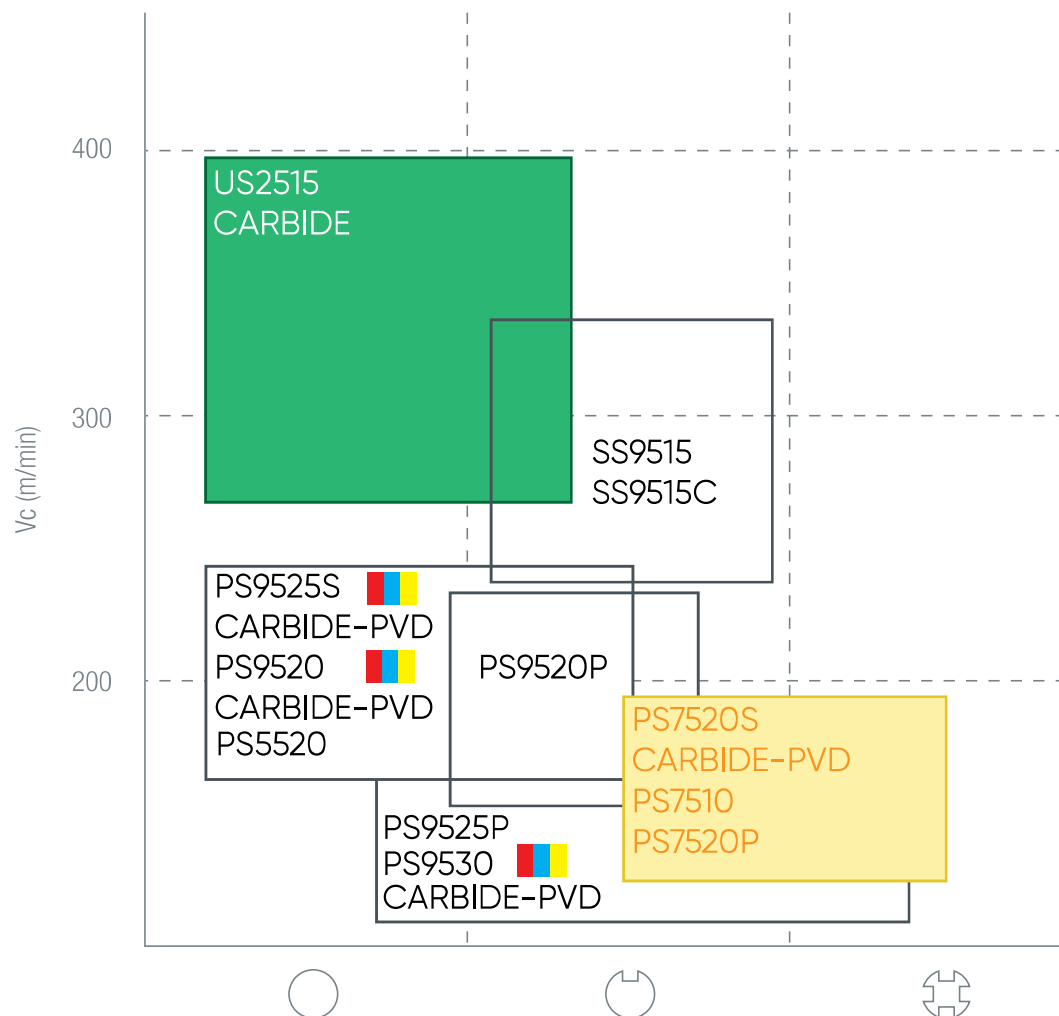
	K					P					M					N					S					H		
	ISO DIN 513																											
	K01	K10	K20	K30	K40	P01	P10	P20	P30	P40	M01	M10	M20	M30	M40	N01	N10	N20	N30	N40	S01	S10	S20	S30	S40	H01	H10	H20
CARBIDE PVD	PS9520					PS5520					PS9520																	
	PS9520P					PS9520					PS9520P																	
	PS9525S					PS9520P					PS9525S																	
	PS9525P					PS9525S					PS9525P																	
	PS9530					PS9525P					PS9530																	
CARBIDE UNCOATED											PS7510										PS7520S							
											PS7520S																	
											PS7520P																	
CERMET UNCOATED	SS9515					SS9515					SS9515																	
	SS9515C					SS9515C					SS9515C																	

CARBIDE /GROOVING

RANGE ISO



GRADES



TURNING

GROOVING

THREADING

MILLING

DRILLING

ENDMILLS

DRILLS

HSS
DRILLS & TAPS

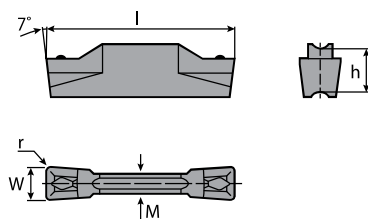
SPARE
PARTS

INDEX

CARBIDE /GROOVING

MAGC

PARTING & GROOVING



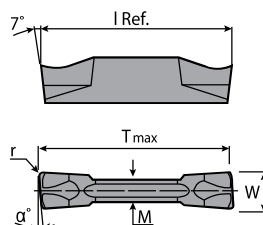
HOLDERS

222

DESCRIPTION		DIMENSIONS						CARBIDE											
								PS5520	PS9520	PS9520P	CS9525S	CS9525P	PS9530	SS9515	SS9515C	PS7510	PS7520S	PS7520P	US2515
	MAGC200	2.0	0.2	16.0	1.2	3.5	-		●		●		●				●		
	MAGC250	2.5	0.2	18.5	2.0	3.85	-		●		●		●				●		
	MAGC300	3.0	0.4	21.0	2.35	4.8	-		●		●		●				●		
	MAGC400	4.0	0.4	21.0	3.3	4.8	-		●		●	●	●				●		
	MAGC500	5.0	0.8	26.0	4.1	5.8	-		●		●	●	●				●		
	MAGC600	6.0	0.8	26.0	5.0	5.8	-		●		●	●	●				●		

