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TÜM TÜRKİYE

EZEUS
CUTTING TOOLS

EZGİM
TEKNİK



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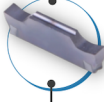


İÇİNDEKİLER



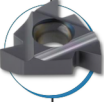
TORNALAMA
TURNING

1-113



KESME VE KANAL AÇMA
GROOVING

113-143



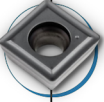
DİŞ AÇMA
THREADING

143-182



FREZELEME
MILLING

183-203



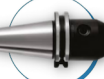
DELİK İŞLEME
DRILLING

204-207



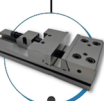
FREZELER
ENDMILLS

209-210



TUTUCULAR
HOLDERS

211-219



MENGENELER
VISES

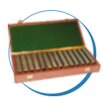
220



AYNALAR
VISES

221-222

DiĞER ÜRÜNLER



TORNALAMA TURNING/



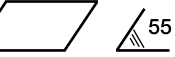




carbide
PCBN
diamond
ceramic

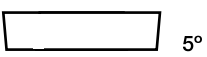
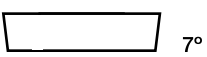
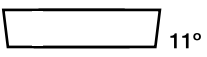
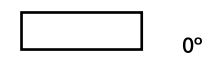




TORNALAMA TURNING / carbide

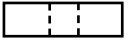
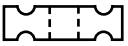
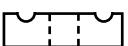










C	N	M	G	12	04	08
1	2	3	4	5	6	7

1	Geometry
C	
D	
K	
S	
T	
V	
W	

2	Clearance Angle
B	 5°
C	 7°
P	 11°
N	 0°

3	Tolerance	
		
G	±0,025	±0,13
M	±0,05 ±0,15	±0,13
U	±0,08 ±0,25	±0,13

4	Shape
A	
G	
M	
T	
X	Special

5	Shape
C	06 09 12 16 19 25 
D	07 11 15 
K	16 
S	09 12 15 19 25 
T	09 11 16 22 
V	11 16 22 
W	06 08 

6	Thickness
02	2,38
03	3,18
T3	3,97
04	4,76
06	6,35
09	9,52

7	Corner Radius
02	0,20
04	0,40
08	0,80
12	1,20
16	1,60
24	2,40

U	M
8	9

SC	2	5	25	S
10	11	12	13	14

8	Series of C/B
H	Huskar Series
U	Undying Series
S	Spirit Series
T	Tusk Series
A	Aluminium

9	ISO Grade
Heavy Machining	P H. Roughing
	R Roughing
	F Functional
Turning	R Roughing
	M Medium
	F Finishing
	J Ultra Finishing
Stainless Steel	S Standart
	K Roughing
Aluminium	LU Functional

10	Coating & Material
SC	CVD Coated Carbide
DC	Double CVD Coated
SP	PVD Coated Carbide
BP	New PVD Coating
SK	Ceramic
SS	Cermet
SU	Uncoated

11	Workpiece Material
2	Non-Ferrous Material
4	Hardened Steel
5	Steel
7	Stainless Steel
8	Cast Iron
9	General Machining

12	Machining
1~3	Turning
4	Threading
5	Grooving
9	Milling












13	ISO Grade
05	
10	
15	
20	
25	
30	
35	
40	
45	

14	Grade
S	Premium
non	Normal

Kaliteleri
Grades

	K					P					M					N				
	K01	K10	K20	K30	K40	P01	P10	P20	P30	P40	M01	M10	M20	M30	M40	N01	N10	N20	N30	N40
CARBIDE CVD	SC2805					SC2515					SC 1725S									
	SC1815					SC2515S														
	SC2815					SC2525														
	SC1825					SC2525S														
						SC2535														
						SC2540														
CARBIDE PVD						SP1525					SP1710S									
											SP2720S									
											SP1720									
CARBIDE UNCOATED																SU1215				
CERMET UNCOATED	SS1915					SS1915					SS1915									
						SS1925														

CVD Tornalama kaliteleri
CVD Turning Grades

MATERIAL	GRADE	ISO	Color	Operation
P	SC2515	P05-P25	BLACK	TM-TiCN+TiC+Al2O3+TiN
				Üstün aşınma direncine ve tokluğa sahip alt tabaka ile mükemmel termal çatlak/plastik deformasyona sahip kaplamanın birleştirilmesi sayesinde yüksek hızlı işleme için uygundur.
	SC2515S	P05-P25	YELLOW	TM-TiCN+TiC+Al2O3+TiN
				Üstün aşınma direncine ve tokluğa sahip alt tabaka ile mükemmel termal çatlak/plastik deformasyona sahip kaplamanın birleştirilmesi sayesinde yüksek hızlı işleme için uygundur.
	SC2525	P15-P35 M10-M20	BLACK	TM-TiCN+TiC+Al2O3+TiN
				Yüksek tokluğa sahip alt tabaka ve iyileştirilmiş kaynak/yontma direncine sahip kaplama tabakasının kullanıldığı genel işleme için ilk tavsiye edilen kalite
	SC2525S	P15-P35 M10-M20	YELLOW	TM-TiCN+TiC+Al2O3+TiN
				Yüksek tokluğa sahip alt tabaka ve iyileştirilmiş kaynak/yontma direncine sahip kaplama tabakasının kullanıldığı genel işleme için ilk tavsiye edilen kalite
	SC2535	P25-P40 M25-M40	YELLOW - BLACK	TM-TiCN+TiC+Al2O3+TiN
				Çeliğin orta ile düşük hızda işlenmesine uygundur.
SC2540	P30-P40 M30-M40	YELLOW - BLACK	TM-TiCN+TiC+Al2O3+TiN	
			Paslanmaz çeliğin orta ila yüksek hızda işlenmesine uygundur.	
M	SC1725S	M20-M30	BLACK	TM-TiCN+TiC+Al2O3
				Paslanmaz çeliğin yüksek hızda işlenmesine uygundur.
K	SC2805	K01-K10	BLACK	TM-TiCN+TiC+Al2O3+TiN
				Termal ve oksidasyona karşı mükemmel dirence sahip üstün CVD kaplamalı son derece sert alt tabakayı uyarlarken, Döküm demiri sürekli işlemede mükemmel performans sağlar.
	SC1815	K10-K20	BLACK	TM-TiCN+TiC+Al2O3+TiN
				Dökme demirin orta hızda işlenmesi
	SC2815	K10-K20	BLACK	TM-TiCN+TiC+Al2O3+TiN
				Dökme demirin orta hızda işlenmesi
SC1825	K20-K30	BLACK	TM-TiCN+TiC+Al2O3+TiN	
	Gri dökme demir ve sfero dökme demir için darbeli kesme			

Hem sürekli hem de darbeli kesmede özellikle dövme otomobil parçalarının ve rulman çeliğinin işlenmesi için universal kalite sağlar.

Her türlü çelik, karbon çeliği, alaşımlı çelik, haddelenmiş çelik, takım çeliği, yumuşak çelik, yatak çeliği ve diğer özel çelik türleri ve yeni kaplama teknolojisi daha uzun ömüre yol açan kaynak direncini ve talaş direncini artırır.



TiN coating layer with superior welding resistance

Üstün kaynak direncine sahip kaplama katmanı

TiC + Al2O3 coating layer with superior heat resistance

üstün ısı direncine sahip kaplama katmanı





TiCN coating layer with superior chipping resistance

Üstün ufalanma direncine sahip kaplama katmanı


Exclusive substrate material for coating with improved wear resistance.

Aşınma direncini artıran kaplama için özel alt tabaka malzemesi



PVD Tornalama kaliteleri PVD Turning Grades

MATERIAL	GRADE	ISO	Color	Operation
P	SP1525	P05-P25	DARK GRAY	2-4 mikron Nano TiAlN PVD Kaplama
				Yontma direnci kırılma direnci ve kaynak direnci ile kararlı işlenebilirlik, Paslanmaz çelik ve dövme çelik için orta, kaba işleme ve ağır darbeli kesme
M	SP1710S	M20-M30	COPPER	
				Son derece sert alt tabakaya uyum sağladığından, paslanmaz çeliğin orta hızda işlenmesinde Mükemmel. Termal ve oksidasyona karşı mükemmel dirence sahip Salina kaplamayı uyarlayarak
	SP1720	M15-M25	YELLOW	2-4 mikron Nano AlCrN AlCrSiN Kaplama
				ÇELİK için orta, kaba işleme ve ağır darbeli kesme. çelik ve dövme çelik
SP2720S	M10-M30	COPPER	PVD(Kaplamalı) - TiAlSiN, Birinci Sınıf	
				Paslanmaz çeliğin orta hızda işlenmesinde mükemmeldir. Termal ve oksidasyona karşı mükemmel dirence sahip

Uncoated Carbide Grades Kaplanmamış Karbür Kaliteleri







































































MATERIAL	GRADE	ISO	Color	Operation
N	SU1215	K05-K25	Silver	Ultra İnce alt tabaka
				Ultra İnce bir alt tabaka kullanılarak artırılmış aşınma ve ufalanma direnci, özel yüzey işleme ve ALU talaş kırıcının keskin kesme kenarı ile mükemmel uzun takım ömrü

Cermet Carbide Grades Sermet Karbür Kaliteleri

MATERIAL	GRADE	ISO	Color	Operation
UNI	SS1915	P05-P25	SILVER	Soğuk/sıcak dövme çeliğin ve Sinterlenmiş demirli alaşımın yüksek hızda ve düşük kesme derinliğinde sürekli işlenmesi için uygundur.
				
	SS1925	P05-P25	SILVER	Soğuk/sıcak dövme çeliğin ve Sinterlenmiş demirli alaşımın yüksek ilerleme ve yüksek kesme derinliğinde yüksek darbeli işleme için uygundur.
				








Talaş kırıcı form seçimi

Chipbreakers Selection (Negative )

	CN □□	DN □□	SN □□	TN □□	VN □□	WN □□
MA FLAT	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 		<input checked="" type="checkbox"/> 
MG BOX	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 
ALU	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 		<input checked="" type="checkbox"/> 
HQ	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 		<input checked="" type="checkbox"/> 		<input checked="" type="checkbox"/> 
PM	<input checked="" type="checkbox"/> 			<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 
ST		<input checked="" type="checkbox"/> 		<input checked="" type="checkbox"/> 		<input checked="" type="checkbox"/> 
TK	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 		<input checked="" type="checkbox"/> 
TM	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 				<input checked="" type="checkbox"/> 
TS	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 
UF		<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 
UM	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 
UR	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 		<input checked="" type="checkbox"/> 
US	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 		<input checked="" type="checkbox"/> 
OTHERS DİĞERLERİ			<input checked="" type="checkbox"/> (TF) 	<input checked="" type="checkbox"/> (R/L-P) 		<input checked="" type="checkbox"/> (HA) 
			<input checked="" type="checkbox"/> (ZR) 	<input checked="" type="checkbox"/> (R/L-C) 		
			<input checked="" type="checkbox"/> (HTR) 	<input checked="" type="checkbox"/> (UH) 		
				<input checked="" type="checkbox"/> (VQ) 		

Talaş kırıcı form seçimi

Chipbreakers Selection (Positive)

	CC □ □	DC □ □	SC □ □	TC □ □	VB □ □	VC □ □
ER/L-U	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 				
L-F	<input checked="" type="checkbox"/> 					
L/R-W	<input checked="" type="checkbox"/> 					
L-Y					<input checked="" type="checkbox"/> 	
ALU	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 
CG	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 		<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 
HF	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 		
HM	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 		
HQ	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 		<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	
HR	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 		<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	
TS	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 		<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	
VM	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 		<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	
VQ	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 				
VW		<input checked="" type="checkbox"/> 				

TURNING

Machining Examples

P Carbon Steel Karbon çelik (1.1040)		
■Workpiece iş parçası	Hub Merkez	
■Cutting Conditions Kesme Koşulları	Vc (m/min)= 250	fn (mm/rev)= 0.2
	ap (mm)= 1,5	Wet
■Designation Seçim	Insert Elmas	CNMG120408-UM CS5225
	Toolholder Takım	DCLNR2525-M12
■Test		

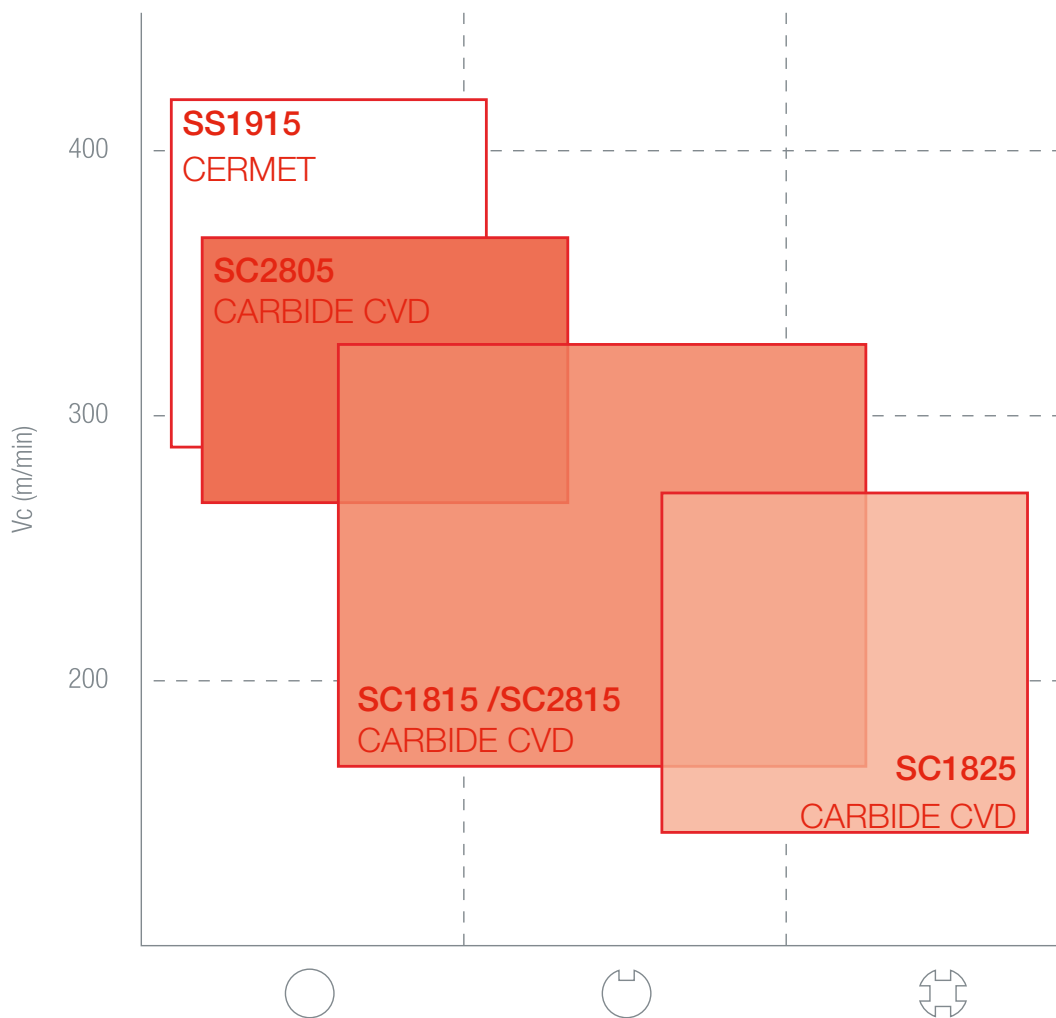
P Alloy Steel Alaşımli çelik (2379)		
■Workpiece iş parçası	Automobile Part	
■Cutting Conditions Kesme Koşulları	Vc (m/min)= 250	fn (mm/rev)= 0.2
	ap (mm)= 1,5	Wet
■Designation Seçim	Insert Elmas	CNMG120408-UM CS5215S
	Toolholder Takım	DCLNR2525-M12
■Test		

M Stainless Steel Paslanmaz çelik (316L)		
■Workpiece iş parçası	Valve	
■Cutting Conditions Kesme Koşulları	Vc (m/min)= 120	fn (mm/rev)= 0.2
	ap (mm)= 1,5	Wet
■Designation Seçim	Insert Elmas	CNMG120408-TS PS7220S
	Toolholder Takım	DCLNR2525-M12
■Test		

K Gray Cast Iron Gri Dökme Demir (GG25)		
■Workpiece iş parçası	Disc	
■Cutting Conditions Kesme Koşulları	Vc (m/min)= 350	fn (mm/rev)= 0.25
	ap (mm)= 1,5	Wet
■Designation Seçim	Insert Elmas	CNMA120408 CS8215
	Toolholder Takım	DCLNR2525-M12
■Test		