MAGD

PARTING



HOLDERS

222

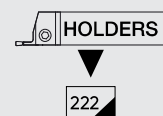
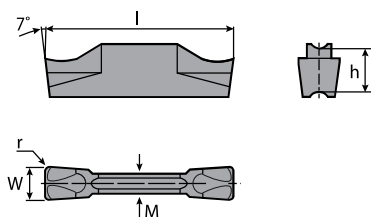
DESCRIPTION		DIMENSIONS						CARBIDE											
								PS5520	PS9520	PS9520P	CS9525S	CS9525P	PS9530	SS9515	SS9515C	PS7510	PS7520S	PS7520P	US2515
	MAGD200J-15D	2.0	0.2	16.0	1.2	3.5	15	●		●		●				●			
	MAGD300J-15D	3.0	0.4	21.0	2.35	4.8	15	●		●		●				●			

Vc • fn

205

MAGJ

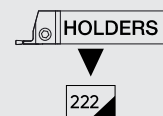
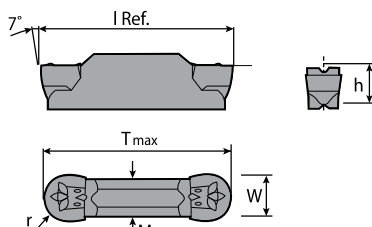
PARTING & GROOVING



DESCRIPTION		DIMENSIONS						CARBIDE											
								PS5520	PS9520	PS9520P	CS9525S	CS9525P	PS9530	SS9515	SS9515C	PS7510	PS7520S	PS7520P	US2515
		W	r	l	M	h	α												
	MAGJ150	1.5	0.15	16.0	1.2	3.5	-		●		●		●				●		
	MAGJ200	2.0	0.2	16.0	1.2	3.5	-		●		●		●				●		
	MAGJ250	2.5	0.2	18.5	2.0	3.85	-		●		●		●				●		
	MAGJ300	3.0	0.4	21.0	2.35	4.8	-		●		●		●				●		
	MAGJ400	4.0	0.4	21.0	3.3	4.8	-		●		●		●				●		
	MAGJ500	5.0	0.8	26.0	4.1	5.8	-		●		●		●				●		
	MAGJ600	6.0	0.8	26.0	5.0	5.8	-		●		●		●				●		
	MAGJ800	8.0	0.8	31	6	8	-						●						

MAGR

PROFILING

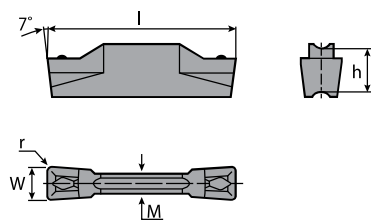


DESCRIPTION		DIMENSIONS						CARBIDE											
								PS5520	PS9520	PS9520P	CS9525S	CS9525P	PS9530	SS9515	SS9515C	PS7510	PS7520S	PS7520P	US2515
		W	r	L	M	h	α												
	MAGR200	2.0	1.0	16.0	1.5	3.5	-		●		●		●					●	
	MAGR300	3.0	1.5	21.0	2.35	4.8	-		●		●		●					●	
	MAGR400	4.0	2.0	21.0	3.3	4.8	-		●		●		●					●	
	MAGR500	5.0	2.5	26.0	4.1	5.8	-		●		●		●					●	

Vc • fn 205

MAGN

PARTING & GROOVING



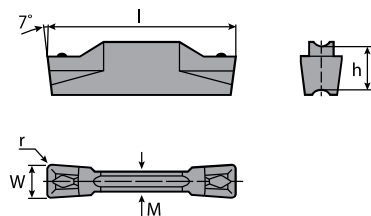
HOLDERS

222

DESCRIPTION		DIMENSIONS						CARBIDE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
								PS5520	PS9520	PS9520P	CS9525S	CS9525P	PS9530	SS9515	SS9515C	PS7510	PS7520S	PS7520P	US2515																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	MAGN200MA	2.0	0.2	16.0	1.2	3.5	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

MAGS

PARTING & GROOVING



HOLDERS

222

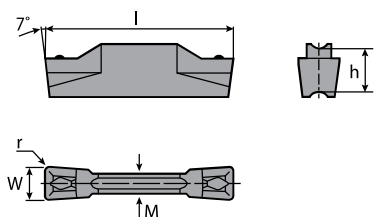
DESCRIPTION		DIMENSIONS						CARBIDE											
								PS5520	PS9520	PS9520P	CS9525S	CS9525P	PS9530	SS9515	SS9515C	PS7510	PS7520S	PS7520P	US2515
	MAGS200	2.0	0.2	16.0	1.2	3.5	-	●	●										
	MAGS250	2.5	0.2	18.5	2.0	3.85	-	●	●										
	MAGS300	3.0	0.4	21.0	2.35	4.8	-	●	●										
	MAGS400	4.0	0.4	21.0	3.3	4.8	-	●	●										
	MAGS500	5.0	0.8	26.0	4,1	5.8	-	●	●										
	MAGS600	6.0	0.8	26.0	5.0	5.8	-	●	●										

Vc • fn

205

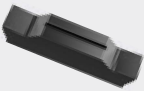
MGGN

PARTING & GROOVING



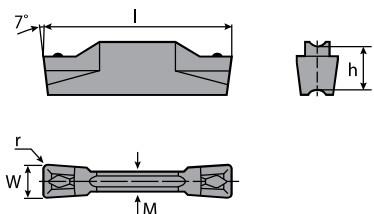
HOLDERS

222

DESCRIPTION		DIMENSIONS						CARBIDE							
								PS5520	PS9520	PS9520P	CS9525S	CS9525P	PS9530	SS9515	SS9515C
	MGGN200	2.0	0.2	16.0	1.2	3.5	-							•	•
	MGGN300-R0.2	3.0	0.4	21.0	2.35	4.8	-							•	•
	MGGN400	4.0	0.4	21.0	3.3	4.8	-							•	•

SAGC

PARTING & GROOVING



HOLDERS

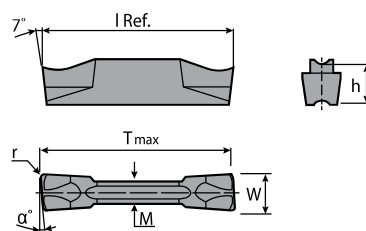
226

DESCRIPTION		DIMENSIONS						CARBIDE							
								PS5520	PS9520	PS9520P	CS9525S	CS9525P	PS9530	SS9515	SS9515C
	SAGC200-02	2.0	0.2	20.0	1.70	4.70	-	•	•	•	•	•	•		
	SAGC300-02	3.0	0.2	20.0	2.40	4.70	-	•	•	•	•	•	•		
	SAGC400-03	4.0	0.3	20.0	3.0	4.70	-	•	•	•	•	•	•		
	SAGC500-03	5.0	0.3	25.0	4.0	5.20	-	•	•	•	•	•	•		

Vc • fn 205

SAGD

PARTING



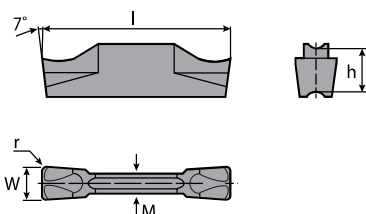
HOLDERS

226

DESCRIPTION		DIMENSIONS						CARBIDE											
								PS5520	PS9520	PS9520P	CS9525S	CS9525P	PS9530	SS9515	SS9515C	PS7510	PS7520S	PS7520P	US2515
W	r	I	M	h	α														
	SAGD200J-15D	2.0	0.2	20.0	1.70	4.70	15		●	●	●	●	●				●		
	SAGD200J-6D	20	0.2	20.0	1.70	4.70	6		●	●	●	●	●				●		
	SAGD300J-15D	30	0.2	20.0	2.40	4.70	15		●	●	●	●	●				●		
	SAGD300J-6D	30	0.2	20.0	2.40	4.70	15		●	●	●	●	●				●		
	SAGD400J-6D	40	0.3	20.0	3.0	4.70	6		●	●	●	●	●				●		
	SAGD400J-4D	40	0.3	20.0	3.0	4.70	4		●	●	●	●	●				●		
	SAGD500J-4D	50	0.3	25.0	4.0	5.20	4		●	●	●	●	●				●		

SAGJ

PARTING & GROOVING



HOLDERS

226

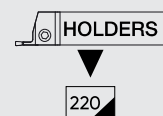
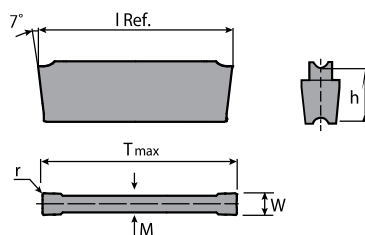
DESCRIPTION		DIMENSIONS						CARBIDE											
								PS5520	PS9520	PS9520P	CS9525S	CS9525P	PS9530	SS9515	SS9515C	PS7510	PS7520S	PS7520P	US2515
		W	r	I	M	h	α												
	SAGJ200-02	2.0	0.2	20.0	1.70	4.70	-		●	●	●	●	●					●	
	SAGJ300-02	3.0	0.2	20.0	2.40	4.70	-		●	●	●	●	●					●	●
	SAGJ400-03	4.0	0.3	20.0	3.0	4.70	-		●	●	●	●	●					●	
	SAGJ500-03	5.0	0.3	25.0	4.0	5.20	-		●	●	●	●	●					●	

Vc • fn

205

SDGN

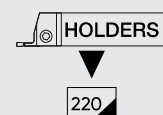
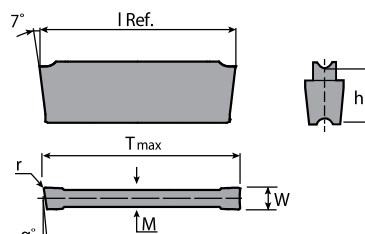
PARTING & GROOVING