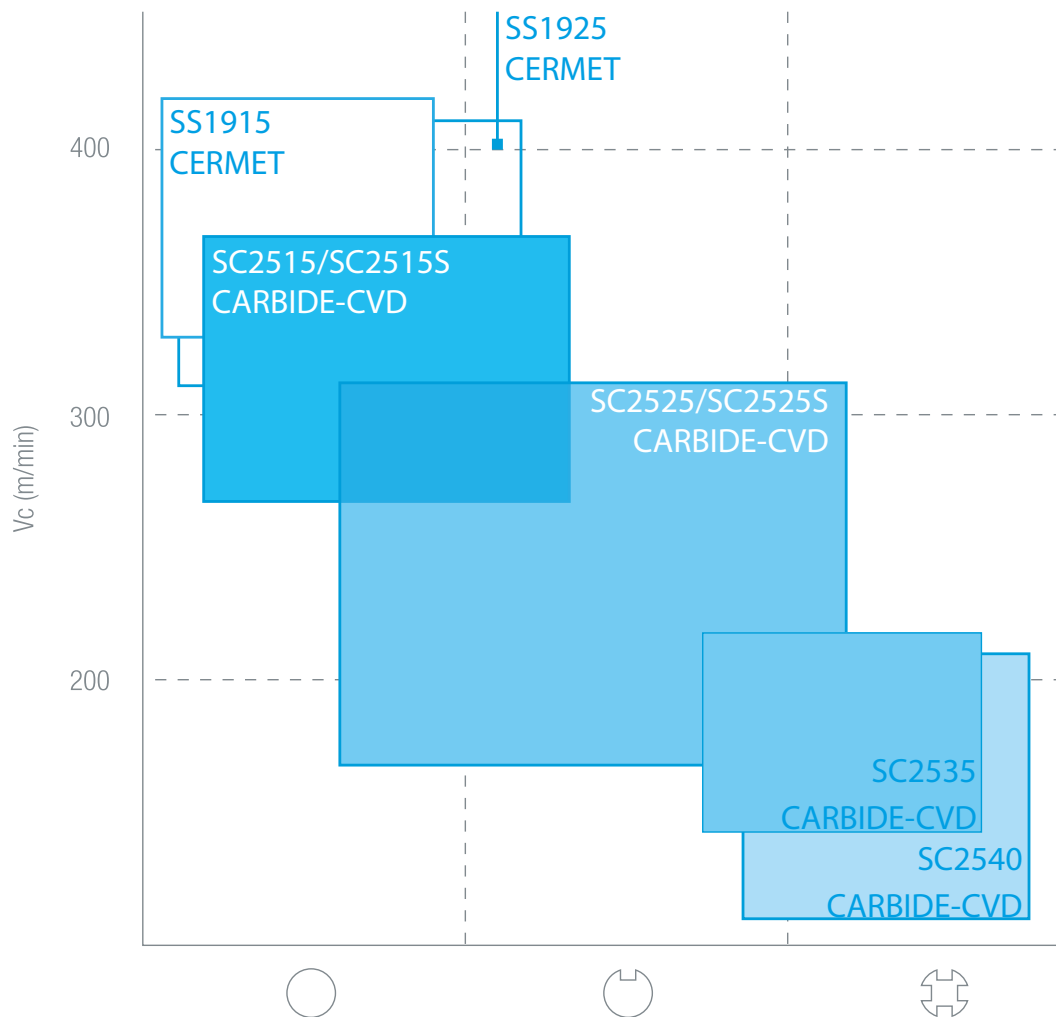
Range ISO **K**

Kaliteleri
Grades



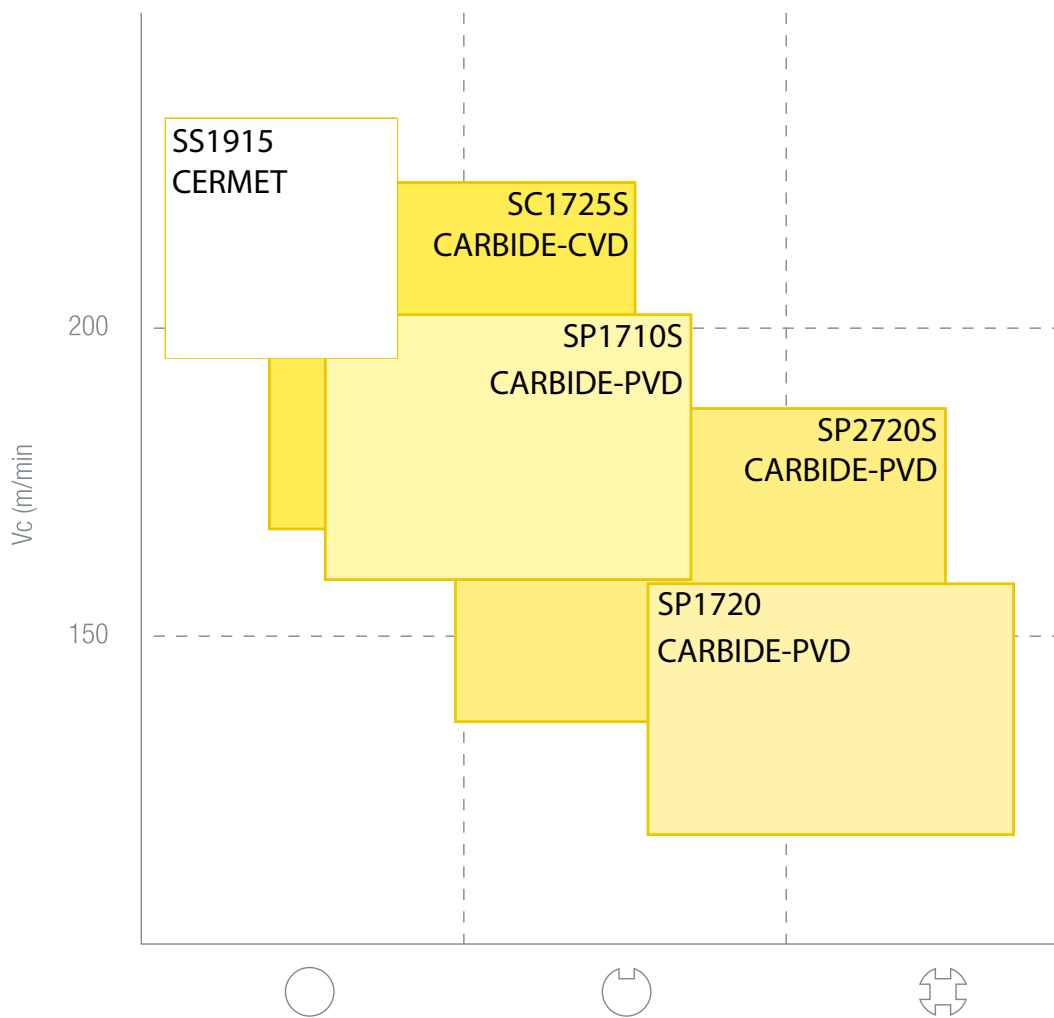
Range ISO **P**

Kaliteleri
Grades



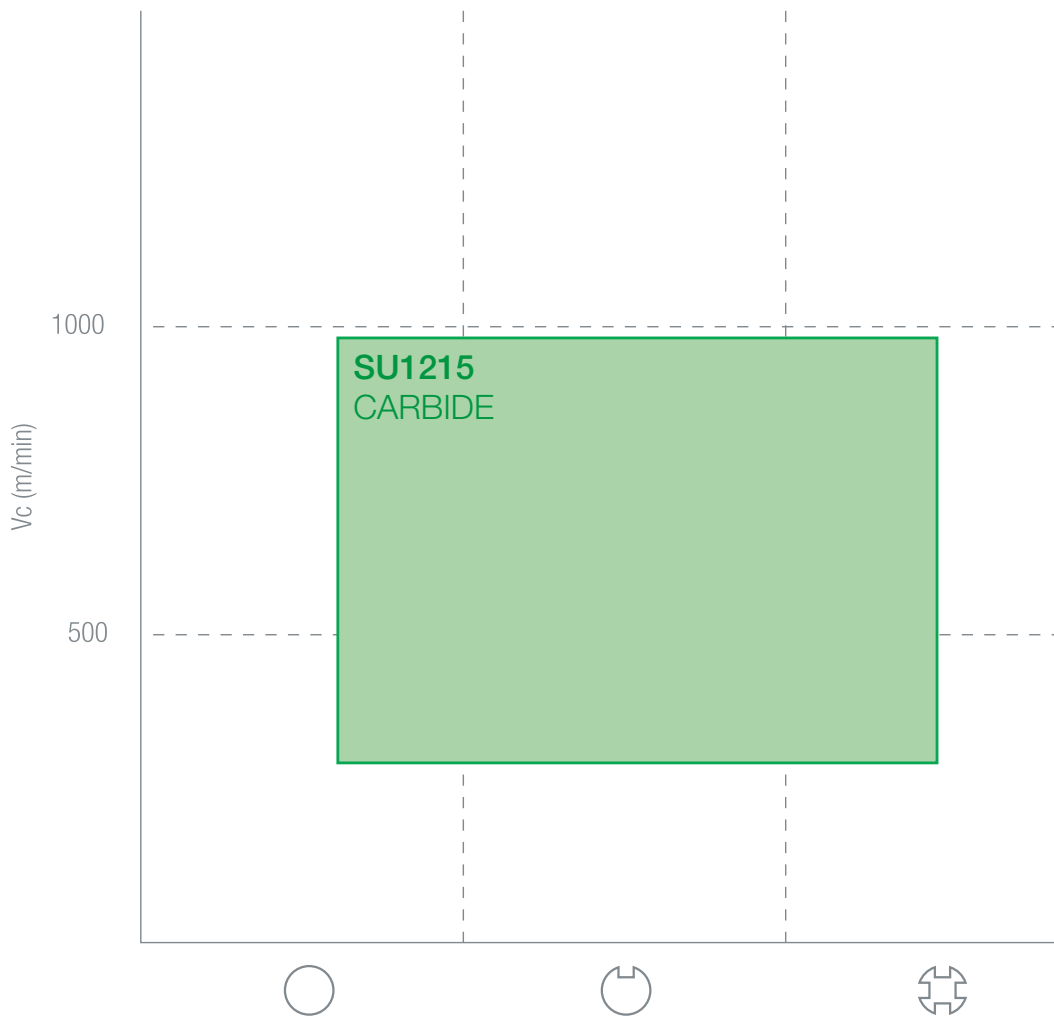
Range ISO **M**

Kaliteleri
Grades



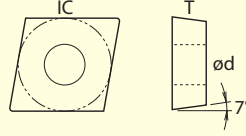
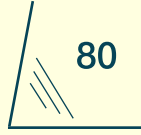
Range ISO **N**

Kaliteleri
Grades



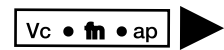
POSITIVE 7°
with hole

CC□□



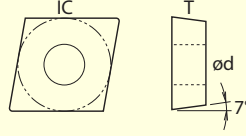
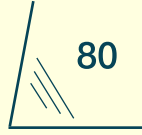
CC □□	0602 □□	09T3 □□	1204 □□
IC	6,35	9,525	12,7
T	2,38	3,97	4,76
ød	2,80	4,40	5,50

ÜRÜN AÇIKLAMASI DESCRIPTION	CARBIDE-CVD										CARBIDE-PVD			CERMET	CARBIDE			
	SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215
	CCGT060202EL-U															•		
	CCGT060204EL-U															•		
	CCGT09T302EL-U															•		
	CCGT09T304EL-U															•		
	CCGT060202ER-U															•		
	CCGT060204ER-U															•		
	CCGT09T302ER-U															•		
	CCGT09T304ER-U															•		
	CCGT030102L-F															•		
	CCGT030104L-F															•		
	CCGT040102L-F															•		
	CCGT040104L-F															•		
	CCGT060202L-W15															•		
	CCGT060204L-W15															•		
	CCGT060202R-W15															•		
	CCGT060204R-W15															•		
	CCGT09T302L-W20															•		
	CCGT09T304L-W20															•		
	CCGT09T302R-W20															•		
	CCGT09T304R-W20															•		
	CCGT060202-ALU																	•
	CCGT060204-ALU																	•
	CCGT060208-ALU																	•
	CCGT09T302-ALU																	•
	CCGT09T304-ALU																	•
	CCGT09T308-ALU																	•
	CCGT09T312-ALU																	•
	CCGT120404-ALU																	•
	CCGT120408-ALU																	•









POSITIVE 7°
with hole

CC□□



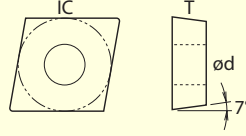
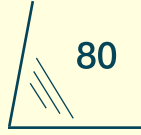
CC □□	0602 □□	09T3 □□	1204 □□
IC	6,35	9,525	12,7
T	2,38	3,97	4,76
ød	2,80	4,40	5,50

ÜRÜN AÇIKLAMASI DESCRIPTION		CARBIDE-CVD								CARBIDE-PVD				CERMET		CARBIDE			
		SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215
	CCMT060202-GC																•		
	CCMT060204-GC																•		
	CCMT060208-GC																•		
	CCMT09T304-GC																•		
	CCMT09T308-GC																•		
	CCMT060202-FH	•														•			
	CCMT060204-FH	•	•		•	•			•	•				•	•				
	CCMT09T302-FH	•																	
	CCMT09T304-FH	•	•		•	•			•	•				•	•				
	CCMT060204-MH	•	•		•	•			•	•				•	•				
	CCMT060208-MH	•	•		•	•			•	•				•	•				
	CCMT09T302-MH	•																	
	CCMT09T304-MH	•	•		•	•			•	•				•	•				
	CCMT09T308-MH	•	•		•	•			•	•				•	•				
	CCMT120404-MH	•	•		•	•			•	•				•	•				
	CCMT120408-MH	•	•		•	•			•	•				•	•				
CCMT120412-MH									•										
	CCMT060204-QH																•		
	CCMT09T304-QH				•												•		
	CCMT09T308-QH																•		
	CCMT060208-RH									•									
	CCMT09T308-RH									•									
	CCMT120408-RH									•									
	CCMT060204-ST													•					
	CCMT060208-ST													•					
	CCMT09T304-ST													•					
	CCMT09T308-ST													•					





POSITIVE 7°
with hole

CC□□



CC □□	0602 □□	09T3 □□	1204 □□
IC	6,35	9,525	12,7
T	2,38	3,97	4,76
ød	2,80	4,40	5,50

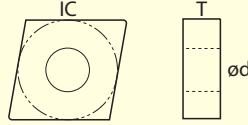
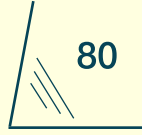
ÜRÜN AÇIKLAMASI DESCRIPTION	CARBIDE-CVD								CARBIDE-PVD				CERMET		CARBIDE			
	SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215
  CCMT060204-MV CCMT09T304-MV CCMT09T308-MV		•		•							•	•	•					
		•		•							•	•	•					
		•		•							•	•	•					
  CCMT060204-QV CCMT09T304-QV		•		•							•	•	•					
		•		•							•	•	•					
  CCMW060204 CCMW09T304 CCMW09T308 CCMW120404 CCMW120408																		



Vc • fn • ap

NEGATIVE
with hole

CN□□



CN □□	1204 □□	1606 □□	1906 □□
IC	12,7	15,875	12,7
T	4,76	6,35	4,76
ød	5,16	6,35	5,50

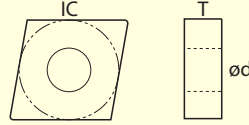
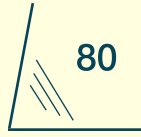
ÜRÜN AÇIKLAMASI DESCRIPTION		CARBIDE-CVD								CARBIDE-PVD				CERMET	CARBIDE				
		SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215
	CNMA120404																		
	CNMA120408																		
	CNMA120412																		
	CNMA120416																		
	CNMA160608																		
	CNMA160612																		
	CNMA160616																		
	CNMA190612																		
	CNMA190616																		
	CNMG120404																		
	CNMG120408	•	•	•	•	•	•	•	•	•		•	•		•				
	CNMG120412	•	•	•	•	•	•	•	•	•		•	•	•	•				
	CNMG120416	•		•		•	•	•	•	•				•	•				
	CNMG160608	•	•	•	•	•	•	•	•	•		•	•	•	•				
	CNMG160612	•	•	•	•	•	•	•	•	•		•	•	•	•				
	CNMG160616	•	•	•	•			•	•			•	•						
	CNMG190608	•	•	•	•							•	•						
	CNMG190612							•	•										
CNMG190616	•	•	•	•			•	•			•	•							
	CNMG120402-ALU																		•
	CNMG120404-ALU																		•
	CNMG120408-ALU																		•
	CNMG120412-ALU																		•
	CNMG120404-HQ				•							•	•	•		•			
	CNMG120408-HQ															•			

finishing medium roughing










Vc • fn • ap

NEGATIVE
with hole

CN□□



CN □□	0904 □□	1204 □□	1606 □□
IC	9,525	12,7	15,875
T	4,76	4,76	6,35
Ød	3,81	5,16	6,35

ÜRÜN AÇIKLAMASI DESCRIPTION	CARBIDE-CVD								CARBIDE-PVD				CERMET		CARBIDE					
	SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215		
  CNMG120404-MP CNMG120408-MP		•		•				•												
		•		•				•												
 CNMG120404-FT CNMG120408-FT														•	•					
														•	•					
  CNMG090412-KT CNMG120408-KT CNMG120412-KT														•	•					
														•	•					
														•	•					
  CNMG090408-MT			•		•															
  CNMG090408-ST CNMG090412-ST CNMG120404-ST CNMG120408-ST CNMG120412-ST CNMG160608-ST CNMG160612-ST CNMG190608-ST CNMG190612-ST CNMG190616-ST												•	•							
												•	•							
					•							•	•	•	•					
					•							•	•	•	•					
												•	•							
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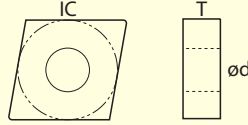
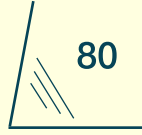
 finishing
  medium
  roughing

Vc • fn • ap



NEGATIVE
with hole

CN□□



CN □□	1204 □□	1606 □□	1906 □□
IC	12,7	15,875	12,7
T	4,76	6,35	4,76
ød	5,16	6,35	5,50

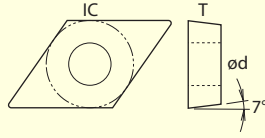
ÜRÜN AÇIKLAMASI DESCRIPTION		CARBIDE-CVD										CARBIDE-PVD			CERMET	CARBIDE			
		SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215
	CNMG120404-MU	•		•		•	•			•	•				•	•			
	CNMG120412-MU	•		•		•	•			•	•				•	•			
	CNMG120416-MU	•		•		•	•			•	•				•	•			
	CNMG120616-MU	•		•		•	•			•	•				•	•			
	CNMG160608-MU	•		•		•	•			•	•				•	•			
	CNMG160612-MU	•		•		•	•			•	•				•	•			
	CNMG160616-MU	•		•		•	•			•	•				•	•			
	CNMG190608-MU	•		•		•	•			•	•				•	•			
	CNMG190612-MU	•		•		•	•			•	•				•	•			
	CNMG190616-MU	•		•		•	•			•	•				•	•			
	CNMG120408-RU	•		•		•													
	CNMG120412-RU	•		•		•													
	CNMG120612-RU	•		•		•													
	CNMG160612-RU	•		•		•													
	CNMG160616-RU	•		•		•													
	CNMG190612-RU	•		•		•	•								•	•			
	CNMG190616-RU	•		•		•	•			•	•				•				
	CNMG190624-RU			•		•													
	CNMM190612-RU			•		•													
	CNMM190616-RU			•		•													
	CNMM190624-RU			•		•													
	CNMM250724-RU			•		•													
	CNMM250924-RU			•	•	•													
	CNMG120404-SU	•		•															
CNMG120408-SU	•		•																

finishing medium roughing

Vc • fn • ap

POSITIVE 7°
with hole

DC□□



DC □□	0702 □□	11T3 □□
IC	6,35	9,525
T	2,38	3,97
Ød	2,80	4,40

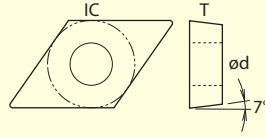
ÜRÜN AÇIKLAMASI DESCRIPTION		CARBIDE-CVD								CARBIDE-PVD			CERMET	CARBIDE							
		SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215		
	DCGT070202-ALU																			•	
	DCGT070204-ALU																				•
	DCGT070208-ALU																				•
	DCGT11T302-ALU																				•
	DCGT11T304-ALU																				•
	DCGT11T308-ALU																				•
	DCGT11T312-ALU																				•
	DCGT11T302EL-U																			•	
	DCGT11T304EL-U																				•
	DCGT11T302ER-U																				•
	DCGT11T304ER-U																				•
	DCMT070204-GC																				•
	DCMT11T302-GC																				•
	DCMT11T304-GC																				•
	DCMT11T308-GC																				•
	DCMT070202-FH	•	•	•	•										•	•					•
	DCMT070204-FH	•	•	•	•										•	•					•
	DCMT11T304-FH	•	•	•	•										•	•					•
	DCMT070204-MH	•	•	•	•										•	•					•
	DCMT070208-MH	•	•	•	•										•	•					•
	DCMT11T302-MH	•	•	•	•										•	•					•
	DCMT11T304-MH	•	•	•	•										•	•					•
	DCMT11T308-MH	•	•	•	•										•	•					•
	DCMT11T312-MH	•	•	•	•										•	•					•

finishing medium roughing

Vc • fn • ap

POSITIVE 7°
with hole

DC□□



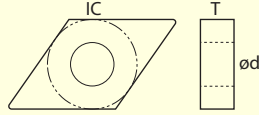
DC □□	0702 □□	11T3 □□
IC	6,35	9,525
T	2,38	3,97
ød	2,80	4,40

ÜRÜN AÇIKLAMASI DESCRIPTION		CARBIDE-CVD								CARBIDE-PVD				CERMET	CARBIDE					
		SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215	
	DCMT070202-QH																•			
	DCMT070204-QH																	•		
	DCMT11T302-QH																	•		
	DCMT11T304-QH																	•		
	DCMT11T308-QH																	•		
	DCMT11T304-RH	•	•	•	•					•	•			•	•					
	DCMT070204-ST																•			
	DCMT070208-ST																•			
	DCMT11T302-ST																•			
	DCMT11T304-ST																•			
	DCMT11T308-ST																•			
	DCMT11T304-MV			•	•							•	•							
	DCMT070204-QV			•	•							•	•							
	DCMT070208-QV			•	•							•	•							
	DCMT11T304-WV			•	•							•	•							
	DCMT11T308-WV			•	•							•	•							



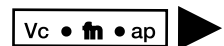
NEGATIVE
with hole

DN□□



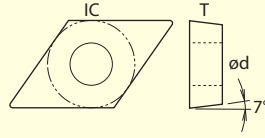
DN □□	1104 □□	1504 □□	1506 □□
IC	9,525	12,7	12,7
T	4,76	4,76	6,35
ød	3,81	5,16	5,16

ÜRÜN AÇIKLAMASI DESCRIPTION	CARBIDE-CVD					CARBIDE-PVD				CERMET	CARBIDE							
	SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215
 DNMA150408 DNMA150412 DNMA150608 DNMA150612 DNMA150616									•	•								
									•	•								
									•	•								
									•	•								
									•	•								
 DNMG110408 DNMG150404 DNMG150408 DNMG150412 DNMG150604 DNMG150608 DNMG150612		•		•					•	•		•	•					
			•		•				•	•		•	•					
			•		•				•	•		•	•					
			•		•				•	•		•	•					
		•	•	•	•	•	•	•	•	•	•	•	•	•	•			
		•	•	•	•	•	•	•	•	•	•	•	•	•	•			
 DNMG150602-ALU DNMG150604-ALU DNMG150608-ALU DNMG150612-ALU																		•
																		•
																		•
																		•
 DNMG150608-AH														•				
 DNMG150608-QH																•		
 DNMG150604L-TS DNMG150608L-TS DNMG150604R-TS DNMG150608R-TS		•		•								•	•					
			•		•							•	•					
			•		•							•	•					
			•		•							•	•					



NEGATIVE
with hole

DN□□



DN □□	1104 □□	1504 □□	1506 □□
IC	9,525	12,7	12,7
T	4,76	4,76	6,35
ød	3,81	5,16	5,16

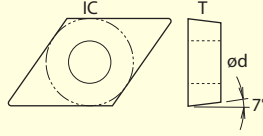
ÜRÜN AÇIKLAMASI DESCRIPTION	CARBIDE-CVD								CARBIDE-PVD				CERMET	CARBIDE				
	SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215
 DNMG110404-KT DNMG110408-KT DNMG150608-KT														•	•			
															•			
															•			
 DNMG150608-MT		•		•								•	•					
 DNMG110404-ST DNMG110408-ST DNMG110412-ST DNMG150408-ST DNMG150412-ST DNMG150604-ST DNMG150608-ST DNMG150612-ST												•	•	•	•			
												•	•	•	•			
												•	•					
												•	•					
												•	•	•	•			
												•	•	•	•			
												•	•	•	•			
												•	•	•	•			
 DNMG150404-FU DNMG150408-FU DNMG150604-FU	•	•	•	•														
	•	•	•	•														
	•	•	•	•														
 DNMG110404-MU DNMG110408-MU DNMG110412-MU DNMG150404-MU DNMG150408-MU DNMG150412-MU DNMG150604-MU DNMG150608-MU DNMG150612-MU	•	•	•	•				•	•					•	•			
	•	•	•	•				•	•					•	•			
	•	•	•	•														
	•	•	•	•				•	•					•	•			
	•	•	•	•				•	•					•	•			
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	•	•	•	•				•	•					•	•			
	•	•	•	•				•	•					•	•			

finishing
 medium
 roughing



Vc • fn • ap

NEGATIVE
with hole

DN□□



DN □□	1104 □□	1504 □□	1506 □□
IC	9,525	12,7	12,7
T	4,76	4,76	6,35
ød	3,81	5,16	5,16

ÜRÜN AÇIKLAMASI DESCRIPTION		CARBIDE-CVD								CARBIDE-PVD			CERMET		CARBIDE				
		SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215
	DNMG150608-RU	•		•		•													
	DNMG150612-RU	•		•		•													
	DNMG150404-SU	•		•		•													
	DNMG150408-SU	•		•		•													
	DNMG150604-SU	•		•		•													