DESCRIPTION		DIMENSIONS						CARBIDE											
								PS5520	PS9520	PS9520P	CS9525S	CS9525P	PS9530	SS9515	SS9515C	PS7510	PS7520S	PS7520P	US2515
	SDGN2002Z	2.0	0.2	21.0	1.7	6.0	-		●	●	●	●	●			●	●		
	SDGN2202J	2.2	0.2	19.8	1.9	6.0	-		●	●	●	●	●			●	●		
	SDGN3002Z	3.0	0.2	21.0	2.4	6.1	-		●	●	●	●	●			●	●		
	SDGN3102C	3.1	0.2	20.1	2.4	6.1	-		●	●	●	●	●			●	●		

SDGR

PARTING

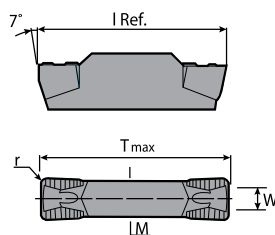


DESCRIPTION		DIMENSIONS						CARBIDE											
								PS5520	PS9520	PS9520P	CS9525S	CS9525P	PS9530	SS9515	SS9515C	PS7510	PS7520S	PS7520P	US2515
	SDGR2200JS-6D	2.2	0.2	19.8	1.9	6.0	6												
	SDGR2200JS-15D	2.2	0.2	19.8	1.9	6.0	15												

Vc • fn 205

SGRIP

PARTING & GROOVING



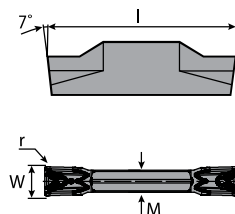
HOLDERS



DESCRIPTION		DIMENSIONS						CARBIDE							
								PS5520	PS9520	PS9520P	CS9525S	CS9525P	PS9530	SS9515	SS9515C
	SGRIP300-M	3.0	0.2	16.0	2.3	4.4	-	•	•	•	•	•			
	SGRIP400-M	4.0	0.4	19.0	2.8	4.9	-	•	•	•	•	•			
	SGRIP500-M	5.0	0.5	19.0	3.4	5.4	-	•	•	•	•	•			

SGDM

PARTING & GROOVING



HOLDERS



DESCRIPTION		DIMENSIONS						CARBIDE							
								PS5520	PS9520	PS9520P	CS9525S	CS9525P	PS9530	SS9515	SS9515C
	SGDM200	2.00	0.2	20	1.5	4.3	-	•		•		•			
	SGDM300	3.00	0.3	20	2.3	4.3	-	•		•		•			
	SGDM400	4.00	0.3	20	3.3	4.3	-	•	•	•	•	•			

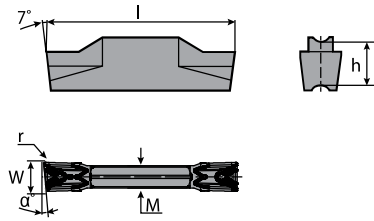
Vc • fn



205

SGDD

PARTING



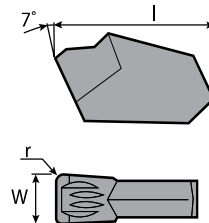
HOLDERS

218

DESCRIPTION		DIMENSIONS						CARBIDE							
								PS5520	PS9520	PS9520P	CS9525S	CS9525P	PS9530	SS9515	SS9515C
	SGDD200-15D	W	r	l	M	h	α								
	SGDD300-15D	2.00	0.2	20	1.5	4.3	15	●		●		●			
		3.00	0.3	20	2.3	4.3	15	●		●		●			

SSP

PARTING



HOLDERS

230

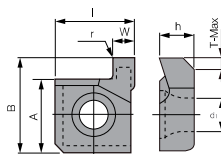
DESCRIPTION		DIMENSIONS						CARBIDE							
								PS5520	PS9520	PS9520P	CS9525S	CS9525P	PS9530	SS9515	SS9515C
	SSP200	W	r	l	M	h	α								
	SSP300	2.2	9.3	0.2	-	-	-	●		●		●			
	SSP400	3.1	3.2	3.3	-	-	-	●		●		●			
	SSP500	4.1	11.3	0.25	-	-	-	●		●		●			
	SSP600	5.1	11.4	0.3	-	-	-	●		●		●			

Vc • fn 205

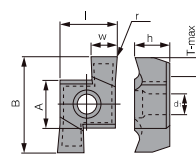
CARBIDE /GROOVING

GR

INTERNAL GROOVING



6GR 7GR



8GR 9GR

HOLDERS

225

DESCRIPTION		DIMENSIONS								CARBIDE												
										PS5520	PS9520	PS9520P	CS9525S	CS9525P	PS9530	SS9515	SS9515C	PS7510	PS7520S	PS7520P	US2515	
		W	A	B	h	d1	l	r	Tmax													
	6GR-100	1.00	4.76	6.44	2.34	2.30	5.56	0.2	1.5	●												
	6GR-150	1.50	4.76	6.44	2.34	2.30	5.56	0.2	1.5	●												
	6GR-200	2.00	4.76	6.44	2.34	2.30	5.56	0.2	1.5	●												
	7GR-100	1.00	5.56	7.36	3.08	2.58	5.56	0.2	1.5	●												
	7GR-150	1.50	5.56	7.36	3.08	2.58	5.56	0.2	1.5	●												
	7GR-200	2.00	5.56	7.36	3.08	2.58	5.56	0.2	1.5	●												
	8GR-150	1.50	5.56	10.16	3.87	2.58	6.15	0.2	1.5	●												
	8GR-200	2.00	5.56	10.16	3.87	2.58	6.15	0.2	1.5	●												
	8GR-250	2.50	5.56	10.16	3.87	2.58	6.15	0.2	1.5	●												
	8GR-300	3.00	5.56	10.16	3.87	2.58	6.15	0.2	1.5	●												
	8GR-350	3.50	5.56	10.16	3.87	2.58	6.15	0.2	1.5	●												
	9GR-100	1.00	6.35	12.95	4.66	2.86	7.74	0.2	1.5	●												
	9GR-150	1.50	6.35	12.95	4.66	2.86	7.74	0.2	1.5	●												
	9GR-200	2.00	6.35	12.95	4.66	2.86	7.74	0.2	1.5	●												
	9GR-250	2.50	6.35	12.95	4.66	2.86	7.74	0.2	1.5	●												
	9GR-300	3.00	6.35	12.95	4.66	2.86	7.74	0.2	1.5	●												
	9GR-350	3.50	6.35	12.95	4.66	2.86	7.74	0.2	1.5	●												

Vc • fn

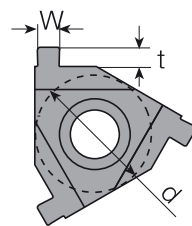


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CARBIDE /GROOVING

□□ER

EXTERNAL GROOVING



HOLDERS

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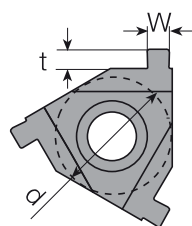
DESCRIPTION		DIMENSIONS				CARBIDE											
						PS5520	PS9520	PS9520P	CS9525S	CS9525P	PS9530	SS9515	SS9515C	PS7510	PS7520S	PS7520P	US2515
		d	l	W	T												
	11ER-W0.50-T0.70	6.35	11	0.50	0.70	●											
	11ER-W0.60-T0.70	6.35	11	0.60	0.70	●											
	11ER-W0.80-T0.70	6.35	11	0.80	0.70	●											
	11ER-W1.00-T0.70	6.35	11	1.00	0.70	●											
	11ER-W1.20-T1.50	6.35	11	1.20	1.50	●											
	11ER-W1.40-T1.50	6.35	11	1.40	1.50	●											
	11ER-W1.50-T1.50	6.35	11	1.50	1.50	●											
	11ER-W1.80-T1.80	6.35	11	1.80	1.80	●											
	16ER-W0.33-T1.30	9.525	16	0.33	1.30	●											
	16ER-W0.50-T1.30	9.525	16	0.50	1.30	●											
	16ER-W0.75-T1.30	9.525	16	0.75	1.30	●											
	16ER-W0.80-T1.30	9.525	16	0.80	1.30	●											
	16ER-W1.00-T1.30	9.525	16	1.00	1.30	●											
	16ER-W1.10-T1.30	9.525	16	1.10	1.30	●											
	16ER-W1.20-T1.60	9.525	16	1.20	1.60	●											
	16ER-W1.30-T1.60	9.525	16	1.30	1.60	●											
	16ER-W1.40-T1.60	9.525	16	1.40	1.60	●											
	16ER-W1.50-T1.60	9.525	16	1.50	1.60	●											
	16ER-W1.60-T1.60	9.525	16	1.60	1.60	●											
	16ER-W1.70-T1.85	9.525	16	1.70	1.85	●											
	16ER-W1.80-T1.85	9.525	16	1.80	1.85	●											
	16ER-W1.85-T1.85	9.525	16	1.85	1.85	●											
	16ER-W2.00-T1.85	9.525	16	2.00	1.85	●											
	16ER-W2.15-T2.00	9.525	16	2.15	2.00	●											
	16ER-W2.30-T2.00	9.525	16	2.30	2.00	●											
	16ER-W2.40-T2.20	9.525	16	2.40	2.20	●											
	16ER-W2.65-T2.20	9.525	16	2.65	2.20	●											