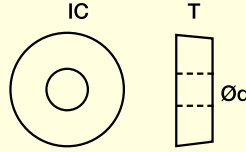
 finishing
  medium
  roughing

Vc • fn • ap 



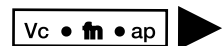
POSITIVE 7°
with hole

RC□□



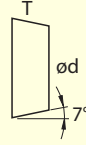
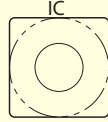
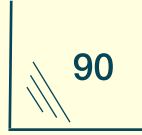
RC □□	0602 □□	0803 □□	10T3 □□
IC	6,0	8,0	10,0
T	2,36	3,18	3,18
Ød	2,80	3,35	3,60

ÜRÜN AÇIKLAMASI DESCRIPTION		CARBIDE-CVD						CARBIDE-PVD			CERMET		CARBIDE							
		SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215	
	RCGT0602M0-ALU																			•
	RCGT0803M0-ALU																			•
	RCGT1003M0-ALU																			•
	RCGT10T3M0-ALU																			•
	RCGT1204M0-ALU																			•
	RCMX0803M0	•	•									•	•							
	RCMX1003M0	•	•									•	•							
	RCMX1204M0	•	•									•	•							
	RCMX1606M0	•	•									•	•	•						
	RCMX2006M0	•	•					•	•	•		•	•							
	RCMX2507M0	•	•			•		•	•			•	•							
	RCMX3209M0	•	•			•						•	•							



POSITIVE 7°
with hole

SC□□



SC □□	09T3 □□	1204 □□
IC	9,525	12,7
T	3,97	4,76
ød	4,40	5,16

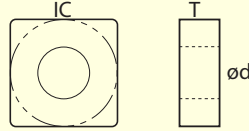
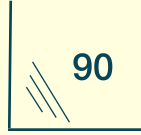
ÜRÜN AÇIKLAMASI DESCRIPTION		CARBIDE-CVD								CARBIDE-PVD				CERMET		CARBIDE					
		SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215		
	SCGT09T302-ALU																			•	
	SCGT09T304-ALU																				•
	SCGT09T308-ALU																				•
	SCGT09T312-ALU																				•
	SCGT120404-ALU																				•
	SCGT120408-ALU																				•
	SCMT09T304-FH					•									•						
	SCMT09T304-MH						•	•							•						
	SCMT09T308-MH	•	•		•	•			•	•				•	•						
	SCMT120404-MH	•	•		•	•			•	•				•	•						
	SCMT120408-MH	•	•		•	•			•	•				•	•						

finishing medium roughing

Vc • fn • ap

NEGATIVE
with hole

SN □□



SN □□	1204 □□	1206 □□	1506 □□
IC	12,7	12,7	15,875
T	4,76	6,35	6,35
ød	5,16	5,16	6,35

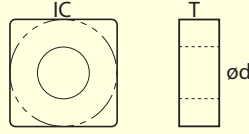
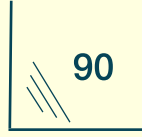
ÜRÜN AÇIKLAMASI DESCRIPTION		CARBIDE-CVD								CARBIDE-PVD			CERMET	CARBIDE					
		SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215
	SNMA120408							•	•	•	•				•				
	SNMA120412							•	•	•	•								
	SNMA120416							•	•	•	•								
	SNMA150612							•	•	•	•								
	SNMA150616							•	•	•	•								
	SNMA190612							•	•	•	•								
	SNMA190616							•	•	•	•								
	SNMA250924							•	•	•	•								
	SNMG120404	•	•	•	•	•						•	•						
	SNMG120408	•	•	•	•	•						•	•						
	SNMG120412	•	•	•	•	•						•	•						
	SNMG120416							•	•										
	SNMG190612	•	•	•	•	•		•	•				•	•					
	SNMG120402-ALU																	•	
	SNMG120404-ALU																	•	
	SNMG120408-ALU																	•	
	SNMG120412-ALU																	•	
	SNMG120408-FT			•											•	•			
	SNMG120404-KT														•	•			
	SNMG120408-KT														•	•			
	SNMG120412-KT														•	•			
	SNMG120612-KT														•	•			
	SNMG120404-ST		•		•							•	•	•	•				
	SNMG120408-ST											•	•	•	•				
	SNMG120412-ST											•	•	•	•				
	SNMG150608-ST											•	•						

finishing medium roughing

Vc • fn • ap

NEGATIVE
with hole

SN □□



SN □□	1906 □□	2507 □□	2509 □□
IC	19,05	25,4	25,4
T	6,35	7,94	9,52
ød	7,93	9,12	9,12

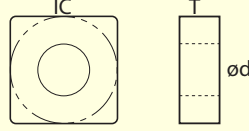
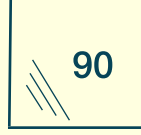
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		SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215
	SNMG120404-FU	•	•	•															
	SNMG120404-MU	•	•	•	•			•	•					•	•				
	SNMG120408-MU	•	•	•	•			•	•					•	•				
	SNMG120412-MU	•	•	•	•			•	•					•	•				
	SNMG120616-MU	•	•	•	•														
	SNMG150608-MU	•	•	•	•	•			•	•				•	•				
	SNMG190612-MU	•	•	•	•														
	SNMG190616-MU	•	•	•	•										•				
	SNMG120408-RU	•	•	•	•														
	SNMG120412-RU	•	•	•	•														
	SNMG120612-RU	•	•	•	•														
	SNMG150612-RU	•	•	•	•	•			•	•				•	•				
	SNMG190612-RU	•	•	•	•	•			•	•				•	•				
	SNMG190616-RU	•	•	•	•	•			•	•				•	•				
	SNMG190624-RU	•	•	•	•	•			•	•				•	•				
	SNMG250724-RU	•	•	•	•														
	SNMG250924-RU	•	•	•	•	•			•	•				•	•				
	SNMG120404-SU	•	•	•	•														
	SNMG120408-SU	•	•	•	•	•			•	•				•	•				
	SNMG120412-SU	•	•	•	•														
	SNMG120412-RZ									•	•								
	SNMG120416-RZ									•	•								

finishing medium roughing


Vc • fn • ap

NEGATIVE
with hole


SN □□



SN □□	1204 □□	1206 □□	1506 □□
IC	12,7	12,7	15,875
T	4,76	6,35	6,35
ød	5,16	5,16	6,35

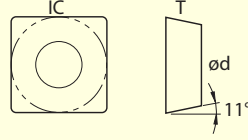
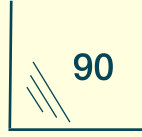
ÜRÜN AÇIKLAMASI DESCRIPTION		CARBIDE-CVD								CARBIDE-PVD			CERMET		CARBIDE				
		SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215
	SNMM250724-RTH	•		•		•													
	SNMM250732-RTH	•		•		•													
	SNMM250924-RTH	•		•		•													
	SNMM250932-RTH	•		•		•													
	SNMM150612-RU	•		•		•													
	SNMM150616-RU	•		•		•													
	SNMM190612-RU	•		•		•													
	SNMM190616-RU	•		•		•													
	SNMM190624-RU	•		•		•													
	SNMM250724-RU	•		•		•													
SNMM250924-RU	•		•		•														

 finishing  medium  roughing

Vc • fn • ap 

POSITIVE 11°
with hole

SP □□

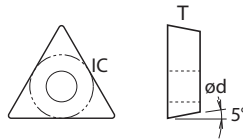


SP □□	1203 □□	1204 □□
IC	12,7	12,7
T	3,18	4,76
ød	5,16	5,16

ÜRÜN AÇIKLAMASI DESCRIPTION		CARBIDE-CVD								CARBIDE-PVD			CERMET	CARBIDE						
		SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215	
	SPMT120408													•	•					
	SPMT120412																			
	SPMT120416																			
	SPMT120420																			
	SPMT120408-MH			•											•	•				

POSITIVE 5°
with hole

TB □□

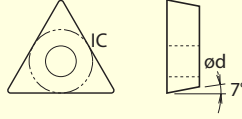
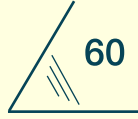


TB □□	0601 □□
IC	3,97
T	1,59
ød	2,16

ÜRÜN AÇIKLAMASI DESCRIPTION		CARBIDE-CVD								CARBIDE-PVD			CERMET	CARBIDE							
		SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215		
	TBGT060102L																	•			
	TBGT060104L																		•		

POSITIVE 7°
with hole

TC □□



TC □□	0902 □□	1102 □□	16T3 □□
IC	5,56	6,35	9,525
T	2,38	2,38	3,97
ød	2,50	2,80	4,40

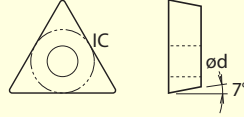
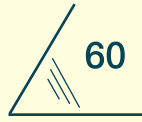
ÜRÜN AÇIKLAMASI DESCRIPTION	CARBIDE-CVD								CARBIDE-PVD				CERMET		CARBIDE				
	SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215	
	TCGT090202-ALU																		•
	TCGT090204-ALU																		•
	TCGT090208-ALU																		•
	TCGT110202-ALU																		•
	TCGT110204-ALU																		•
	TCGT110208-ALU																		•
	TCGT16T302-ALU																		•
	TCGT16T304-ALU																		•
	TCGT16T308-ALU																		•
	TCGT16T312-ALU																		•
	TCGW16T304								•	•									•
	TCGW16T308								•	•									•
	TCGW16T312								•	•									•
	TCMT110204-GC															•			•
	TCMT090204-FH	•	•	•	•			•	•					•	•				•
	TCMT110204-FH	•	•	•	•			•	•					•	•				•
	TCMT16T304-FH	•	•	•	•			•	•					•	•				•
	TCMT090204-MH	•	•	•	•			•	•					•	•				•
	TCMT090208-MH	•	•	•	•			•	•					•	•				•
	TCMT110204-MH	•	•	•	•			•	•					•	•				•
	TCMT110208-MH	•	•	•	•			•	•					•	•				•

finishing
 medium
 roughing

Vc • fn • ap

POSITIVE 7°
with hole

TC □□



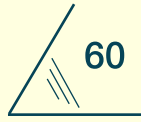
TC □□	0902□□	1102□□	16T3□□
IC	5,56	6,35	9,525
T	2,38	2,38	3,97
ød	2,50	2,80	4,40

ÜRÜN AÇIKLAMASI DESCRIPTION		CARBIDE-CVD								CARBIDE-PVD				CERMET		CARBIDE			
		SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215
	TCMT16T304-MH	•		•		•	•			•	•					•			
	TCMT16T308-MH	•		•		•	•			•	•					•			
	TCMT16T312-MH	•		•															
	TCMT220408-MH	•		•															
	TCMT090204-QH																•		
	TCMT110204-QH																•		
	TCMT110208-QH																•		
	TCMT16T304-QH																		
	TCMT110208-RH									•	•								
	TCMT110204-ST														•				
	TCMT16T304-ST														•				
	TCMT16T308-ST														•				
	TCMT16T304-MV		•		•							•	•						
	TCMT16T308-MV		•		•							•	•						



NEGATIVE
with hole

TN□□



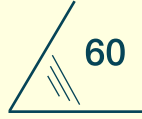
TN □ □	1604 □ □	2204 □ □	2706 □ □
IC	9,525	12,7	15,875
T	4,76	4,76	6,35
ød	3,81	5,16	6,35

ÜRÜN AÇIKLAMASI DESCRIPTION	CARBIDE-CVD								CARBIDE-PVD				CERMET	CARBIDE						
	SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215		
 	TNGG160402L-P																			
	TNGG160404L-P																			
	TNGG160402R-P																			
	TNGG160404R-P																			
 	TNMA160404																			
	TNMA160408																			
	TNMA160412																			
	TNMA160416																			
	TNMA220404																			
	TNMA220408																			
	TNMA220412																			
	TNMA220416																			
 	TNMG160404																			
	TNMG160408																			
	TNMG160412																			
	TNMG220408																			
	TNMG220412																			
	TNMG220416																			
	TNMG270612																			
	TNMG270616																			
	TNMG330704																			
	TNMG330724																			
	TNMG330924																			
	 	TNMG160402-ALU																		
TNMG160404-ALU																				
TNMG160408-ALU																				
TNMG160412-ALU																				



NEGATIVE
with hole

TN□□



TN □□	1604□□	2204□□	2706□□
IC	9,525	12,7	15,875
T	4,76	4,76	6,35
ød	3,81	5,16	6,35

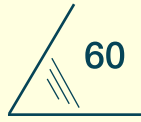
ÜRÜN AÇIKLAMASI DESCRIPTION		CARBIDE-CVD								CARBIDE-PVD				CERMET	CARBIDE				
		SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215
	TNMG160404-QH																•		
	TNMG160408-QH																	•	
	TNMG160404L-C																•		
	TNMG160408L-C																•		
	TNMG160404R-C																•		
	TNMG160408R-C																•		
	TNMG160404-MP		•		•						•	•	•						
	TNMG160408-MP		•		•						•	•	•						
	TNMG160412-MP				•						•	•	•						
	TNMG160404L-TS	•		•											•	•			
	TNMG160408L-TS	•		•											•	•			
	TNMG160404R-TS	•		•											•	•			
	TNMG160408R-TS	•		•											•	•			
	TNMG160404-KT														•	•			
	TNMG220408-KT														•	•			
	TNMG160404-ST				•			•	•			•	•	•	•	•			
	TNMG160408-ST				•			•	•			•	•	•	•	•			
	TNMG160412-ST														•	•			
	TNMG220404-ST																		
	TNMG220408-ST																		
	TNMG160404-FU	•		•		•													
	TNMG160408-FU	•		•		•													

finishing medium roughing

Vc • fn • ap

NEGATIVE
with hole

TN □□



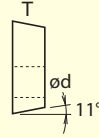
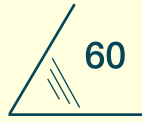
TN □□	1604□□	2204□□	2706□□
IC	9,525	12,7	15,875
T	4,76	4,76	6,35
Ød	3,81	5,16	6,35

ÜRÜN AÇIKLAMASI DESCRIPTION		CARBIDE-CVD								CARBIDE-PVD				CERMET		CARBIDE				
		SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215	
	TNMG220412-HU	•		•																
	TNMG220416-HU	•		•																
	TNMG160404-MU	•		•		•	•			•	•				•	•				
	TNMG160408-MU	•		•		•	•			•	•				•	•				
	TNMG160412-MU	•		•		•	•			•	•				•	•				
	TNMG160416-MU									•	•									
	TNMG220404-MU	•		•		•	•			•	•				•	•				
	TNMG220408-MU	•		•		•	•			•	•				•	•				
	TNMG220412-MU	•		•		•	•			•	•				•	•				
	TNMG160408-RU	•		•		•	•			•	•				•	•				
	TNMG160412-RU	•		•		•	•			•	•				•	•				
	TNMG220416-RU	•		•		•	•			•	•				•	•				
	TNMG270612-RU			•		•	•													
	TNMG330924-RU			•		•	•													
	TNMG160404-SU	•		•		•														
	TNMG160408-SU	•		•		•														
	TNMG160404-QV				•							•	•	•						
	TNMG160408-QV				•							•	•	•						
	TNMM220412-RU			•		•	•													
	TNMM220416-RU			•		•	•													
	TNMM270616-RU			•		•	•													



POSITIVE 11°
with hole

TP □□



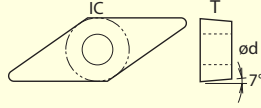
TP □□	0802□□	0902□□	1103□□
IC	4,76	5,56	6,35
T	2,38	2,38	3,18
ød	2,30	3,00	3,40

ÜRÜN AÇIKLAMASI DESCRIPTION		CARBIDE-CVD								CARBIDE-PVD			CERMET	CARBIDE					
		SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215
	TPGH080202L											•	•			•			
	TPGH080204L											•	•			•			
	TPGH090202L											•	•			•			
	TPGH090204L											•	•			•	•		
	TPGH110302L											•	•			•			
	TPGH110304L											•	•			•	•		
	TPGN160308	•		•		•													
	TPGN220416	•		•		•													
	TPGT110204-MH	•		•		•													
	TPMT110304-GC																•		
	TPMT110304-QH																•		
	TPMT110308-QH																•		
	TPUN160304																		
	TPUN160308																		
	TPUN220412													•		•			



POSITIVE 7°
with hole

VC □ □



VC □ □	1103 □ □	1604 □ □	2205 □ □
IC	6,35	9,525	12,70
T	3,18	4,76	5,56
Ød	2,80	4,40	5,60

ÜRÜN AÇIKLAMASI DESCRIPTION		CARBIDE-CVD								CARBIDE-PVD				CERMET	CARBIDE						
		CS5215	CS5215S	CS5225	CS5225S	CS5235	CS5240	CS8205	CS8215	CS8115	CS8125	CS7125S	PS7110S	PS7220S	PS7120	PS5125	SS9115	SS9125	US2115		
	VCGT110302-ALU																			•	
	VCGT110304-ALU																				•
	VCGT110308-ALU																				•
	VCGT160402-ALU																				•
	VCGT160404-ALU																				•
	VCGT160408-ALU																				•
	VCGT160412-ALU																				•
	VCGT220516-ALU																				•
	VCGT110304-VF													•	•						
	VCGW110304																				
	VCGW160404																				
	VCGW160408																				
	VCMT160404	•		•	•	•	•														
	VCMT110302-CG																			•	
	VCMT110302-CG																			•	

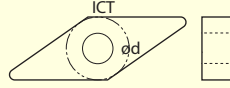
finishing
 medium
 roughing

Vc • fn • ap



NEGATIVE
with hole

VN □□



VN □□	1604 □□
IC	9,525
T	4,76
ød	3,81

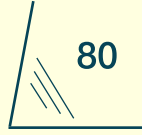
ÜRÜN AÇIKLAMASI DESCRIPTION		CARBIDE-CVD								CARBIDE-PVD				CERMET	CARBIDE							
		CS5215	CS5216S	CS5225	CS5225S	CS5235	CS5240	CS8205	CS8215	CS8115	CS8125	CS7125S	PS7110S	PS7220S	PS7120	PS5125	SS9115	SS9125	US2115			
	VNMG160404	•		•		•	•			•	•		•	•	•	•						
	VNMG160408	•		•		•	•			•	•			•	•	•	•					
	VNMG160412	•		•		•	•			•	•				•	•	•					
	VNMG160404-QH																•					
	VNMG160408-QH																•					
	VNMG160404-MP		•		•								•	•								
	VNMG160408-MP		•		•								•	•								
	VNMG160404-ST		•		•								•	•								
	VNMG160404-FU	•		•		•																
	VNMG160408-FU	•		•		•																
	VNMG160404-MU	•		•		•	•			•	•				•	•						
	VNMG160408-MU	•		•		•	•			•	•				•	•						
	VNMG160412-MU	•		•		•	•			•	•				•	•						

finishing
 medium
 roughing

Vc • fn • ap

NEGATIVE
with hole

WN□□



WN □ □	0604 □ □	0804 □ □
IC	9,525	12,7
T	4,76	4,76
ød	3,81	5,16

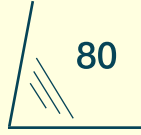
ÜRÜN AÇIKLAMASI DESCRIPTION		CARBIDE-CVD								CARBIDE-PVD				CERMET		CARBIDE			
		SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215
	WNMA080404							•	•	•	•								
	WNMA080408							•	•	•	•								
	WNMA080412							•	•	•	•								
	WNMA080416							•	•	•	•								
	WNMG080404	•		•		•	•	•	•	•				•	•				
	WNMG080408	•		•		•	•	•	•	•				•	•				
	WNMG080412	•		•		•	•	•	•	•				•	•				
	WNMG080416							•	•	•	•								
	WNMG080404-ALU																		•
	WNMG080408-ALU																		•
	WNMG080408-AH													•					
	WNMG080404-QH																	•	
	WNMG080408-QH		•		•								•	•				•	
	WNMG080412-QH																	•	
	WNMG080404-MP		•		•								•	•					
	WNMG080408-MP		•	•	•								•	•					
	WNMG080412-MP		•		•								•	•					

finishing medium roughing

Vc • fn • ap

**NEGATIVE
with hole**

WN□□



WN □□	0604□□	0804□□
IC	9,525	12,7
T	4,76	4,76
ød	3,81	5,16

ÜRÜN AÇIKLAMASI DESCRIPTION		CARBIDE-CVD								CARBIDE-PVD			CERMET		CARBIDE				
		SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S	SP1710S	SP2720S	SP1720	SP1720	SS1915	SS1925	SU1215
	WNMG080404L-ST		•		•								•	•					
	WNMG080408L-ST		•		•								•	•					
	WNMG080408R-ST		•	•	•								•	•					
	WNMG080408-MT		•		•								•	•					
	WNMG080404-KT														•	•			
	WNMG080408-KT														•	•			
	WNMG080412-KT														•				
	WNMG080404-ST		•		•								•	•	•	•			
	WNMG080408-ST		•		•								•	•	•	•			
	WNMG080404-FU	•		•		•													
	WNMG080408-FU	•		•		•													
	WNMG060408-MU	•		•		•	•		•	•					•	•			
	WNMG080404-MU	•		•		•	•		•	•					•	•			
	WNMG080408-MU	•		•		•	•		•	•					•	•			
	WNMG080412-MU	•		•		•	•		•	•					•	•			
	WNMG080408-RU	•		•		•													
	WNMG080412-RU	•		•		•													

finishing medium roughing

Vc • fn • ap

Kesme Parametreleri Cutting Parameters Vc(m/min)