Vc • fn

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IR

INTERNAL GROOVING



HOLDERS

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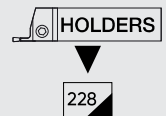
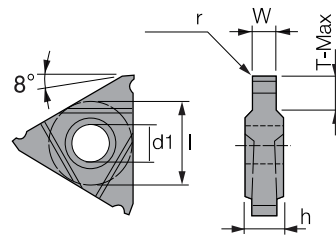
DESCRIPTION		DIMENSIONS				CARBIDE											
						PS5520	PS9520	PS9520P	CS9525S	CS9525P	PS9530	SS9515	SS9515C	PS7510	PS7520S	PS7520P	US2515
		d	l	W	T												
	11IR-W0.50-T0.70	6.35	11	0.50	0.70	●											
	11IR-W0.60-T0.70	6.35	11	0.60	0.70	●											
	11IR-W0.80-T0.70	6.35	11	0.80	0.70	●											
	11IR-W1.00-T0.70	6.35	11	1.00	0.70	●											
	11IR-W1.20-T1.50	6.35	11	1.20	1.50	●											
	11IR-W1.40-T1.50	6.35	11	1.40	1.50	●											
	11IR-W1.50-T1.50	6.35	11	1.50	1.50	●											
	11IR-W1.80-T1.80	6.35	11	1.80	1.80	●											
	11IR-W2.20-T1.20	6.35	11	2.20	1.20	●											
11IR-W2.20-T1.80	6.35	11	2.20	1.80	●												
	16IR-W0.33-T1.20	9.525	16	0.33	1.20	●											
	16IR-W0.50-T1.20	9.525	16	0.50	1.20	●											
	16IR-W0.75-T1.20	9.525	16	0.75	1.20	●											
	16IR-W0.80-T1.20	9.525	16	0.80	1.20	●											
	16IR-W1.00-T1.30	9.525	16	1.00	1.30	●											
	16IR-W1.10-T1.30	9.525	16	1.10	1.30	●											
	16IR-W1.20-T1.60	9.525	16	1.20	1.60	●											
	16IR-W1.30-T1.60	9.525	16	1.30	1.60	●											
	16IR-W1.40-T1.60	9.525	16	1.40	1.60	●											
	16IR-W1.50-T1.60	9.525	16	1.50	1.60	●											
	16IR-W1.60-T1.60	9.525	16	1.60	1.60	●											
	16IR-W1.70-T1.85	9.525	16	1.70	1.85	●											
	16IR-W1.80-T1.85	9.525	16	1.80	1.85	●											
	16IR-W1.85-T1.85	9.525	16	1.85	1.85	●											
	16IR-W2.00-T1.85	9.525	16	2.00	1.85	●											
	16IR-W2.15-T2.00	9.525	16	2.15	2.00	●											
	16IR-W2.30-T2.00	9.525	16	2.30	2.00	●											
	16IR-W2.50-T2.00	9.525	16	2.50	2.00	●											
	16IR-W2.65-T2.20	9.525	16	2.65	2.20	●											

Vc • fn 205

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$$V_c \bullet f_n \rightarrow 205$$

EXTERNAL GROOVING

[illegible]

CARBIDE /GROOVING

CUTTING PARAMETERS Vc(m/min)

KG	GREY CAST IRON
KN	NODULAR CAST IRON
PL	LOW CARBON AND FREE CUTTING STEEL
PM	MEDIUM CARBON STEEL
PH	HIGH CARBON STEEL
PA	ALLOY STEEL

MM	MARTENSITIC AND FERRITIC STAINLESS STEEL
MA	AUSTENITIC STAINLESS STEEL
NA	ALUMINIUM ALLOYS
NH	ALUMINIUM ALLOYS AGED AND HARDENED
NB	BRASS
NC	BRONZE AND ELECTROLYTIC COPPER

MATERIAL		CARBIDE-PVD									CERMET UNCOATED		CARBIDE UNCOATED
		PS5520	PS9520	PS9520P	PS9525S	PS9525P	PS9530	PS7510	PS7520S	PS7520P	SS9515	SS9515C	US2515
K	KG	120-160	200-360	250-450	250-450	250-450	200-360						
	KN	120-160	150-280	150-280	180-300	150-280	150-280						
P	PL	160-220	200-320	200-320	250-350	200-320	200-320						
	PM	140-280	180-260	220-300	220-300	220-300	180-260						
	PH	120-160	160-250	180-260	200-280	180-260	160-250						
	PA	140-200	150-220	160-250	180-250	160-250	150-220						
M	MM	90-140	160-260	160-260	90-140	160-260	160-260	140-360	160-260	140-260	150-1500	150-1500	
	MA	100-180	140-220	160-260	100-180	140-220	160-260	140-360	140-220	140-260	150-1500	150-1500	
N	NA												600-1500
	NH												300-700
	NB												250-400
	NC												150-250

TURNING

GROOVING

THREADING

MILLING

DRILLING

ENDMILLS

DRILLS

HSS
DRILLS & TAPSSPARE
PARTS

INDEX

CARBIDE /GROOVING

CUTTING PARAMETERS f_n (mm/rev)

KG	GREY CAST IRON
KN	NODULAR CAST IRON
PL	LOW CARBON AND FREE CUTTING STEEL
PM	MEDIUM CARBON STEEL
PH	HIGH CARBON STEEL
PA	ALLOY STEEL

MM	MARTENSITIC AND FERRITIC STAINLESS STEEL
MA	AUSTENITIC STAINLESS STEEL
NA	ALUMINIUM ALLOYS
NH	ALUMINIUM ALLOYS AGED AND HARDENED
NB	BRASS
NC	BRONZE AND ELECTROLYTIC COPPER