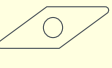

GK	GREY CAST IRON / GRI DÖKME DEMİR	MM	MARTENSITIC AND FERRITIC STAINLESS / PASLANMAZ ÇELİK KALİTE
NK	NODULAR CAST IRON / NODÜLER DÖKME DEMİR	AM	STEEL AUSTENITIC STAINLESS STEEL / ÇELİK KALİTE
LP	LOW CARBON AND FREE CUTTING STEEL / DÜŞÜK KARBON KESME ÇELİĞİ	AN	ALUMINIUM ALLOYS AGED AND HARDENED / ALÜMİNYUM VE
MP	MEDIUM CARBON STEEL / ORTA KARBON ÇELİĞİ	HN	ALUMINIUM ALLOYS / ALAŞIMLI ALÜMİNYUM
HP	HIGH CARBON STEEL / YÜKSEK KARBON ÇELİĞİ	BN	BRASS / PİRİNÇ
AP	ALLOY STEEL / ALAŞIMLI ÇELİK	CN	BRONZE AND ELECTROLYTIC COPPER / BRONZ VE ELEKTROLİTİK BAKIR

MATERIAL MALZEME		CARBIDE-CVD										
		SC2515	SC2515S	SC2525	SC2525S	SC2535	SC2540	SC2805	SC2815	SC1815	SC1825	SC1725S
K	GK							250-450	200-360	200-360	160-300	
	NK							180-300	150-280	150-280	120-250	
P	LP	250-350	200-320	200-320	200-320	160-250						
	MP	220-300	180-260	180-260	180-260	140-200						
	HP	200-280	160-250	160-250	160-250	120-180	100-160					
	AP	180-250	150-220	150-220	150-220	100-170	90-160					
M	MM											160-260
	AM											140-220

MATERIAL MALZEME		CARBIDE-PVD			CERMET		CARBIDE					
		SP1710S	SP2720S	SP1720	SP1525	SS1915	SS1925	SU1215				
K	GK					250-400	250-400					
	NK					180-300	180-300					
P	LP				100-180	280-380	280-380					
	MP				80-160	240-330	240-330					
	HP				80-140	220-300	220-300					
	AP				60-120	200-280	200-280					
M	MM	120-220	100-150	100-150		180-250	180-250					
	AM	100-180	80-120	80-120		160-220	160-220					
N	NA							600-1500				
	HN							300-700				
	BN							250-400				
	CN							150-250				

Kesme Parametreleri
Cutting Parameters ap (mm) & fn (mm/rev)

negative 







NEGATIVE INSERT SIZE		CN □ □	-	1204..	1606..	1906..	2507.. 2509..
		DN □ □	1104..	1504.. 1506..	-	-	-
		SN □ □	0903..	1204..	-	1906..	2507.. 2509..
		TN □ □	-	1604..	2204..	-	-
		VN □ □	-	1604..	-	-	-
		WN □ □	0604..	0804..	-	-	-

Chip Breaker Form	Corner Radius	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)
MA FLAT	R02										
	R04			2,00-4,00	0,20-0,35						
	R08			2,00-6,00	0,25-0,50	4,00-8,00	0,34-0,60				
	R12			2,00-6,00	0,33-0,58	4,00-10,0	0,40-0,70	5,00-11,0	0,43-0,76	8,00-16,0	0,45-1,00
	R16 / R24			2,00-7,00	0,37-0,65	4,00-10,0	0,45-0,78	5,00-13,0	0,49-0,8	8,00-18,0	0,50-1,10
GM BOX	R02										
	R04			1,00-4,00	0,16-0,25					8,00-16,0	0,45-0,89
	R08	1,00-4,00	0,23-0,40	1,00-4,00	0,22-0,38	4,00-7,00	0,34-0,58	5,00-10,0	0,42-0,76		
	R12			1,00-5,00	0,26-0,44	4,00-8,00	0,40-0,68	5,00-11,0	0,43-0,76		
	R16 / R24			1,00-5,00	0,29-0,50	4,00-8,00	0,45-0,76	5,00-11,0	0,49-0,85	8,00-18,0	0,50-1,10
ALU	R02			0,10-3,00	0,05-0,30						
	R04			0,80-3,50	0,10-0,40						
	R08			0,80-3,50	0,10-0,40						
	R12			0,80-3,50	0,10-0,42						
	R16 / R24										
AH	R02										
	R04										
	R08										
	R12			0,80-3,50	0,05-0,30						
	R16 / R24										
QH	R02										
	R04			0,50-2,50	0,05-0,25						
	R08			0,50-4,00	0,10-0,50						
	R12			0,50-4,00	0,13-0,60						
	R16 / R24										
RTH	R02										
	R04										
	R08										
	R12										
	R16 / R24									1,80-10,00	0,30-0,80
MP	R02										
	R04										
	R08			1,00-5,00	0,10-0,50						
	R12										
	R16 / R24										

Kesme Parametreleri

Cutting Parameters a_p (mm) & f_n (mm/rev)





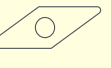

negative 

NEGATIVE INSERT SIZE		CN □ □	-	1204..	1606..	1906..	2507.. 2509..
		DN □ □	1104..	1504.. 1506..	-	-	-
		SN □ □	0903..	1204..	-	1906..	2507.. 2509..
		TN □ □	-	1604..	2204..	-	-
		VN □ □	-	1604..	-	-	-
		WN □ □	0604..	0804..	-	-	-

Chip Breaker Form	Corner Radius	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)
TS	R02										
	R04			1,00-3,50	0,12-0,30						
	R08			1,80-7,00	0,15-0,50						
	R12										
	R16 / R24										
FT	R02										
	R04			0,05-1,00	0,04-0,28						
	R08			0,07-1,00	0,05-0,03						
	R12										
	R16 / R24										
KT	R02										
	R04	0,50-1,00	0,10-0,25	0,50-1,20	0,10-0,28						
	R08	0,50-1,20	0,10-0,28	0,50-1,50	0,10-0,30	0,80-2,00	0,10-0,35				
	R12			0,50-1,60	0,10-0,30						
	R16 / R24										
MT	R02										
	R04										
	R08			0,50-3,00	0,05-0,40						
	R12										
	R16 / R24										
ST	R02										
	R04	1,00-3,00	0,13-0,23	0,80-4,00	0,05-0,30						
	R08			0,80-4,00	0,10-0,40						
	R12			0,80-4,00	0,10-0,40						
	R16 / R24										
FU	R02										
	R04			0,30-1,80	0,05-0,35						
	R08			0,30-2,00	0,05-0,35						
	R12										
	R16 / R24										
HU	R02										
	R04										
	R08										
	R12					1,30-8,00	0,25-0,70				
	R16 / R24					1,80-8,00	0,30-0,80				

Kesme Parametreleri
Cutting Parameters ap (mm) & fn (mm/rev)

negative 

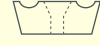
NEGATIVE INSERT SIZE		CN □ □	-	1204..	1606..	1906..	2507.. 2509..
		DN □ □	1104..	1504.. 1506..	-	-	-
		SN □ □	0903..	1204..	-	1906..	2507.. 2509..
		TN □ □	-	1604..	2204..	-	-
		VN □ □	-	1604..	-	-	-
		WN □ □	0604..	0804..	-	-	-

Chip Breaker Form	Corner Radius	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)
MU	R02										
	R04			1,00-4,50	0,10-0,33	2,00-7,50	0,13-0,33				
	R08			1,50-5,00	0,15-0,45	2,00-8,00	0,18-0,45	3,00-9,00	0,20-0,46		
	R12			1,50-5,50	0,15-0,50	2,00-8,00	0,22-0,50	3,00-10,0	0,24-0,50		
	R16 / R24			1,50-5,50	0,15-0,60	2,00-8,00	0,25-0,60	3,00-10,0	0,32-0,50		
TU	R02										
	R04										
	R08										
	R12					1,30-7,00	0,25-0,65				
	R16 / R24										
RU	R02										
	R04										
	R08			3,00-10,0	0,30-0,72	3,00-15,0	0,27-0,48	3,00-17,0	0,34-0,60		
	R12			3,00-15,00	0,30-0,80	3,00-15,5	0,32-0,50	3,00-18,0	0,38-0,68		
	R16 / R24					3,00-16,00	0,35-0,63	3,00-18,0	0,38-0,68	5,00-17,0	0,45-0,90
SU	R02										
	R04			1,50-4,50	0,15-0,45						
	R08			1,50-5,00	0,15-0,5						
	R12			1,50-5,00	0,15-0,50						
	R16 / R24										
QV	R02										
	R04										
	R08										
	R12										
	R16 / R24										
RZ	R02										
	R04										
	R08										
	R12			1,00-7,00	0,20-0,50						
	R16 / R24			1,80-7,00	0,32-0,75						
R/L-P R/L-C	R02			0,50-3,50	0,08-0,30						
	R04			1,00-3,50	0,12-0,30						
	R08			1,30-3,50	0,15-0,35						
	R12										
	R16 / R24										

Kesme Parametreleri

Cutting Parameters ap (mm) & fn (mm/rev)

positive



NEGATİF UÇ BOYUTU		CC / CP □□	0602..	09T3.. 0903..	1204..	-	-
		DC □□	0702..	11T3..	..	-	-
		SC / SP □□	-	09T3..	1204..	-	-
		TC / TP □□	0902..	1102..	16T3..	2204..	-
		VB / VC □□	-	1103..	1604..	2205..	-
		WB □□	0601..	-	-	-	-

Chip Breaker Form	Corner Radius	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)
ER/L-U	R02	0,10-0,50	0,01-0,10	0,02-2,00	0,04-0,15						
	R04	0,10-0,50	0,01-0,10	0,50-3,00	0,08-0,30						
	R08										
	R12										
	R16 / R24										
L-F	R02	0,30-1,00	0,10-0,20	0,50-1,20	0,10-0,25						
	R04	0,50-1,00	0,10-0,25	0,70-1,50	0,12-0,30	0,20-4,00	0,02-0,30				
	R08					0,30-5,00	0,03-0,50				
	R12										
	R16 / R24										
L/R-W	R02	0,07-1,80	0,03-0,15	0,08-2,00	0,04-0,15						
	R04	0,1-2,00	0,05-0,2	0,1-2,20	0,08-0,2						
	R08										
	R12										
	R16 / R24										
L-Y	R02			0,06-1,70	0,03-0,13						
	R04			0,09-2,00	0,06-0,22						
	R08										
	R12										
	R16 / R24										
ALU	R02	0,03-3,00	0,01-0,12	0,05-4,00	0,02-0,30	0,05-4,00	0,02-0,30				
	R04	0,10-3,00	0,02-0,13	0,10-5,00	0,03-0,50	0,10-5,00	0,03-0,50				
	R08	0,10-4,00	0,02-0,20	0,10-5,00	0,03-0,50	0,10-5,00	0,04-0,80				
	R12			0,15-5,00	0,04-0,60	0,50-6,50	0,08-0,70	0,10-7,00	0,03-0,60		
	R16 / R24										
GC	R02	0,30-1,00	0,05-0,20								
	R04	0,30-1,00	0,10-0,25	0,30-1,5	0,10-0,25						
	R08	0,40-2,40	0,80-0,25	0,30-1,5	0,10-0,28						
	R12										
	R16 / R24										
FH	R02										
	R04										
	R08										
	R12										
	R16 / R24										

Kesme Parametreleri
Cutting Parameters ap (mm) & fn (mm/rev)

positive



NEGATİF UÇ BOYUTU		CC / CP □□	0602..	09T3.. 0903..	1204..	-	-
		DC □□	0702..	11T3..	..	-	-
		SC / SP □□	-	09T3..	1204..	-	-
		TC / TP □□	0902..	1102..	16T3..	2204..	-
		VB / VC □□	-	1103..	1604..	2205..	-
		WB □□	0601..	-	-	-	-

Chip Breaker Form	Corner Radius	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)
MH	R02	1.0-6.0	0.10-0.70								
	R04										
	R08										
	R12										
	R16 / R24										
QH	R02	0,06-1,70	0,06-0,19	0,10-2,00	0,07-0,22						
	R04	0,10-2,00	0,11-0,25	0,80-3,00	0,08-0,30	0,80-3,00	0,08-0,28				
	R08	0,20-2,00	0,08-0,30	1,00-3,00	0,10-0,30	1,00-3,00	0,10-0,33				
	R12										
	R16 / R24										
RH	R02										
	R04										
	R08										
	R12										
	R16 / R24										
ST	R02										
	R04										
	R08										
	R12										
	R16 / R24										
MV	R02										
	R04										
	R08										
	R12										
	R16 / R24										
QV	R02										
	R04										
	R08										
	R12										
	R16 / R24										
WV	R02										
	R04										
	R08										
	R12										
	R16 / R24										

Tornalamada cvd karşılaştırma tablosu TURNING CVD Comparison table

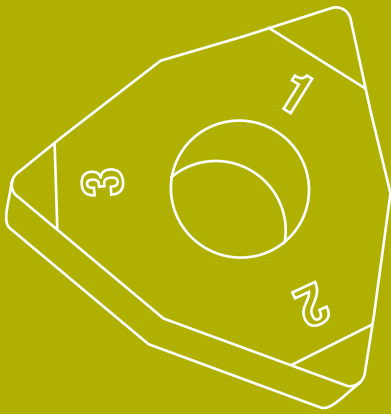
MATERIAL MALZEME	EZEUS	ISCAR	SECO	TEAGUTEC	KYOCERA	SANDVIK	KENAMETAL	mitsubishi	WALTER	KORLOY
P			TP0500	TT8105	CA5505	GC4305	KCP05(B)	UE6105	WPP10S	NC3010
	SC2515	IC8150	TP0501	TT8110	CA510	GC4205		UE6110	WKP13S	
	SC2515S		TP1500	TT8115	CA515	GC4315	KCP10(B)	MY5015		NC3215
			TP2500	TT8120	CA525	GC4215		MC6025	WPP20S	NC3220
	SC2525	IC8250	TP2501	LC025P	CA5525	GC4325	KCP25(B)	UE6020	WKP23S	NC3225
	SC2525S		T350M	TT8125		GC4225				
	SC2535	IC8350	TP3500	TT5100	CA530	GC4235	KCP30(B)	UE6035	WPP30S	NC3030
				TT8135	CA5535				WKP33S	NC500H
		TGP45	TT7100			KCP40(B)			NC5330	
M	SC1725S	IC6015	TM2000	TT9215	CA6515	GC2015	KCM15(M)	MC7015	WAM10	NC9020
			TM4000	TT9225	CA6525	GC2025	KCM25(B)	US7020	WAM20	NC9025
								US735	WAM30	NC9030
K	SC2805	IC5005	TK1001	TT7005	CA4505	GC3205	KCK05(B)	MC5005	WKK10S	NC6205
					CA4010	GC3210		UC5105		
	SC2815			TT7310						NC6210
	SC1815									
		IC5015	TK2001	TT7015	CA4515	GC3215	KCK15(B)	MC5015	WKK20S	NC6215
	SC1825		TGK1500		CA4115	GC3225		UC5115		

Tornalama sermet TURNING Cermet

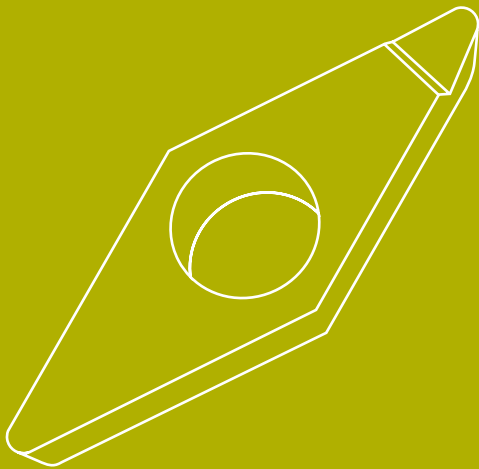
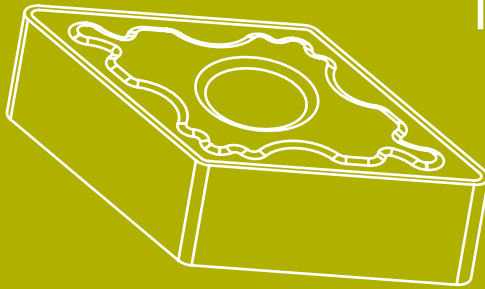
MATERIAL	EZEUS	ISCAR	SECO	TEAGUTEC	KYOCERA	SANDVIK	KENAMETAL	mitsubishi	WALTER	KORLOY
UNI										
	SS1915	IC20N	C15M	CT3000	TN60	CT525	KT125	NX2525		CC1500
	SS1925	IC520N					HT5	NX3035		CN1500

Tornalamada pvd karşılaştırma tablosu
TURNING PVD Comparison table








MATERIAL MALZEME	EZEUS	ISCAR	SECO	TEAGUTEC	KYOCERA	SANDVIK	KENAMETAL	MITSUBISHI	WALTER	KORLOY
P	SP1710S	IC507	CP200		PR1005					
		IC808			PR915		KU10T			PC8110
	SP2720S		CP250		PR1115		KU25T			PC230
	SP1720				PR930					
		IC3028		TT5030		GC1025		VP15TF	WTA43	PC5300
		IC908			PR1025			VP20MF	WTA41	PC8115
		IC830			PR630	GC4125				
	SP1525		CP500		PR660					PC3545
M	SP1710S	IC808	CP200			GC1005		MP9005		
	SP2720S	IC907			PR915	GC1105	KC5010	VP10RT	WSM10S	PC8110
			CP250				KC5510		WSM20S	PC8115
	SP1720				PR930	GC1020				
		IC3028					KC5025	VP15TF	WSM30S	PC5300
		IC830		TT5030	PR1125	GC1025	KC5525	VP20MF	WSM40S	
					PR630	GC4125				PC9030
	SP1525		CP500	TT8020	PR660	GC2035				PC5400
S										
	SP1710S	IC808	TS2000					VP05RT	WSM10	PC8105
		IC907			PR915	GC1105				
			CP500				KC5010	VP10RT	WSM20	PC8110
	SP1720									PC8115
	SP2720S	IC328	TS2500	TT5030	PR660	GC1025		VP15TF	WSM30	
					PR1325	GC2035	KC5025			PC5300
									PC5400	

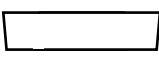
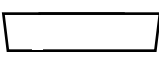
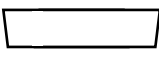
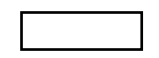




TORNALAMA TURNING / PCBN


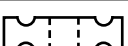

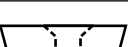









C	C	G	W	12	04	08
1	2	3	4	5	6	7

1	Geometry	
C		80°
D		55°
R		360°
S		90°
T		60°
V		35°
W		80°

2	Clearance Angle	
B		5°
C		7°
P		11°
N		0°

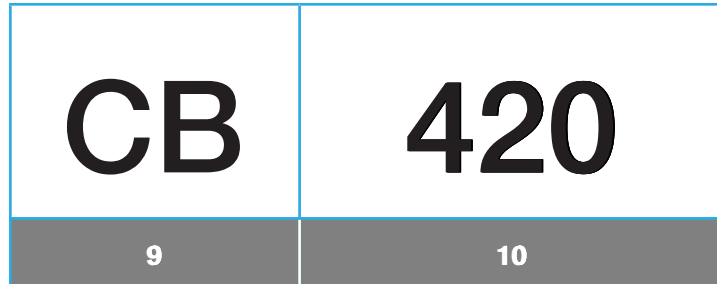
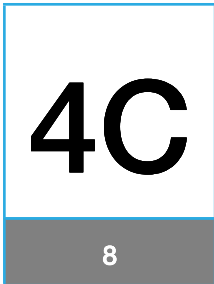
3	Tolerance	
		
G	±0,025	±0,13
M	±0,05 ±0,15	±0,13
U	±0,08 ±0,25	±0,13

4	Shape
A	
G	
M	
W	
X	Special

5	Shape (mm)	
C	06 09 12 16 19 25	
D	07 11 15	
R	06 09 12 15 19 25	
S	09 12 15 19 25	
T	09 11 16 22	
V	11 16 22	
W	06 08	

6	Thickness (mm)	
02	2,38	
03	3,18	
T3	3,97	
04	4,76	
06	6,35	
07	7,94	
09	9,52	
10	10,00	

7	Corner Radius	
02	0,20 mm	
04	0,40 mm	
08	0,80 mm	
12	1,20 mm	
16	1,60 mm	
24	2,40 mm	

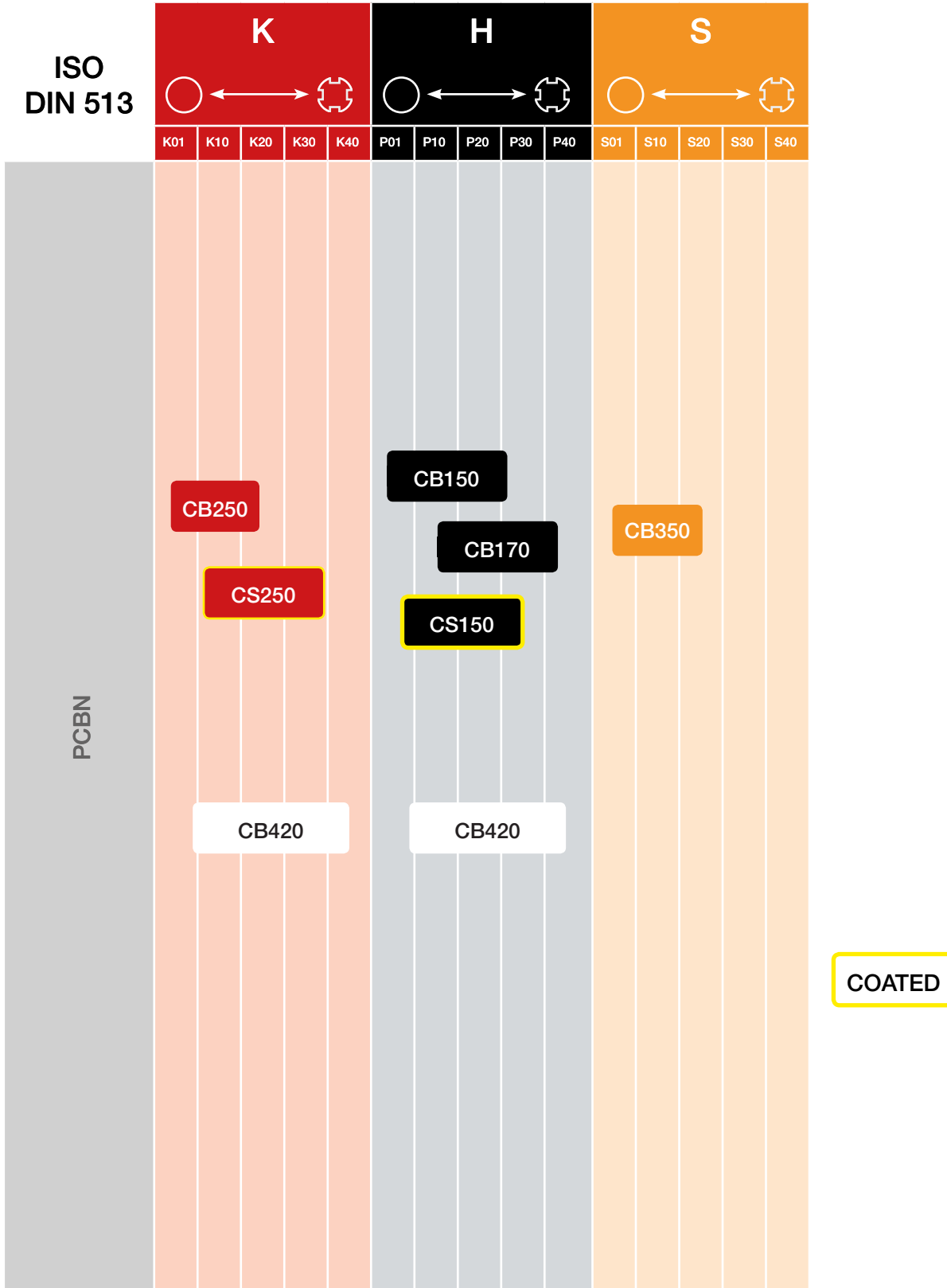


8	Number of Edges
1C	1 Corner
2C	2 Corners
3C	3 Corners
4C	4 Corners
6C	6 Corners
8C	8 Corners
FF	Full Face
SO	Solid PcBN

9	
CB	PCBN
CS	TiN Coating PCBN

10	Application
1 □□	Hardened Steel
2 □□	Cast Iron
3 □□	Super Alloy
4 □□	Universal

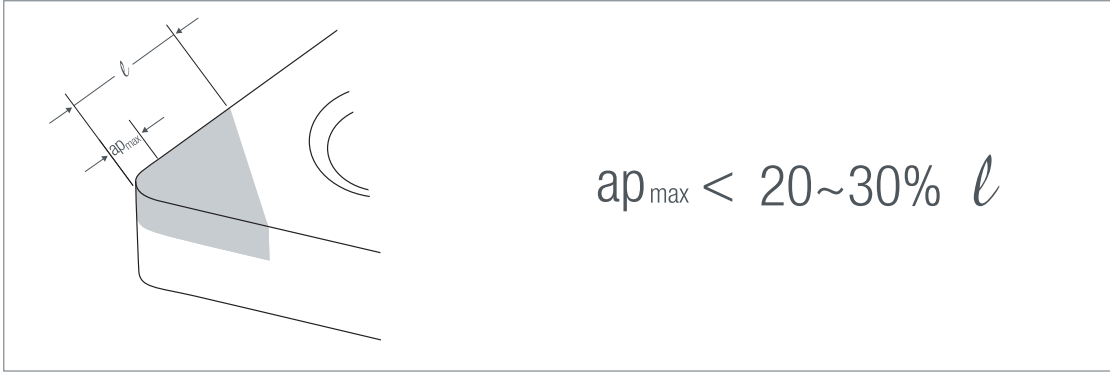
Kaliteleri
Grades



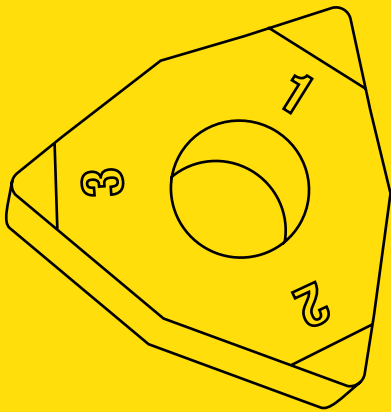
**Kesme parametreleri
Cutting Parameters**

GK	GREY CAST IRON	GRİ DÖKME DEMİR
NK	NODULAR CAST IRON	NODÜLER DÖKME DEMİR
WK	WHITE CAST IRON	BEYAZ DÖKME DEMİR
SK	SINTERED MATERIAL	SİNERLİ MALZEME

HH	HARDENED STEEL	GÜÇLENDİRİLMİŞ ÇELİK
CH	CASE HARDENED STEEL	GÜÇLENDİRİLMİŞ ÇELİK KASA
BH	BEARING STEEL	RULMAN ÇELİĞİ
AS	SUPER ALLOYS (Ni Based)	SÜPER ALAŞIM

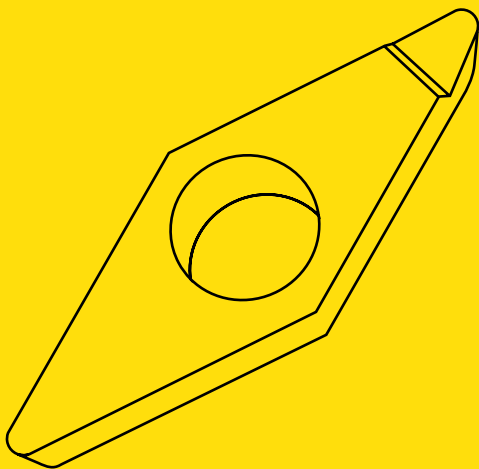
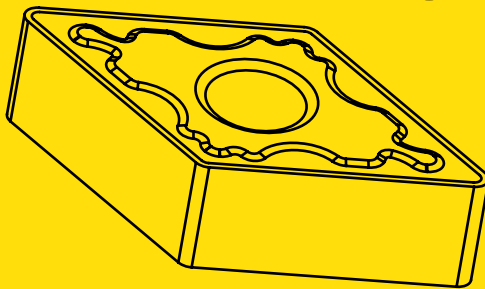


MATERIAL MALZEME	ap (mm)	fn (mm/ rev)	CUTTING CONDITION	PCBN									
				CB150	CB170	CS150	CB250	CS250	CB350	CB420			
H	HH	0,05-0,25	0,05-0,20	○	●	◇	120-250	100-230	100-200				100-220
				⊕	◇			80-180				80-180	
	CH	0,05-0,25	0,08-0,25	○	●	◇			100-180				100-200
				⊕	◇			80-160				80-160	
	BH	0,05-0,25	0,05-0,20	○	●	◇	120-220	100-200	100-180				100-200
				⊕	◇			80-150				90-150	
K	GK	0,10-0,50	0,10-0,30	○	●	◇				400-1000		400-1200	
				⊕	◇				400-800		400-1000		
	NK	0,10-0,30	0,05-0,20	○	●	◇			250-400			250-500	
				⊕	◇			150-300			200-400		
	WK	0,10-0,30	0,10-0,30	○	●	◇				60-100		60-120	
⊕				◇				50-80		50-100			
SK	0,05-0,20	0,05-0,25	○	●	◇			160-250	160-250		160-280		
			⊕	◇							120-220		
S	AS	0,05-0,20	0,10-0,20	○	●						120-300		

















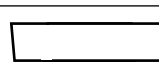
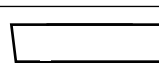
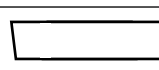
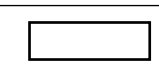
TORNALAMA



TURNING / diamond

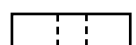
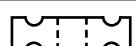
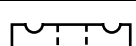
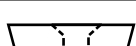









D	C	G	W	11	T3	04
1	2	3	4	5	6	7

1	Geometry	
C		 80
D		 55
R		 360
S		 90
T		 60
V		 35
W		 80

2	Clearance Angle	
B		5°
C		7°
P		11°
N		0°

3	Tolerance	
		
G	±0,025	±0,13
M	±0,05 ±0,15	±0,13
U	±0,08 ±0,25	±0,13

4	Shape
A	
G	
M	
W	
X	Special

5	Shape (mm)	
C	06 09 12 16 19 25	
D	07 11 15	
R	06 09 12 15 19 25	
S	09 12 15 19 25	
T	09 11 16 22	
V	11 16 22	
W	06 08	

6	Thickness (mm)	
02	2,38	
03	3,18	
T3	3,97	
04	4,76	
06	6,35	
07	7,94	
09	9,52	
10	10,00	

7	Corner Radius	
02	0,20 mm	
04	0,40 mm	
08	0,80 mm	
12	1,20 mm	
16	1,60 mm	
24	2,40 mm	

1C

8

CP

9

150

10

8	Number of Edges
1C	1 Corner
2C	2 Corners
3C	3 Corners
FE	Full Edge

9	
CP	CPD

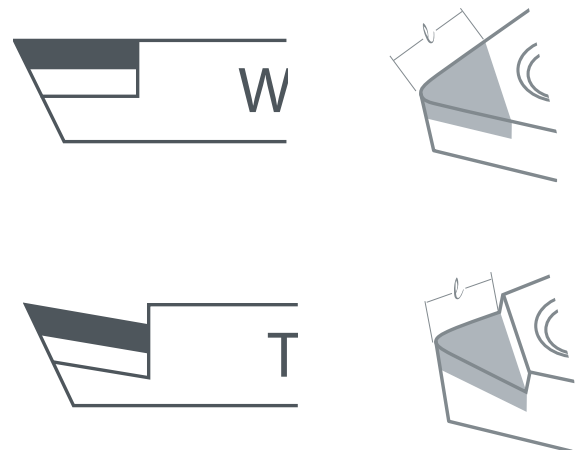
10	Application
1 □□	Non - Ferrous Metal
3 □□	

Kaliteleri
Grades

ISO DIN 513	N				
	N01	N10	N20	N30	N40
PCD			CP100		
		CP150			
		CP200			
	CP300				

CUTTING EDGE STYLE

POSITIVE INSERTS

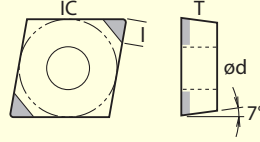
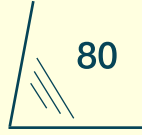


NEGATIVE INSERTS



POSITIVE 7°
with hole

CC□□



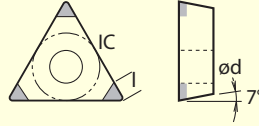
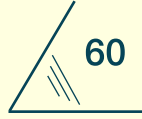
CC □□	0602 □□	09T3 □□	1204 □□
IC	6,35	9,525	12,7
T	2,38	3,97	4,76
Ød	2,80	4,40	5,50

ÜRÜN AÇIKLAMASI DESCRIPTION	EDGE KÖŞE		PCD					
			CP100	CP150	CP200	CP300		
	CCGT060202	1C		•	•	•		
	CCGT060204	1C	•	•	•	•		
	CCGT060208	1C	•	•		•		
	CCGT09T302	1C		•	•	•		
	CCGT09T304	1C	•	•	•	•		
	CCGT09T308	1C	•	•		•		
	CCGT120404	1C		•	•	•		
	CCGT120408	1C	•	•		•		
	CCGT09T302	2C		•	•	•		
	CCGT09T304	2C	•	•	•	•		
	CCGT09T308	2C	•	•		•		
	CCGT120404	2C		•	•	•		
	CCGT120408	2C	•	•		•		
	CCGW060202	1C		•	•	•		
	CCGW060204	1C	•	•	•	•		
	CCGW060208	1C	•	•		•		
	CCGW09T302	1C		•	•	•		
	CCGW09T304	1C	•	•	•	•		
	CCGW09T308	1C	•	•		•		
	CCGW120404	1C		•	•	•		
	CCGW120408	1C	•	•		•		
	CCGW09T302	2C		•	•	•		
	CCGW09T304	2C	•	•	•	•		
	CCGW09T308	2C	•	•		•		
	CCGW120404	2C		•	•	•		
	CCGW120408	2C	•	•		•		
	CCGX060204R/L	FE		•		•		
	CCGX09T304R/L	FE		•		•		

Vc • fn • ap

POSITIVE 7°
with hole

TC □□



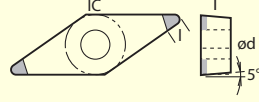
TC □□	0902□□	1102□□	16T3□□
IC	5,56	6,35	9,525
T	2,38	2,38	3,97
ød	2,50	2,80	4,40

ÜRÜN AÇIKLAMASI DESCRIPTION		EDGE KÖŞE		PCD					
				CP100	CP150	CP200	CP300		
	TCGT090202	1C			•	•	•		
	TCGT090204	1C		•	•	•	•		
	TCGT110202	1C		•	•	•	•		
	TCGT110204	1C		•	•	•	•		
	TCGT110208	1C		•	•		•		
	TCGT16T304	1C		•	•	•	•		
	TCGT16T308	1C		•	•		•		
	TCGT16T304	3C		•	•	•	•		
	TCGT16T308	3C		•	•		•		
	TCGW090202	1C			•	•	•		
	TCGW090204	1C		•	•	•	•		
	TCGW110202	1C		•	•	•	•		
	TCGW110204	1C		•	•	•	•		
	TCGW110208	1C		•	•		•		
	TCGW16T304	1C		•	•	•	•		
	TCGW16T308	1C		•	•		•		
	TCGW16T304	3C		•	•	•	•		
	TCGW16T308	3C		•	•		•		
	TCGX090204R/L	FE			•		•		
	TCGX110204R/L	FE			•		•		
	TCGX16T304R/L	FE			•		•		

Vc • fn • ap

POSITIVE 5°
with hole

VB □□



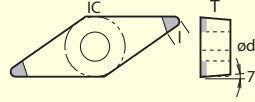
VB □□	1103□□	1604□□
IC	6,35	9,525
T	3,18	4,76
ød	2,80	4,40

ÜRÜN AÇIKLAMASI		EDGE	KÖŞE	PCD					
				CP100	CP150	CP200	CP300		
	VBGT110302	1C			•	•	•		
	VBGT110304	1C		•	•	•	•		
	VBGT160402	1C		•	•	•	•		
	VBGT160404	1C		•	•	•	•		
	VBGT160408	1C		•	•		•		
	VBGT110302	2C			•	•	•		
	VBGT110304	2C		•	•	•	•		
	VBGT160402	2C		•	•	•	•		
	VBGT160404	2C		•	•	•	•		
	VBGT160408	2C		•	•		•		
	VBGW110302	1C			•	•	•		
	VBGW110304	1C		•	•	•	•		
	VBGW160402	1C		•	•	•	•		
	VBGW160404	1C		•	•	•	•		
	VBGW160408	1C		•	•		•		
	VBGW110302	2C			•	•	•		
	VBGW110304	2C		•	•	•	•		
	VBGW160402	2C		•	•	•	•		
	VBGW160404	2C		•	•	•	•		
	VBGW160408	2C		•	•		•		

Vc • fn • ap

POSITIVE 7°
with hole

VC □ □



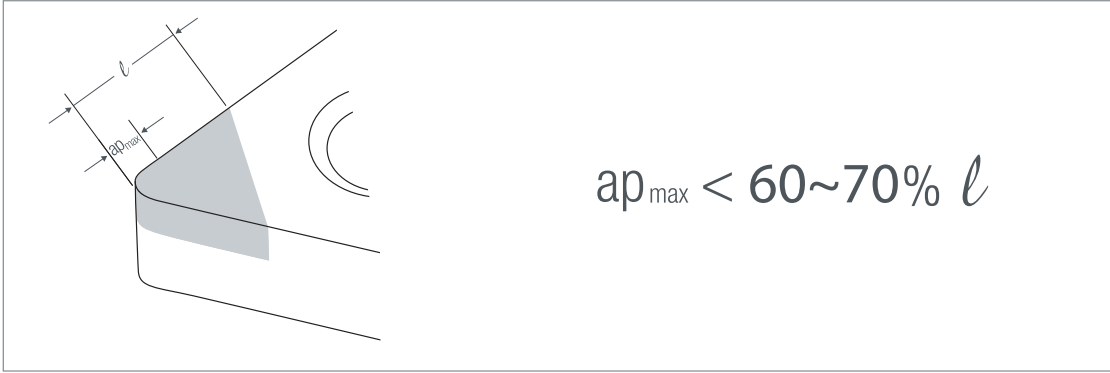
VC □ □	1103 □ □	1604 □ □
IC	6,35	9,525
T	3,18	4,76
ød	2,80	4,40

ÜRÜN AÇIKLAMASI DESCRIPTION		EDGE KÖŞE		PCD					
				CP100	CP150	CP200	CP300		
	VCGT110302	1C			•	•	•		
	VCGT110304	1C		•	•	•	•		
	VCGT160402	1C			•	•	•		
	VCGT160404	1C		•	•	•	•		
	VCGT160408	1C		•	•		•		
	VCGT110302	2C			•	•	•		
	VCGT110304	2C		•	•	•	•		
	VCGT160402	2C			•	•	•		
	VCGT160404	2C		•	•	•	•		
	VCGT160408	2C		•	•		•		
	VCGW110302	1C			•	•	•		
	VCGW110304	1C		•	•	•	•		
	VCGW160402	1C			•	•	•		
	VCGW160404	1C		•	•	•	•		
	VCGW160408	1C		•	•		•		
	VCGW110302	2C			•	•	•		
	VCGW110304	2C		•	•	•	•		
	VCGW160402	2C			•	•	•		
	VCGW160404	2C		•	•	•	•		
	VCGW160408	2C		•	•		•		
	VCGX110304R/L	FE			•		•		
	VCGX160404R/L	FE			•		•		

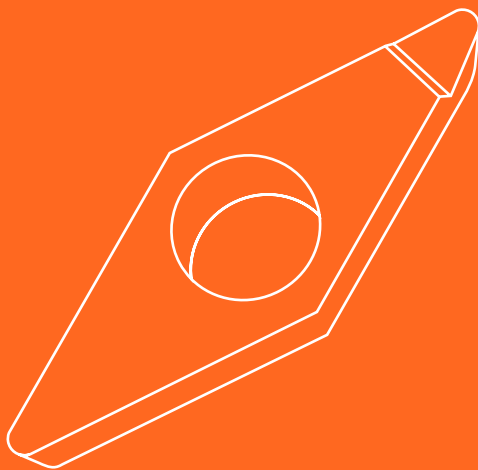
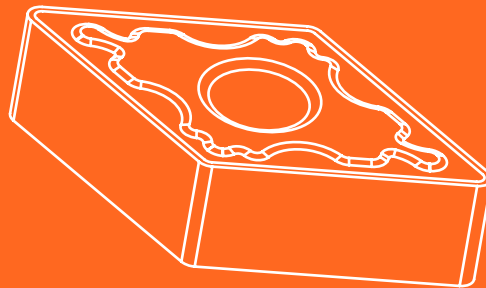
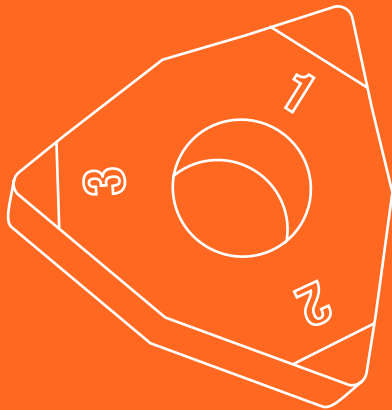
Vc • fn • ap

Kesme parametreleri
Cutting Parameters

AN	ALUMINIUM ALLOYS	ALÜMİNYUM ALAŞIM	CN	BRONZE AND ELECTROLYTIC COPPER	BRONZ VE ELEKTROLİTİK BAKIR
SN	ALUMINIUM ALLOYS (Si≤15%)	ALÜMİNYUM ALAŞIM	NG	GRAPHITE	GRAFİT
HN	AL ALLOYS AGED AND HARDENED	YILLANDIRILMIŞ VE SERTLEŞTİRİLMİŞ ALAŞIMLAR	MH	HARD METAL (Co≤16%)	SERT METAL
BN	BRASS	PİRİNÇ	TS	TITANIUM ALLOYS	TİTANYUM ALAŞIMLAR



MATERIAL MALZEME	ap (mm)	fn (mm/ rev)	CUTTING CONDITION	PCD						
				CP100	CP150	CP200	CP300			
N	NA	0,10~1,00	0,08~0,25	○ ⊕ ♀		600-2500		600-2500		
		1,00~2,50	0,15~0,50	○ ⊕ ♀		600-1600		600-1600		
	SN	0,10~1,00	0,05~0,20	○ ⊕ ♀			500-1800			
		1,00~2,50	0,08~0,35	○ ⊕ ♀			500-1200			
	HN	0,10~1,00	0,05~0,35	○ ⊕ ♀			400-1000			
		1,00~2,50	0,08~0,35	○ ⊕ ♀			400-800			
	BN	0,10~1,00	0,10~0,30	○ ⊕ ♀	400-1200	400-1200		400-1200		
		1,00~2,50	0,15~0,25	○ ⊕ ♀	400-1000	400-1000		400-1000		
	CN	0,10~1,00	0,10~0,30	○ ⊕ ♀	300-800	300-800		300-800		
		1,00~2,50	0,15~0,25	○ ⊕ ♀	300-500	300-500		300-500		
GN	0,10~1,00	0,08~0,25	○ ⊕ ♀		300-800	300-800	300-800			
	1,00~2,50	0,15~0,50	○ ⊕ ♀		300-600	300-600	300-600			
H	MH	0,10~0,50	0,08~0,25	○ ♀			10-40			
S	TS	0,10~1,00	0,05~0,20	○ ⊕ ♀	100-200	100-200	100-220	100-200		
		1,00~2,50	0,08~0,20	○ ⊕ ♀	100-150	100-150	100-220	100-150		