PARTING-OFF

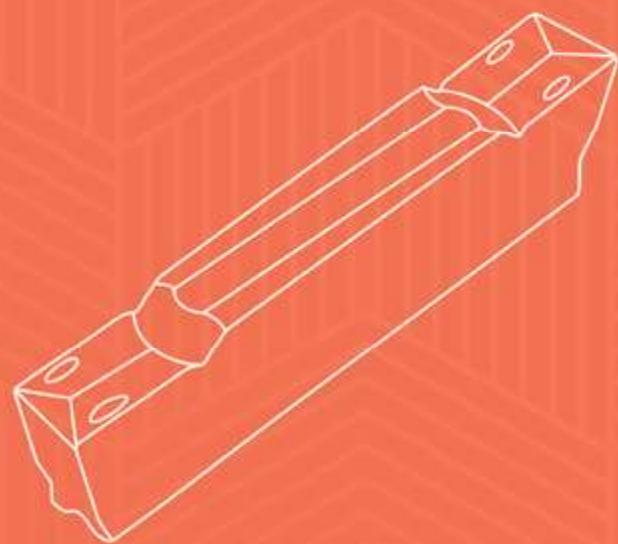
MATERIAL		CUTTING WIDTH				
		2 mm	3 mm	4 mm	5 mm	6 mm
K	KG	0.05~0.12	0.10~0.25	0.10~0.30	0.10~0.35	0.10~0.40
	KN	0.05~0.10	0.10~0.20	0.10~0.25	0.10~0.30	0.10~0.35
P	PL	0.02~0.15	0.03~0.20	0.08~0.30	0.10~0.40	0.12~0.50
	PM	0.02~0.15	0.03~0.20	0.08~0.30	0.10~0.40	0.12~0.50
	PH	0.02~0.15	0.03~0.20	0.08~0.30	0.10~0.40	0.12~0.50
	PA	0.02~0.15	0.03~0.20	0.08~0.30	0.10~0.40	0.12~0.50
M	MM	0.02~0.10	0.03~0.15	0.08~0.25	0.10~0.35	0.12~0.40
	MA	0.02~0.08	0.03~0.13	0.08~0.20	0.10~0.30	0.12~0.35
N	NA	0.05~0.10	0.05~0.20	0.05~0.25	0.05~0.30	0.05~0.35
	NH	0.05~0.10	0.05~0.20	0.05~0.25	0.05~0.30	0.05~0.35
	NB	0.05~0.10	0.05~0.20	0.05~0.25	0.05~0.30	0.05~0.35
	NC	0.05~0.10	0.05~0.20	0.05~0.25	0.05~0.30	0.05~0.35

FACING

MATERIAL		CUTTING WIDTH		
		3 mm	4 mm	5 mm
K	KG	0.05~0.10	0.05~0.12	0.05~0.15
	KN	0.05~0.10	0.05~0.12	0.05~0.15
P	PL	0.05~0.10	0.05~0.12	0.05~0.15
	PM	0.05~0.10	0.05~0.12	0.05~0.15
	PH	0.05~0.10	0.05~0.12	0.05~0.15
	PA	0.05~0.10	0.05~0.12	0.05~0.15
M	MM	0.05~0.10	0.05~0.12	0.05~0.15
	MA	0.05~0.10	0.05~0.12	0.05~0.15
N	NA	0.05~0.15	0.08~0.15	0.08~0.15
	NH	0.05~0.15	0.08~0.15	0.08~0.15
	NB	0.05~0.15	0.08~0.15	0.08~0.15
	NC	0.05~0.15	0.08~0.15	0.08~0.15

GROOVING, GROOVE TURNING

MATERIAL		CUTTING WIDTH					
		0.5 ~ 1.0 mm	1.0 ~ 2.0 mm	2.0 ~ 3.0 mm	3.0 ~ 4.0 mm	4.0 ~ 5.0 mm	6.0 ~ 8.0 mm
K	KG	0.03~0.07	0.04~0.08	0.05~0.08	0.05~0.10	0.05~0.10	0.05~0.12
	KN	0.03~0.07	0.04~0.08	0.05~0.08	0.05~0.10	0.05~0.10	0.05~0.12
P	PL	0.03~0.08	0.04~0.09	0.05~0.10	0.05~0.12	0.05~0.15	0.05~0.20
	PM	0.03~0.08	0.04~0.09	0.05~0.10	0.05~0.12	0.05~0.15	0.05~0.20
	PH	0.03~0.07	0.04~0.08	0.05~0.08	0.05~0.10	0.05~0.12	0.05~0.15
	PA	0.03~0.07	0.04~0.08	0.05~0.08	0.05~0.10	0.05~0.12	0.05~0.15
M	MM	0.03~0.08	0.04~0.09	0.05~0.10	0.05~0.12	0.05~0.12	0.05~0.15
	MA	0.03~0.08	0.04~0.09	0.05~0.10	0.05~0.12	0.05~0.12	0.05~0.15
N	NA	0.05~0.12	0.05~0.15	0.05~0.15	0.08~0.15	0.08~0.15	0.10~0.20
	NH	0.05~0.12	0.05~0.15	0.05~0.15	0.08~0.15	0.08~0.15	0.10~0.20
	NB	0.05~0.12	0.05~0.15	0.05~0.15	0.08~0.15	0.08~0.15	0.10~0.20
	NC	0.05~0.12	0.05~0.15	0.05~0.15	0.08~0.15	0.08~0.15	0.10~0.20



GROOVING/**PCBN**

PCBN /GROOVING

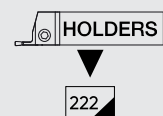
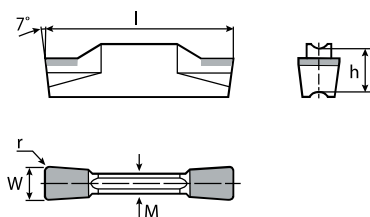
GRADES