TORNALAMA

TURNING / ceramic



C	N	G	A	12	04	08
1	2	3	4	5	6	7

1	Geometry	
C		80
D		55
R		360
S		90
T		60
V		35
W		80

2	Clearance Angle	
B		5°
C		7°
P		11°
N		0°

3	Tolerance	
G	±0,025	±0,13
M	±0,05 ±0,15	±0,13
U	±0,08 ±0,25	±0,13

4	Shape
A	
G	
M	
T	
X	Special

5	Shape (mm)	
C	06 09 12 16 19 25	
D	07 11 15	
R	06 09 12 15 19 25	
S	09 12 15 19 25	
T	09 11 16 22	
V	11 16 22	
W	06 08	

6	Thickness (mm)	
02	2,38	
03	3,18	
T3	3,97	
04	4,76	
06	6,35	
07	7,94	
09	9,52	
10	10,00	

7	Corner Radius	
02	0,20 mm	
04	0,40 mm	
08	0,80 mm	
12	1,20 mm	
16	1,60 mm	
24	2,40 mm	

T	04	00	0	KS	81	50
8	9	10	11	12	13	14

8	Chamfer	9	Chamfer Width 1	10	Cf Width 2 x Degree
T	Mono 20° Chamfer	01	0,05 mm	00	Mono type
K	Mono 30° Chamfer	02	0,10 mm	01	0,20 x 25
D	Double 10° Chamfer	03	0,15 mm	02	0,10 x 30
S	Double 15° Chamfer	04	0,20 mm	03	0,20 x 30
AD	After Double 10° Chamfer	05	1,00 mm	04	0,15 x 30
AS	After Double 15° Chamfer	06	2,00 mm	05	0,45 x 25
		10	1,20 mm		
		20	1,50 mm		
		30	0,75 mm		
		40	1,25 mm		

11	Honing (µm)	12	Grade	13	Workpiece	14	Application
0	No Honing	KS	Al ₂ O ₃ + TiC(N)	41	Cast Iron	10	
1	10	KSC	Al ₂ O ₃ +TiC(N)+TiN	71	Inconel & High Temp. Alloy	20	
2	20	KZ	Al ₂ O ₃ + ZrO ₂	81	Hardened Steel	30	
3	30	KN	Si ₃ N ₄			40	
5	50	KA	TiC + Al ₂ O ₃			50	
		KL	SiAlON			60	
		KW	Whisker			70	

Kaliteleri
Grades

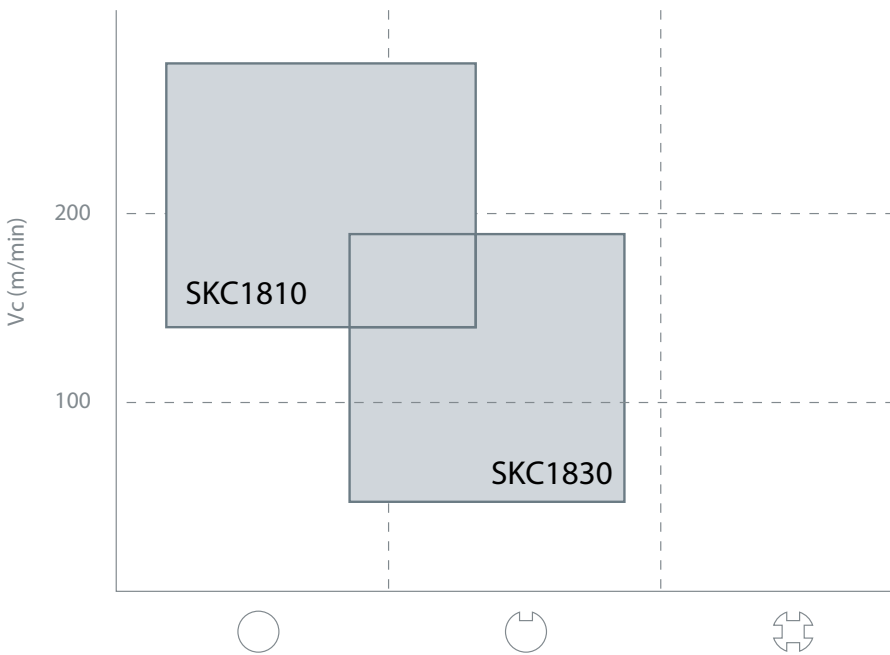
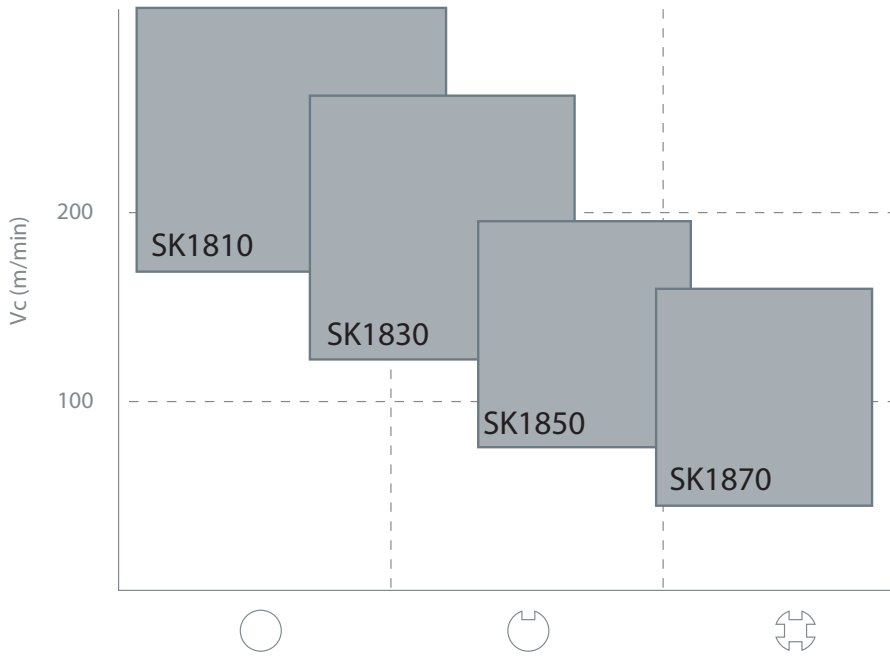
ISO DIN 513	K					H					S									
	K01	K10	K20	K30	K40	P01	P10	P20	P30	P40	M01	M10	M20	M30	M40					
$Al_2O_3 + TiC(N)$						SK8110														
						SK8130														
						SK8150														
						SK8170														
$Al_2O_3 + TiC(N)$ PVD						SKC1810														
						SKC1830														
$Al_2O_3 + ZrO_2$	ZK1420																			
	ZK1430																			
Si_3N_4	NK1410																			
	NK1410																			
	NK1430																			
	NK1440																			
	NK1450																			
TiC + Al_2O_3	AK1410																			
SiAlON																LK1710				
																LK1720				
Whisker																WK1710				
																WK1720				

COATED



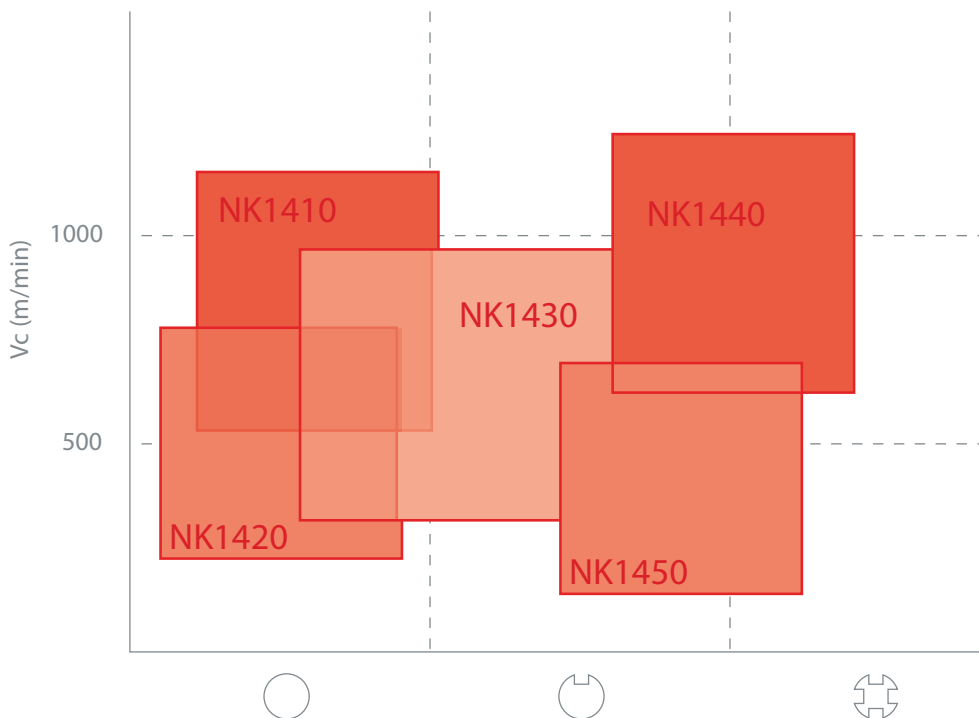
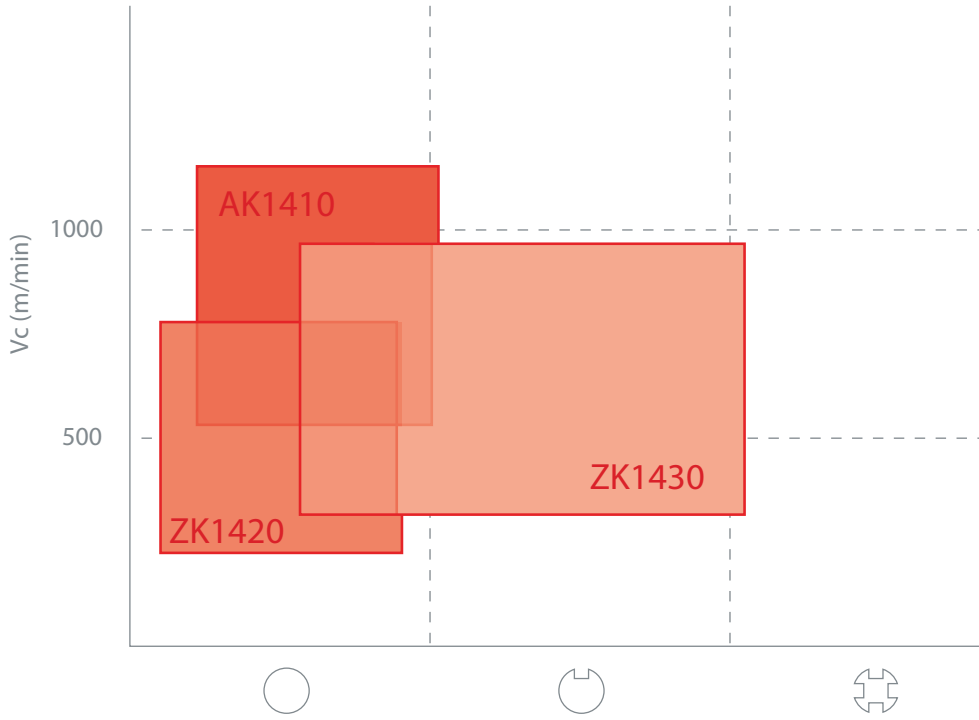
Range ISO **H**

Kaliteli
Grades



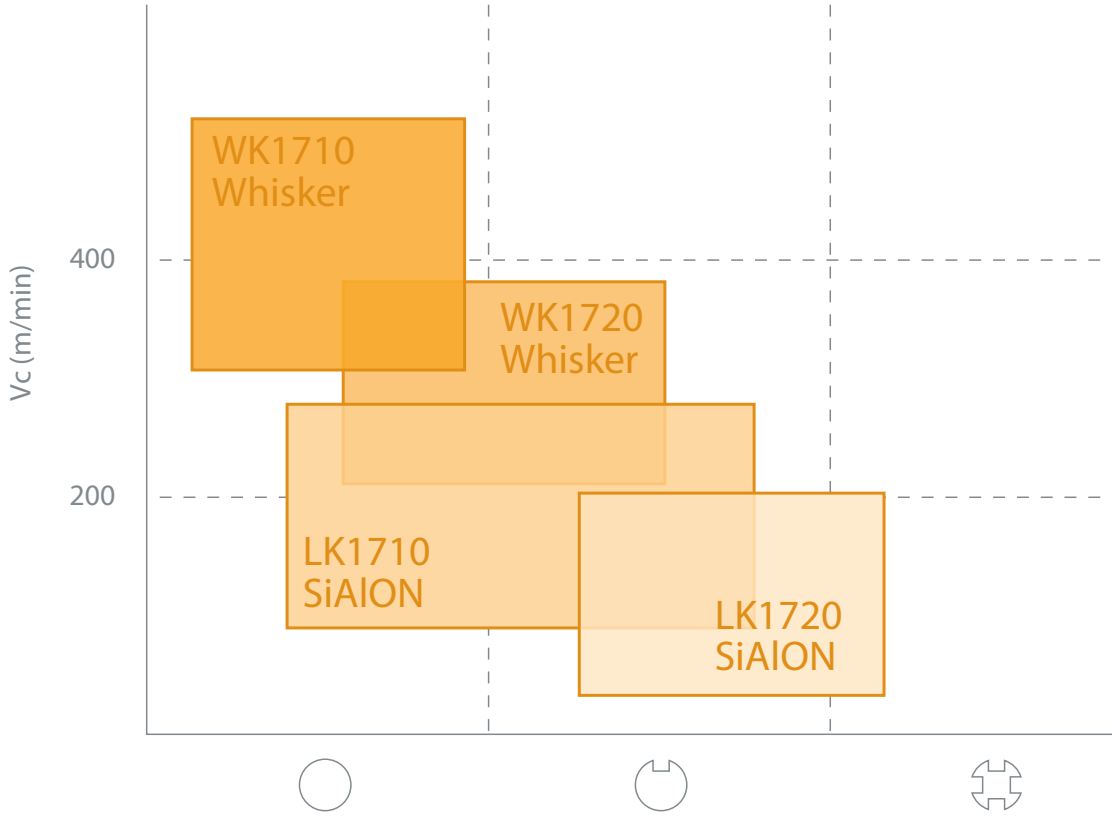
Range ISO **K**

Kaliteleri
Grades



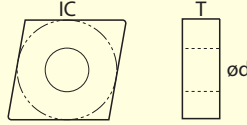
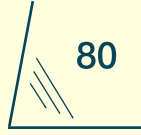
Range ISO **S**

Kaliteleri
Grades



**NEGATIVE
with hole**

CN□□



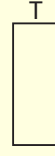
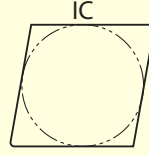
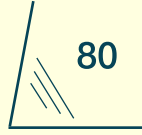
CN □□	1204 □□	1606 □□	1906 □□
IC	12,7	15,875	19,05
T	4,76	6,35	6,35
ød	5,16	6,35	7,93

ÜRÜN AÇIKLAMASI DESCRIPTION	IC	Al ₂ O ₃ + TiC(N)				+ PVD		ZrO ₂			Si ₃ N ₄				SiAlON		Whisker		
		SK1810	SK1830	SK1850	SK1870	SKC1810	SKC1830	ZK1420	ZK1430	NK1410	NK1420	NK1430	NK1440	NK1450	AK1410	LK1710	LK1720	KW1710	KW1720
	CNGA120404	T04000	•	•	•		•	•											
	CNGA120408	T04000	•	•	•		•	•											
	CNGA120412	T04000	•	•	•		•	•											
	CNGA160612	T04000	•	•	•		•	•											
	CNGA160616	T04000	•	•	•		•	•											
	CNGA120404	T04002	•	•	•		•	•											
	CNGA120408	T04002	•	•	•		•	•											
	CNGA120412	T04002	•	•	•		•	•											
	CNGA120416	T04002	•	•	•		•	•											
	CNGA160612	T04002	•	•	•		•	•											
	CNGA160616	T04002	•	•	•		•	•											
	CNGA190616	T04002	•	•	•		•	•											
	CNGA160612	S20022	•	•	•		•	•											
	CNGA160616	S20022	•	•	•		•	•											
CNGA190616	S20022	•	•	•		•	•												

Vc • fn • ap

NEGATIVE
without hole

CN□□



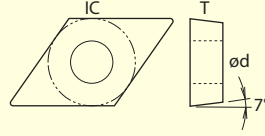
CN □□	1204 □□	1207 □□
IC	12,7	12,7
T	4,76	7,94
Ød		

ÜRÜN AÇIKLAMASI DESCRIPTION	İC	T	Al ₂ O ₃ + TiC(N)				+ PVD		ZrO ₂		Si ₃ N ₄				SiAlON		Whisker		
			SK1810	SK1830	SK1850	SK1870	SKC1810	SKC1830	ZK1420	ZK1430	NK1410	NK1420	NK1430	NK1440	NK1450	AK1410	LK1710	LK1720	KW1710
	CNGN120408	T04000																	•
	CNGN120412	T04000																	•
	CNGN120708	T04000																	•
	CNGN120712	T04000																	•
	CNGN120408	T04002		•	•							•	•					•	
	CNGN120412	T04002		•	•							•	•					•	
	CNGN120416	T04002		•	•							•	•					•	
	CNGN120708	T04002		•	•							•	•					•	
	CNGN120712	T04002		•	•							•	•					•	
	CNGN120716	T04002		•	•							•	•					•	
	CNMX120712	T04000										•	•		•	•			
	CNMX120716	T04000										•	•		•	•			
	CNMX120712	T04002										•	•		•	•			
	CNMX120716	T04002										•	•		•	•			

Vc • fn • ap

NEGATIVE
with hole

DN□□



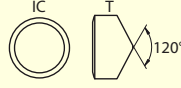
DN □□	1504 □□	1506 □□	1507 □□
IC	12,7	12,7	12,7
T	4,76	6,35	7,94
ød	5,16	5,16	5,16

ÜRÜN AÇIKLAMASI DESCRIPTION	T04000	Al ₂ O ₃ + TiC(N)				+ PVD		ZrO ₂		Si ₃ N ₄				SiAlON		Whisker			
		SK1810	SK1830	SK1850	SK1870	SKC1810	SKC1830	ZK1420	ZK1430	NK1410	NK1420	NK1430	NK1440	NK1450	AK1410	LK1710	LK1720	KW1710	KW1720
	DNGA150404	•	•		•														
	DNGA150408	•	•	•	•		•			•	•	•						•	•
	DNGA150412	•	•	•	•							•	•	•			•	•	•
	DNGA150604	•	•	•	•														
	DNGA150608	•	•	•	•				•	•	•	•			•				
	DNGA150612	•	•	•	•						•	•	•		•				
	DNGA150616	•	•	•							•	•	•						
	DNGA150704	•	•																
	DNGA150708	•	•							•	•	•	•						
	DNGA150712	•	•							•		•	•			•			
		DNGA150404	•	•		•													
DNGA150408		•	•	•	•		•			•	•	•						•	•
DNGA150412		•	•	•	•							•	•	•			•	•	•
DNGA150604		•	•	•	•														
DNGA150608		•	•	•	•				•	•	•	•			•				
DNGA150612		•	•	•	•						•	•	•		•				
DNGA150616		•	•	•							•	•	•						
DNGA150704		•	•																
DNGA150708		•	•							•	•	•	•						
DNGA150712		•	•							•		•	•	•		•			

Vc • fn • ap

POSITIVE 7°
without hole

RC□□



RC □□	0606 □□	0607 □□	0907 □□	1207 □□	1510 □□	1910 □□
IC	6,35	6,35	9,525	12,70	15,87	19,05
T	6,35	7,94	7,94	7,94	10,00	10,00
Ød						

ÜRÜN AÇIKLAMASI DESCRIPTION	IC	Al ₂ O ₃ + TiC(N)				+ PVD		ZrO ₂		Si ₃ N ₄				SiAlON		Whisker				
		SK1810	SK1830	SK1850	SK1870	SKC1810	SKC1830	ZK1420	ZK1430	NK1410	NK1420	NK1430	NK1440	NK1450	AK1410	LK1710	LK1720	KW1710	KW1720	
	RCGX 060600	T04000	•	•	•		•	•										•	•	
	RCGX 060700	T04000	•	•	•		•	•											•	•
	RCGX 090700	T04000	•	•	•		•	•											•	•
	RCGX 120700	T04000	•	•	•		•	•											•	•
	RCGX 151000	T04000	•	•	•		•	•											•	•
	RCGX 191000	T04000	•	•	•		•	•											•	•
	RCGX 251200	T04000	•	•	•		•	•											•	•
	RCGX 060600	S20022	•	•	•		•	•											•	•
	RCGX 060700	S20022	•	•	•		•	•											•	•
	RCGX 090700	S20022	•	•	•		•	•											•	•
	RCGX 120700	S20022	•	•	•		•	•											•	•
	RCGX 151000	S20022	•	•	•		•	•											•	•
	RCGX 191000	S20022	•	•	•		•	•											•	•
	RCGX 251200	S20022	•	•	•		•	•											•	•
	RCGX 060600	S06032	•	•	•		•	•											•	•
	RCGX 060700	S06032	•	•	•		•	•											•	•
	RCGX 090700	S06032	•	•	•		•	•											•	•
	RCGX 120700	S06032	•	•	•		•	•											•	•
	RCGX 151000	S06032	•	•	•		•	•											•	•
	RCGX 191000	S06032	•	•	•		•	•											•	•
	RCGX 251200	S06032	•	•	•		•	•											•	•
	RCGX 060600	AS06032	•	•	•		•	•											•	•
	RCGX 060700	AS06032	•	•	•		•	•											•	•
	RCGX 090700	AS06032	•	•	•		•	•											•	•
	RCGX 120700	AS06032	•	•	•		•	•											•	•
	RCGX 151000	AS06032	•	•	•		•	•											•	•
	RCGX 191000	AS06032	•	•	•		•	•											•	•
	RCGX 251200	AS06032	•	•	•		•	•											•	•

Vc • fn • ap

**NEGATIVE
without hole**

RN□□

360

IC

T

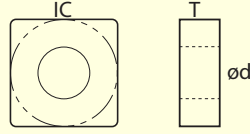
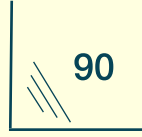
RN □□	1204 □□	1207 □□	1907 □□
IC	12,70	12,70	19,05
T	4,76	7,94	7,94
Ød	-	-	-

ÜRÜN AÇIKLAMASI DESCRIPTION	T04000	Al ₂ O ₃ + TiC(N)				+ PVD		ZrO ₂		Si ₃ N ₄					SiAlON		Whisker			
		SK1810	SK1830	SK1850	SK1870	SKC1810	SKC1830	ZK1420	ZK1430	NK1410	NK1420	NK1430	NK1440	NK1450	AK1410	LK1710	LK1720	KW1710	KW1720	
	RNGN 120400	T04000	●	●	●													●	●	
	RNGN 120700	T04000	●	●	●														●	●
	RNGN 190700	T04000	●	●	●														●	●
	RNGN 120400	S20022	●	●	●														●	●
	RNGN 120700	S20022	●	●	●														●	●
	RNGN 190700	S20022	●	●	●														●	●
	RNGN 120400	S06032	●	●	●														●	●
	RNGN 120700	S06032	●	●	●														●	●
	RNGN 190700	S06032	●	●	●														●	●
	RNGN 120400	AS20022	●	●	●														●	●
	RNGN 120700	AS20022	●	●	●														●	●
	RNGN 190700	AS20022	●	●	●														●	●
	RNGN 120400	AS06032	●	●	●														●	●
	RNGN 120700	AS06032	●	●	●														●	●
	RNGN 190700	AS06032	●	●	●														●	●

Vc • fn • ap

**NEGATIVE
with hole**

SN □ □



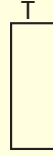
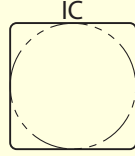
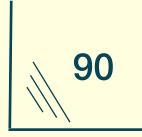
SN □ □	0904 □ □	1204 □ □	1207 □ □
IC	9,52	12,70	12,70
T	4,76	4,76	7,94
ød	3,81	5,16	5,16

ÜRÜN AÇIKLAMASI DESCRIPTION		IC	Al ₂ O ₃ + TiC(N)				+ PVD		ZrO ₂		Si ₃ N ₄				SiAlON		Whisker			
			SK1810	SK1830	SK1850	SK1870	SKC1810	SKC1830	ZK1420	ZK1430	NK1410	NK1420	NK1430	NK1440	NK1450	AK1410	LK1710	LK1720	KW1710	KW1720
	SNGA090304	T04000	•	•																
	SNGA090308	T04000	•	•																
	SNGA120404	T04000	•		•					•					•					
	SNGA120408	T04000	•	•	•	•				•	•		•		•			•	•	
	SNGA120412	T04000	•	•	•	•			•		•	•	•		•	•	•			
	SNGA120416	T04000									•				•	•	•			
	SNGA120708	T04000	•																	
	SNGA120712	T04000	•								•	•								
	SNGA120716	T04000	•							•	•	•							•	
	SNGA120412	S20022	•	•	•	•			•	•	•	•		•	•	•				
	SNGA120416	S20022								•				•	•	•				
	SNGA120708	S20022	•																	
	SNGA120712	S20022	•							•	•									
	SNGA120716	S20022	•						•	•	•						•			

Vc • fn • ap

NEGATIVE
without hole

SN □□



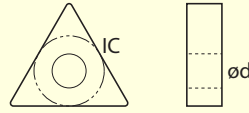
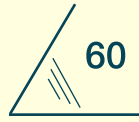
SN □□	0904 □□	1204 □□	1207 □□
IC	9,52	12,70	12,70
T	4,76	4,76	7,94
Ød	3,81	5,16	5,16

ÜRÜN AÇIKLAMASI DESCRIPTION	Image	T04000	Al ₂ O ₃ + TiC(N)				+ PVD		ZrO ₂		Si ₃ N ₄					SiAlON		Whisker	
			SK1810	SK1830	SK1850	SK1870	SKC1810	SKC1830	ZK1420	ZK1430	NK1410	NK1420	NK1430	NK1440	NK1450	AK1410	LK1710	LK1720	KW1710
		SNGN090304	•	•															
		SNGN090308	•	•															
		SNGN090312	•		•					•				•					
		SNGN120408	•	•	•	•				•	•		•	•				•	•
		SNGN120412	•	•	•	•		•		•	•	•		•	•	•			
		SNGN120416								•				•	•	•			
		SNGN120708	•																
		SNGN120712	•							•	•								
		SNGN120716	•					•		•	•						•		
		SNGN120412	•	•	•	•		•		•	•	•		•	•	•			
		SNGN120416	•	•	•	•		•		•				•	•	•			
		SNGN120708	•																
		SNGN120712	•							•	•								
		SNGN120716	•					•		•	•						•		
		SNGX120708	•								•		•						
		SNGX120712	•	•							•	•	•			•			
		SNGX120716									•	•	•	•		•			
		SNGX120708	•								•		•						
		SNGX120712	•	•							•	•	•			•			
		SNGX120716									•	•	•	•		•			

Vc • fn • ap

NEGATIVE
with hole

TN □□



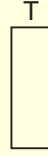
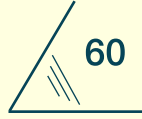
TN □□	1604 □□	2204 □□	2706 □□
IC	9,525	12,7	15,875
T	4,76	4,76	6,35
ød	3,81	5,16	6,35

ÜRÜN AÇIKLAMASI DESCRIPTION		IC	Al ₂ O ₃ + TiC(N)				+ PVD		ZrO ₂		Si ₃ N ₄					SiAlON		Whisker	
			SK1810	SK1830	SK1850	SK1870	SKC1810	SKC1830	ZK1420	ZK1430	NK1410	NK1420	NK1430	NK1440	NK1450	AK1410	LK1710	LK1720	KW1710
	TNGA160404	T04000	•	•				•		•					•				
	TNGA160408	T04000	•	•	•	•		•		•	•	•		•	•				
	TNGA160412	T04000	•	•	•	•		•		•	•	•						•	•
	TNGA160416	T04000	•	•	•	•				•	•	•							
	TNGA220408	T04000		•	•					•		•				•		•	•
	TNGA220412	T04000		•	•					•		•				•		•	•
	TNGA270608	T04000	•	•															
	TNGA270612	T04000	•	•															
	TNGA270616	T04000		•												•			
	TNGA160404	T04002	•	•				•		•					•				
	TNGA160408	T04002	•	•	•	•		•		•	•	•		•	•				
	TNGA160412	T04002	•	•	•	•		•		•	•	•						•	•
	TNGA160416	T04002	•	•	•	•				•	•	•							
	TNGA220408	T04002		•	•					•		•				•		•	•
	TNGA220412	T04002		•	•					•		•				•		•	•
	TNGA270608	T04002	•	•															
	TNGA270612	T04002	•	•															
	TNGA270616	T04002		•												•			

Vc • fn • ap

NEGATIVE
without hole

TN □□



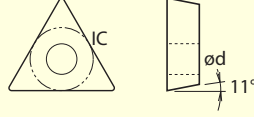
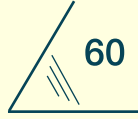
TN □□	1604 □□	2204 □□	2706 □□
IC	9,525	12,7	15,875
T	4,76	4,76	6,35
Ød			

ÜRÜN AÇIKLAMASI DESCRIPTION	DESCRIPTION	Al ₂ O ₃ + TiC(N)				+ PVD		ZrO ₂		Si ₃ N ₄						SiAlON		Whisker	
		SK1810	SK1830	SK1850	SK1870	SKC1810	SKC1830	ZK1420	ZK1430	NK1410	NK1420	NK1430	NK1440	NK1450	AK1410	LK1710	LK1720	KW1710	KW1720
	TNGN160404	T04000	•	•				•		•					•				
	TNGN160408	T04000	•	•	•	•		•		•	•	•		•	•				
	TNGN160412	T04000	•	•	•	•				•	•	•						•	•
	TNGN160416	T04000	•	•	•	•				•	•	•							
	TNGN220408	T04000		•	•						•	•				•		•	•
	TNGN220412	T04000		•	•						•	•				•		•	•
	TNGN270608	T04000	•	•															
	TNGN270612	T04000	•	•															
	TNGN270616	T04000		•												•			
	TNGN160404	T04002	•	•				•		•					•				
	TNGN160408	T04002	•	•	•	•		•		•	•	•		•	•				
	TNGN160412	T04002	•	•	•	•				•	•	•						•	•
	TNGN160416	T04002	•	•	•	•				•	•	•							
	TNGN220408	T04002		•	•						•	•				•		•	•
	TNGN220412	T04002		•	•						•	•				•		•	•
	TNGN270608	T04002	•	•															
	TNGN270612	T04002	•	•															
	TNGN270616	T04002		•												•			

Vc • fn • ap

**POSITIVE 11°
without hole**

TP □ □



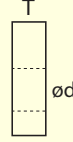
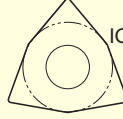
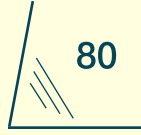
TP □ □	1103 □ □	1603 □ □
IC	6,35	9,525
T	3,18	3,18
Ød		
/		

ÜRÜN AÇIKLAMASI DESCRIPTION			Al ₂ O ₃ + TiC(N)				+ PVD	ZrO ₂		Si ₃ N ₄					SiAlON		Whisker			
			SK1810	SK1830	SK1850	SK1870	SKC1810	SKC1830	ZK1420	ZK1430	NK1410	NK1420	NK1430	NK1440	NK1450	AK1410	LK1710	LK1720	KW1710	KW1720
	TPGN110304	T04000	•	•						•		•			•					
	TPGN110308	T04000	•	•						•	•	•			•				•	•
	TPGN160304	T04000	•	•	•			•		•		•			•					
	TPGN160308	T04000	•	•				•		•	•	•	•		•				•	•
	TPGN160312	T04000	•	•								•	•						•	•
	TPGN160404	T04000	•		•															
	TPGN160408	T04000	•	•														•		
	TPGN160412	T04000	•															•		
	TPGN220404	T04000	•	•																
	TPGN220408	T04000	•	•							•								•	•
	TPGN220412	T04000	•	•								•	•							
	TPGN220416	T04000	•	•	•															
	TPGN110304	T04002	•	•						•		•			•					
	TPGN110308	T04002	•	•						•	•	•			•				•	•
	TPGN160304	T04002	•	•	•			•		•		•			•					
	TPGN160308	T04002	•	•				•		•	•	•	•		•				•	•
	TPGN160312	T04002	•	•								•	•						•	•
	TPGN160404	T04002	•		•															
	TPGN160408	T04002	•	•														•		
	TPGN160412	T04002	•															•		
	TPGN220404	T04002	•	•																
	TPGN220408	T04002	•	•							•								•	•
	TPGN220412	T04002	•	•								•	•							
	TPGN220416	T04002	•	•	•															

Vc • fn • ap

**NEGATIVE
with hole**

WN□□



WN□□ 0804□□

IC 12,7
T 4,76
ød 5,16

ÜRÜN AÇIKLAMASI DESCRIPTION		T04000	Al ₂ O ₃ + TiC(N)				+ PVD		ZrO ₂		Si ₃ N ₄					SiAlON		Whisker	
			SK1810	SK1830	SK1850	SK1870	SKC1810	SKC1830	ZK1420	ZK1430	NK1410	NK1420	NK1430	NK1440	NK1450	AK1410	LK1710	LK1720	KW1710
	WNGA080404	T04000	•	•	•														
	WNGA080408	T04000	•	•	•					•	•	•	•	•		•		•	•
	WNGA080412	T04000	•	•	•					•	•	•	•	•		•			
	WNGA080404	T04002	•	•	•														
	WNGA080408	T04002	•	•	•					•	•	•	•	•		•		•	•
	WNGA080412	T04002	•	•	•					•	•	•	•	•		•			

Vc • fn • ap

Kesme parametleri
Cutting Parameters

HH	HARDENED STEEL	GÜÇLENDİRİLMİŞ ÇELİK
CH	CASE HARDENED STEEL	GÜÇLENDİRİLMİŞ ÇELİK KASA
BH	BEARING STEEL	RULMAN ÇELİĞİ

GK	GREY CAST IRON	GRİ DÖKME DEMİR
NK	NOCULAR CAST IRON	NODÜLER DÖKME DEMİR
AS	SUPER ALLOYS (Ni Based)	SÜPER ALAŞIM

MATERIAL	ap (mm)	fn (mm/rev)	CUTTING CONDITION	Al ₂ O ₃ + TiC(N)				+ PVD		SiAlON		Whisker			
				SK1810	SK1830	SK1850	SK1870	SKC1810	SKC1830	LK1710	LK1720	WK1710	WK1720		
H	HH	0,10~0,50	0,05~0,20	○	∅	130~250	120~240	110~230	100~220	100~220	120~240				
		0,50~2,00	0,10~0,30	○	∅	110~180	100~170	90~160	80~150	80~160	100~180				
	CH	0,10~0,50	0,05~0,20	○	∅	110~210	100~200	90~190	80~180	80~180	100~200				
		0,50~2,00	0,10~0,30	○	∅	90~150	80~140	70~130	60~120	60~120	80~140				
	BH	0,10~0,50	0,05~0,20	○	∅	110~230	100~220	90~210	80~200	80~200	100~220				
		0,50~2,00	0,10~0,30	○	∅	80~160	70~150	60~140	60~140	60~140	80~160				
K	GK	0,20~0,50	0,10~0,30	○	∅			300~700							
				⊕	∅										
		○	∅												
	NK	1,00~4,00	0,25~0,50	⊕	∅										
				○	∅										
		○	∅			300~600									
AS	0,50~1,00	0,10~0,30	○	∅							250~500				
			⊕	∅								350~700			
	○	∅									250~500				
AS	1,00~4,00	0,15~0,40	○	∅							200~350		250~500		
			⊕	∅								180~300	150~280	200~350	200~350
○	∅										150~250		200~400		
⊕	∅										140~240	120~220			

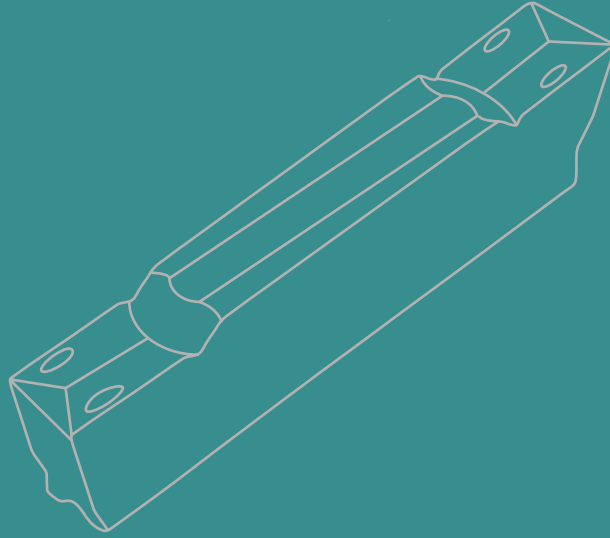
Kesme parametreleri Cutting Parameters

HH	HARDENED STEEL	GÜÇLENDİRİLMİŞ ÇELİK
CH	CASE HARDENED STEEL	GÜÇLENDİRİLMİŞ ÇELİK KASA
BH	BEARING STEEL	RULMAN ÇELİĞİ


GK	GREY CAST IRON	GRİ DÖKME DEMİR
NK	NOCULAR CAST IRON	NODÜLER DÖKME DEMİR
AS	SUPER ALLOYS (Ni Based)	SÜPER ALAŞIM

MATERIAL MALZEME	ap (mm)	fn (mm/ rev)	CUTTING CONDITION	ZrO ₂		Si ₃ N ₄							
				ZK1420	ZK1430	NK1410	NK1420	NK1430	NK1440	NK1450	AK1410		
H	HH	0,10~0,50	0,05~0,20	○	∅								
		0,50~2,00	0,10~0,30	○	∅								
	CH	0,10~0,50	0,05~0,20	○	∅								
		0,50~2,00	0,10~0,30	○	∅								
	BH	0,10~0,50	0,05~0,20	○	∅								
		0,50~2,00	0,10~0,30	○	∅								
K	GK	0,20~0,50	0,10~0,30	○	∅	350~750	400~800	650~1200	600~1200	600~1200	500~1000		
				⊕	∅			550~1100	500~1000	500~1000	450~800		
		○	∅			650~1200	600~1200	600~1200	500~1000	450~800			
	NK	1,00~4,00	0,25~0,50	⊕	∅			550~1100	500~1000	500~1000	450~800	400~600	
				○	∅			450~800	400~800	400~800	350~700		450~800
		○	∅			350~650	300~600	300~600	250~500		400~600		
S	AS	0,50~1,00	0,10~0,30	○	∅								
				⊕	∅								
		○	∅										
1,00~4,00	0,15~0,40	⊕	∅										

KESME/KANAL AÇMA GROOVING

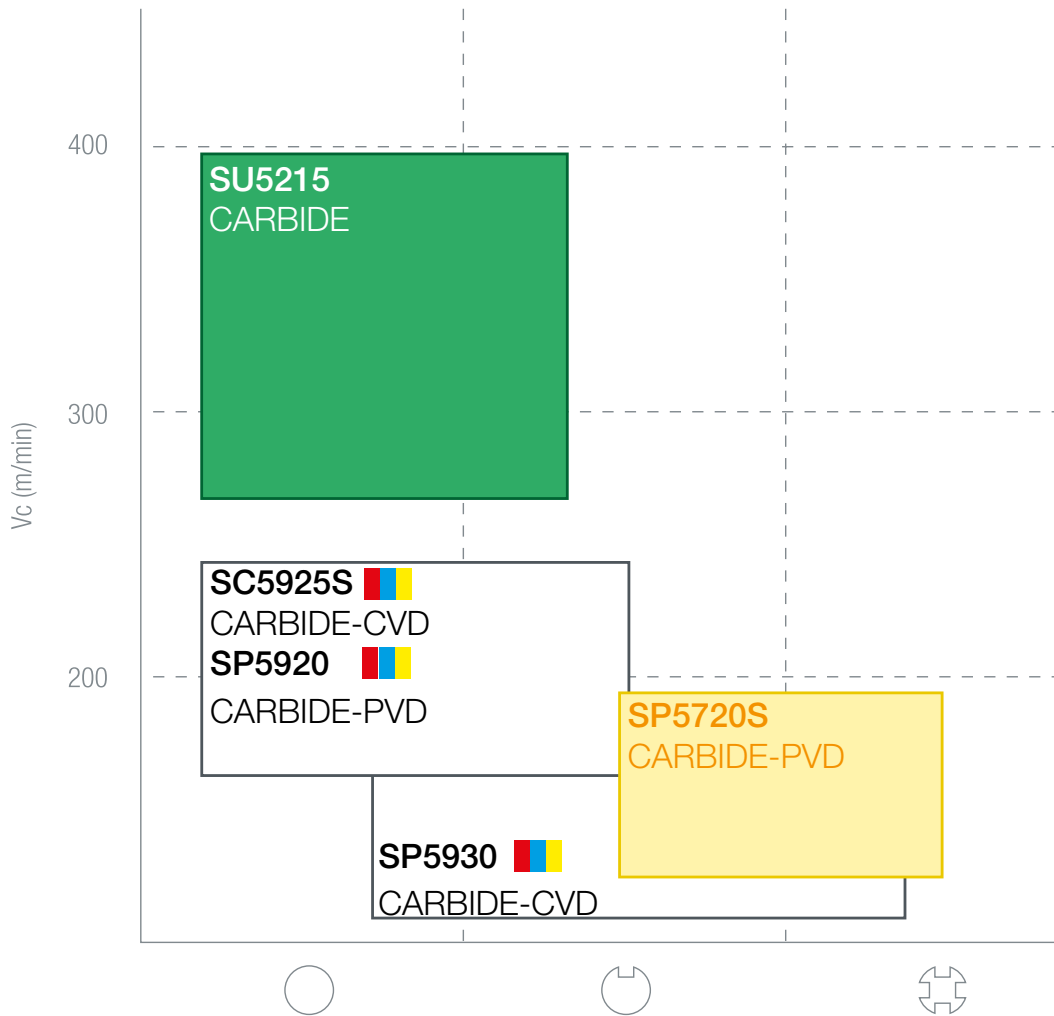


Kaliteleri
Grades

	K					P					M					N				
																				
	K01	K10	K20	K30	K40	P01	P10	P20	P30	P40	M01	M10	M20	M30	M40	N01	N10	N20	N30	N40
CARBIDE CVD	SC5925S					SC5925S					SC5925S									
CARBIDE PVD	SP5930					SP5930					SP5930									
	SP5920					SP5920					SP5920									
CARBIDE UNCOATED											SP5720S									
																SU5215				