ISO DIN 513	K					H					S				
	K01	K10	K20	K30	K40	P01	P10	P20	P30	P40	S01	S10	S20	S30	S40
PCBN															

COATED

MAGN

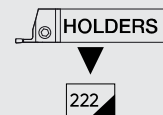
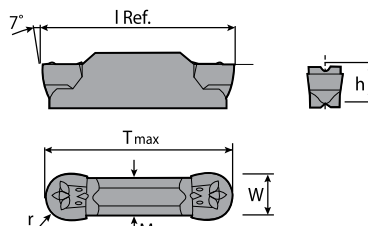
PARTING & GROOVING



DESCRIPTION		DIMENSIONS					PCBN						
							BC150	BC170	SC150	BC250	SC250	BC350	BC420
		W	r	l	M	h							
	MAGN200	2.0	0.2	16.0	1.2	3.5	●	●					●
	MAGN300	3.0	0.4	21.0	2.35	4.8	●	●					●
	MAGN400	4.0	0.4	21.0	3.3	4.8	●	●					●

MRMN

PARTING & GROOVING



DESCRIPTION		DIMENSIONS					PCBN					
							BC150	BC170	SC150	BC250	SC250	BC350
	MRMN300	3.0	1.5	21.0	2.35	4.8						●
	MRMN400	4.0	0.2	21.0	3.3	4.8						●

Vc • fn ▶ 210

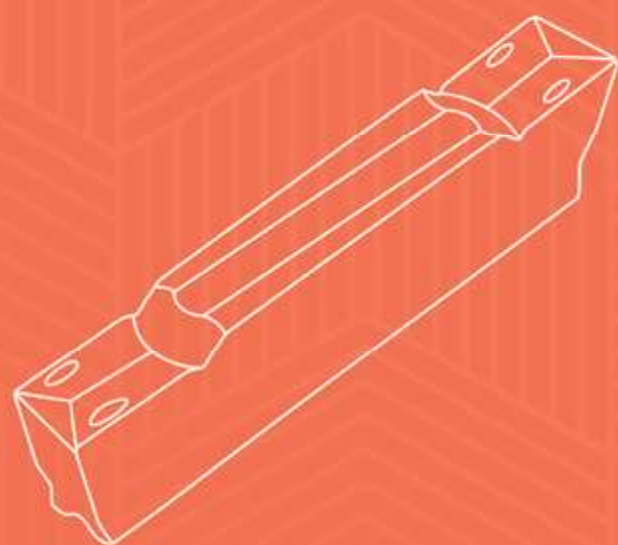
PCBN /GROOVING

CUTTING PARAMETERS

KG	GREY CAST IRON
KN	NODULAR CAST IRON
KW	WHITE CAST IRON
KS	SINTERED MATERIAL

HH	HARDENED STEEL
HC	CASE HARDENED STEEL
HB	BEARING STEEL
SA	SUPER ALLOYS (Ni Based)

MATERIAL		fn (mm/rev)	CUTTING CONDITION		PCBN							
					BC150	BC170	SC150	BC250	SC250	BC350	BC420	
H	HH	0,05~0,15				80~180	80~180					80~150
						60~120	60~120					80~150
	HC	0,05~0,15				80~140	80~140					80~140
						60~100	60~100					80~140
	HB	0,05~0,15				80~120	80~120					80~120
						60~100	60~100					80~120



GROOVING/**DIAMOND**

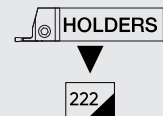
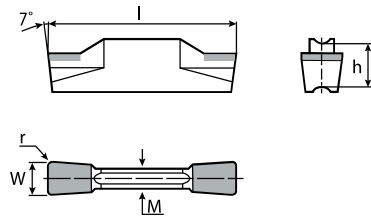
DIAMOND /GROOVING

GRADES

ISO DIN 513	N				
	N01	N10	N20	N30	N40
PCD		PC100			
	PC150				
		PC200			
			PC300		

MAGN

PARTING & GROOVING

[illegible] $V_c \bullet fn$ 

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DIAMOND /GROOVING

CUTTING PARAMETERS

NA	ALUMINIUM ALLOYS
NS	ALUMINIUM ALLOYS (Si≤15%)
NH	AL ALLOYS AGED AND HARDENED
NB	BRASS

NC	BRONZE AND ELECTROLYTIC COPPER
NG	GRAPHITE
HM	HARD METAL (Co≤16%)
ST	TITANIUM ALLOYS

MATERIAL		fn (mm/rev)	CUTTING CONDITION	PCD						
				PC100	PC150	PC200	PC300			
N	NA	0,05~0,15	○ ⊞ ◊		600~2500	600~2500				
		0,05~0,15	○ ⊞ ◊		600~2500	600~2500				
	NS	0,05~0,15	○ ⊞ ◊		500~1500	500~1500				
		0,05~0,15	○ ⊞ ◊		500~1500	500~1500				
	NB	0,05~0,15	○ ⊞ ◊		400~1200	400~1200				
		0,05~0,15	○ ⊞ ◊		400~1200	400~1200				
	NG	0,05~0,15	○ ⊞ ◊		300~800	300~800				
		0,05~0,15	○ ⊞ ◊		300~800	300~800				