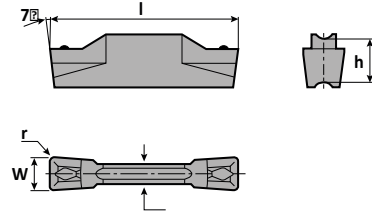
Range ISO **P** **M** **K**

Kaliteleri
Grades



MAGC

PARTING & GROOVING



ÜRÜN AÇIKLAMASI

DESCRIPTION

ÖLÇÜLER

DIMENSIONS

CARBIDE

SC5925S

SP5930

SP5920

SP5720S

SU5215

W

r

l

M

hr

α



MAGC200

2.0

0.2

16.0

1.2

3.5

-

●

●

●

●MAC250

MAGC250

2.5

0.2

18.5

2.0

3.85

-

●

●

●

●MAC300

MAGC300

3.0

0.4

21.0

2.35

4.8

-

●

●

●

●MAC400

MAGC400

4.0

0.4

21.0

3.3

4.8

-

●

●

●

●MAC500

MAGC500

5.0

0.8

26.0

4.1

5.8

-

●

●

●

●MAC600

MAGC600

6.0

0.8

26.0

5.0

5.8

-

●

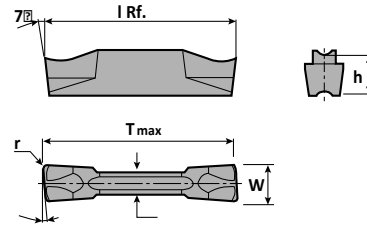
●

●

●

MAGD

PARTING



ÜRÜN AÇIKLAMASI

DESCRIPTION

ÖLÇÜLER

DIMENSIONS

CARBIDE

SC5925S

SP5930

SP5920

SP5720S

SU5215

W

r

l

M

hr

α



MAGD200J-15D

2.0

0.2

16.0

1.2

3.5

15

●

●

●

●MAD300-15D

MAGD300J-15D

3.0

0.4

21.0

2.35

4.8

15

●

●

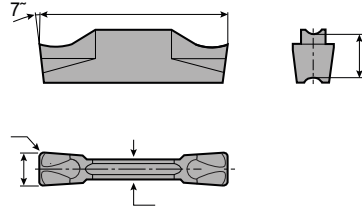
●

●

Vc • fn

MAGJ

PARTING & GROOVING



ÜRÜN AÇIKLAMASI

DESCRIPTION

ÖLÇÜLER

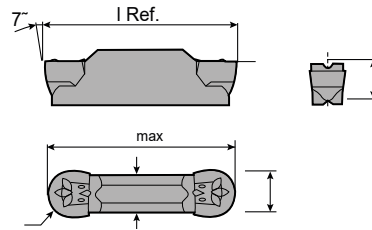
DIMENSIONS

CARBIDE

	DESCRIPTION	W	r	l	M	h	α	CARBIDE				
								SC5925S	SP5930	SP5920	SP5720S	SU5215
	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	-	●	●	●	●	

MAGR

PROFILING



ÜRÜN AÇIKLAMASI

DESCRIPTION

ÖLÇÜLER

DIMENSIONS

CARBIDE

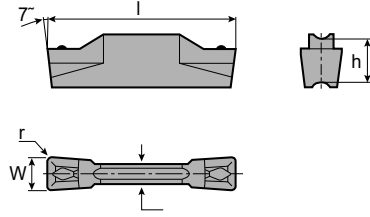
	DESCRIPTION	W	r	l	M	h	α	CARBIDE				
								SC5925S	SP5930	SP5920	SP5720S	SU5215
	MAGR200	2.0	1.0	16.0	1.5	3.5	-	●	●	●	●	
	MAGR300	3.0	1.5	21.0	2.35	4.8	-	●	●	●	●	
	MAGR400	4.0	2.0	21.0	3.3	4.8	-	●	●	●	●	
	MAGR500	5.0	2.5	26.0	4.1	5.8	-	●	●	●	●	

Vc • fn



SAGC

PARTING & GROOVING



ÜRÜN AÇIKLAMASI

DESCRIPTION

ÖLÇÜLER

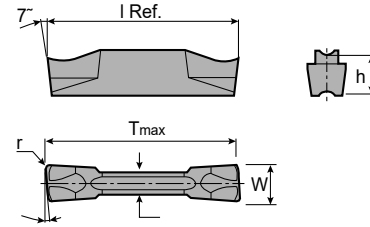
DIMENSIONS

CARBIDE

	DESCRIPTION	W	r	l	M	h	α	CARBIDE				
								SC5925S	SP5930	SP5920	SP5720S	SU5215
	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	-	●	●	●	●	

SAGD

PARTING



ÜRÜN AÇIKLAMASI

DESCRIPTION

ÖLÇÜLER

DIMENSIONS

CARBIDE

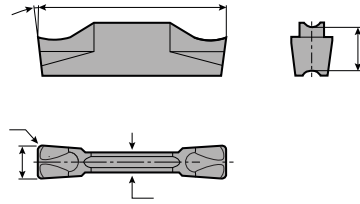
	DESCRIPTION	W	r	l	M	h	r	α	CARBIDE				
									SC5925S	SP5930	SP5920	SP5720S	SU5215
	SAGD200J-15D	2.0	0.2	20.0	1.70	4.70	15	15	●	●	●	●	
	SAGD200J-6D	2.0	0.2	20.0	1.70	4.70	6	6	●	●	●	●	
	SAGD300J-15D	3.0	0.2	20.0	2.40	4.70	15	15	●	●	●	●	
	SAGD300J-6D	3.0	0.2	20.0	2.40	4.70	15	15	●	●	●	●	
	SAGD400J-6D	4.0	0.3	20.0	3.0	4.70	6	6	●	●	●	●	
	SAGD400J-4D	4.0	0.3	20.0	3.0	4.70	4	4	●	●	●	●	
	SAGD500J-4D	5.0	0.3	25.0	4.0	5.20	4	4	●	●	●	●	

Vc • fn



SAGJ

PARTING & GROOVING



ÜRÜN AÇIKLAMASI

DESCRIPTION

ÖLÇÜLER

DIMENSIONS

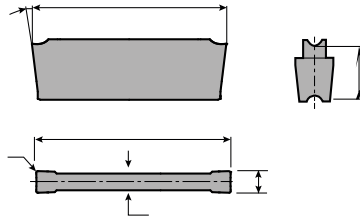
CARBIDE



	W	r	l	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	-	●	●	●	●	●

SDGN

PARTING & GROOVING



ÜRÜN AÇIKLAMASI

DESCRIPTION

ÖLÇÜLER

DIMENSIONS

CARBIDE

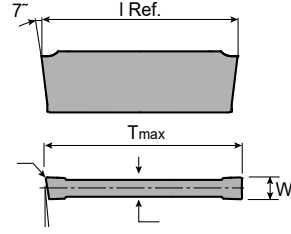


	W	r	l	M	h	α					
SDGN2002Z	2.0	0.2	21.0	1.7	6.0	-	●	●	●	●	●
SDGN2202J	2.2	0.2	19.8	1.9	6.0	-	●	●	●	●	●
SDGN3002Z	3.0	0.2	21.0	2.4	6.1	-	●	●	●	●	●
SDGN3102C	3.1	0.2	20.1	2.4	6.1	-	●	●	●	●	●

Vc • fn

SDGR

PARTING




ÜRÜN AÇIKLAMASI

DESCRIPTION

ÖLÇÜLER

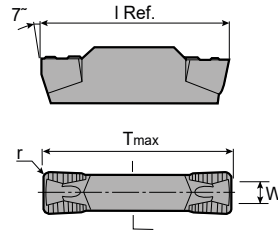
DIMENSIONS

CARBIDE

	DESCRIPTION	W	r	l	M	h	α	CARBIDE				
								SC5925S	SP5930	SP5920	SP5720S	SU5215
	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	●	●	●	●	

SGRIP

PARTING & GROOVING




ÜRÜN AÇIKLAMASI

DESCRIPTION

ÖLÇÜLER

DIMENSIONS

CARBIDE

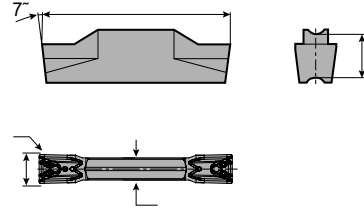
	DESCRIPTION	W	r	l	M	h	α	CARBIDE				
								SC5925S	SP5930	SP5920	SP5720S	SU5215
	SGRIP300-M	3.0	0.2	16.0	2.3	4.4	-	●	●	●	●	
	SGRIP400-M	4.0	0.4	19.0	2.8	4.9	-	●	●	●	●	
	SGRIP500-M	5.0	0.5	19.0	3.4	5.4	-	●	●	●	●	

Vc • fn



SGDM

PARTING & GROOVING



ÜRÜN AÇIKLAMASI

DESCRIPTION

ÖLÇÜLER

DIMENSIONS

CARBIDE

SC5925S

SP5930

SP5920

SP5720S

SU5215

W

r

l

M

h

α



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

-

●

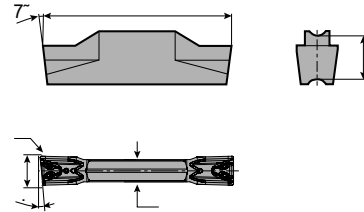
●

●

●

SGDD

PARTING



ÜRÜN AÇIKLAMASI

DESCRIPTION

ÖLÇÜLER

DIMENSIONS

CARBIDE

SC5925S

SP5930

SP5920

SP5720S

SU5215

W

r

l

M

h

α



SGDD200-15D

2.00

0.2

20

1.5

4.3

15

●

●

●

●

SGDD300-15D

3.00

0.3

20

2.3

4.3

15

●

●

●

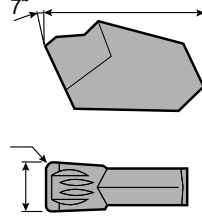
●

Vc • fn



SSP

PARTING



ÜRÜN AÇIKLAMASI

DESCRIPTION

ÖLÇÜLER

DIMENSIONS

CARBIDE

SC5925S

SP5930

SP5920

SP5720S

SU5215

W r l M h α



SSP200

2.2

9.3

0.2

-

-

-

●

●

●

●

SSP300

3.1

3.2

3.3

-

-

-

●

●

●

●

SSP400

4.1

11.3

0.25

-

-

-

●

●

●

●

SSP500

5.1

11.4

0.3

-

-

-

●

●

●

●

SSP600

6.4

11.4

0.35

-

-

-

●

●

●

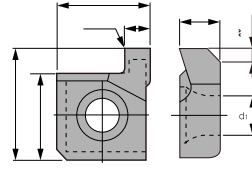
●

Vc • fn

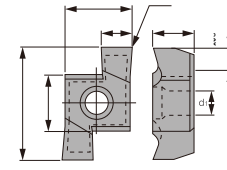


GR

INTERNAL GROOVING



6GR 7GR



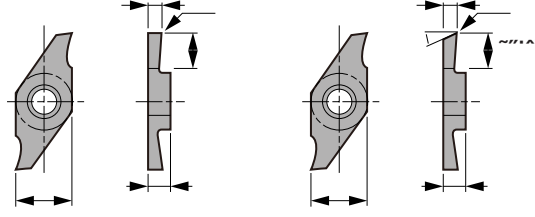
8GR 9GR

ÜRÜN AÇIKLAMASI DESCRIPTION		ÖLÇÜLER DIMENSIONS								CARBIDE				
										SC5925S	SP5930	SP5920	SP5720S	SU5215
		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

SKFC

FINE TOOL



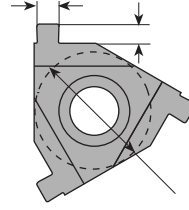
ÜRÜN AÇIKLAMASI DESCRIPTION		ÖLÇÜLER DIMENSIONS						CARBIDE				
		W	r	h	t	t-max	α	SC5925S	SP5930	SP5920	SP5720S	SU5215
	SKFC12R-050-N	0.50	0.03	8.7	3.0	2.5	-			●		
	SKFC12R-070-N	0.70	0.03	8.7	3.0	4.0	-			●		
	SKFC12R-100-N	1.00	0.03	8.7	3.0	6.0	-			●		
	SKFC12R-125-N	1.25	0.03	8.7	3.0	6.0	-			●		
	SKFC12R-150-N	1.50	0.03	8.7	3.0	6.0	-			●		
	SKFC12R-200-N	2.00	0.03	8.7	3.0	6.0	-			●		
	SKFC12L-050-N	0.50	0.03	8.7	3.0	2.5	-			●		
	SKFC12L-070-N	0.70	0.03	8.7	3.0	4.0	-			●		
	SKFC12L-100-N	1.00	0.03	8.7	3.0	6.0	-			●		
	SKFC12L-125-N	1.25	0.03	8.7	3.0	6.0	-			●		
	SKFC12L-150-N	1.50	0.03	8.7	3.0	6.0	-			●		
	SKFC12L-200-N	2.00	0.03	8.7	3.0	6.0	-			●		
	SKFC16L-150-N	1.50	0.03	9.5	4.0	8.0	-			●		
	SKFC16L-200-N	2.00	0.03	9.5	4.0	8.0	-			●		
	SKFC16R-150-N	1.50	0.03	9.5	4.0	8.0	-			●		
	SKFC16R-200-N	2.00	0.03	9.5	4.0	8.0	-			●		
	SKFC12L-100-S-20D	1.00	-	8.7	3.0	6.0	20			●		
	SKFC12R-100-S-20D	1.00	-	8.7	3.0	6.0	20			●		
	SKFC16L-150-S-20D	1.50	-	9.5	4.0	8.0	20			●		
	SKFC16R-150-S-20D	1.50	-	9.5	4.0	8.0	20			●		
	SKFC16L-200-S-20D	2.00	-	9.5	4.0	8.0	20			●		
	SKFC16R-200-S-20D	2.00	-	9.5	4.0	8.0	20			●		

Vc • fn



11ER

EXTERNAL GROOVING

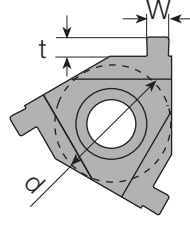


ÜRÜN AÇIKLAMASI DESCRIPTION		ÖLÇÜLER DIMENSIONS				CARBIDE				
						SC5925S	SP5930	SP5920	SP5720S	SU5215
	11ER-W0.50-T0.70	6.35	11	0.50	0.70			●		
	11ER-W0.60-T0.70	6.35	11	0.60	0.70			●		
	11ER-W0.80-T0.70	6.35	11	0.80	0.70			●		
	11ER-W1.00-T0.70	6.35	11	1.00	0.70			●		
	11ER-W1.20-T1.50	6.35	11	1.20	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

□□IR

INTERNAL GROOVING



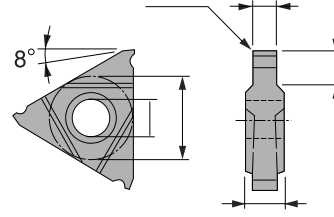
ÜRÜN AÇIKLAMASI DESCRIPTION		ÖLÇÜLER DIMENSIONS				CARBIDE				
						SC5925S	SP5930	SP5920	SP5720S	SU5215
	11IR-W0.50-T0.70	6.35	11	0.50	0.70			●		
	11IR-W0.60-T0.70	6.35	11	0.60	0.70			●		
	11IR-W0.80-T0.70	6.35	11	0.80	0.70			●		
	11IR-W1.00-T0.70	6.35	11	1.00	0.70			●		
	11IR-W1.20-T1.50	6.35	11	1.20	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-T1.80	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



STGF

EXTERNAL GROOVING



ÜRÜN AÇIKLAMASI

DESCRIPTION

ÖLÇÜLER

DIMENSIONS

CARBIDE

SC5925S

SP5930

SP5920

SP5720S

SU5215

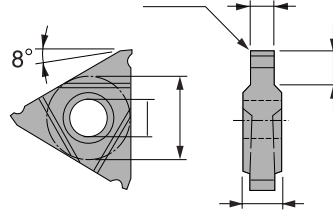


	W	T-max	r	l	d1	h
STGF32R-050	0.50	1.00	0.05	9.525	3.18	4.4
STGF32R-100	1.00	2.00	0.05	9.525	3.18	4.4
STGF32R-110	1.10	2.00	0.05	9.525	3.18	4.4
STGF32R-120	1.20	2.00	0.05	9.525	3.18	4.4
STGF32R-125	1.25	2.00	0.20	9.525	3.18	4.4
STGF32R-145	1.45	2.00	0.20	9.525	3.18	4.4
STGF32R-150	1.50	2.00	0.20	9.525	3.18	4.4
STGF32R-175	1.75	2.00	0.20	9.525	3.18	4.4
STGF32R-185	1.85	2.50	0.20	9.525	3.18	4.4
STGF32R-200	2.00	2.50	0.20	9.525	3.18	4.4
STGF32R-250	2.50	2.50	0.20	9.525	3.18	4.4
STGF32R-300	3.00	3.00	0.20	9.525	3.18	4.4

Vc • fn

STGF

EXTERNAL GROOVING



ÜRÜN AÇIKLAMASI

DESCRIPTION

ÖLÇÜLER

DIMENSIONS

CARBIDE

SC5925S

SP5930

SP5920

SP5720S

SU5215

W

T-max

r

l

d1

h



STGF43R-125

1.25

2.00

0.20

12.7

4.76

5.5

STGF43R-145

1.45

2.00

0.20

12.7

4.76

5.5

STGF43R-150

1.50

3.50

0.20

12.7

4.76

5.5

STGF43R-175

1.75

3.50

0.20

12.7

4.76

5.5

STGF43R-185

1.85

3.50

0.20

12.7

4.76

5.5

STGF43R-200

2.00

3.50

0.20

12.7

4.76

5.5

STGF43R-230

2.30

3.50

0.20

12.7

4.76

5.5

STGF43R-250

2.50

4.00

0.30

12.7

4.76

5.5

STGF43R-265

2.65

4.00

0.30

12.7

4.76

5.5

STGF43R-280

2.80

4.00

0.30

12.7

4.76

5.5

STGF43R-300

3.00

4.00

0.30

12.7

4.76

5.5

STGF43R-320

3.20

4.00

0.30

12.7

4.76

5.5

STGF43R-330

3.30

4.00

0.30

12.7

4.76

5.5

STGF43R-350

3.50

5.00

0.30

12.7

4.76

5.5

STGF43R-400

4.00

5.00

0.40

12.7

4.76

5.5

STGF43R-430

4.30

5.00

0.40

12.7

4.76

5.5

STGF43R-450

4.50

5.00

0.40

12.7

4.76

5.5

STGF43R-480

4.80

5.00

0.40

12.7

4.76

5.5

Vc • fn



Cutting Parameters Vc(m/min)

GK	GREY CAST IRON / GRİ DÖKME DEMİR	MM	MARTENSITIC AND FERRITIC STAINLESS / PASLANMAZ ÇELİK KALİTE
NK	NODULAR CAST IRON / NODÜLER DÖKME DEMİR	AM	STEEL AUSTENITIC STAINLESS STEEL / ÇELİK KALİTE
LP	LOW CARBON AND FREE CUTTING STEEL / DÜŞÜK KARBON KESME ÇELİĞİ	AN	ALUMINIUM ALLOYS AGED AND HARDENED / ALÜMİNYUM VE
MP	MEDIUM CARBON STEEL / ORTA KARBON ÇELİĞİ	HN	ALUMINIUM ALLOYS / ALAŞIMLI ALÜMİNYUM
HP	HIGH CARBON STEEL / YÜKSEK KARBON ÇELİĞİ	BN	BRASS / PİRİNÇ
AP	ALLOY STEEL / ALAŞIMLI ÇELİK	CN	BRONZE AND ELECTROLYTIC COPPER / BRONZ VE ELEKTROLİTİK BAKIR

MATERIAL		CARBIDE-CVD	CARBIDE-PVD			CARBIDE
		CS9525S	PS9530	PS9520	PS7520S	US2515
K	GK	250-450	200-360	200-360		
	NK	180-300	150-280	150-280		
P	LP	250-350	200-320	200-320		
	MP	220-300	180-260	180-260		
	HP	200-280	160-250	160-250		
	AP	180-250	150-220	150-220		
M	MM	160-260	160-260	160-260	160-260	
	AM	140-220	140-220	140-220	140-220	
N	AN					600-1500
	HN					300-700
	BN					250-400
	CN					150-250

Kesme Parametreleri Cutting Parameters f_n (mm/rev)

GK	GREY CAST IRON / GRİ DÖKME DEMİR
NK	NODULAR CAST IRON / NODÜLER DÖKME DEMİR
LP	LOW CARBON AND FREE CUTTING STEEL / DÜŞÜK KARBON KESME ÇELİĞİ
MP	MEDIUM CARBON STEEL / ORTA KARBON ÇELİĞİ
HP	HIGH CARBON STEEL / YÜKSEK KARBON ÇELİĞİ
AP	ALLOY STEEL / ALAŞIMLI ÇELİK

MM	MARTENSITIC AND FERRITIC STAINLESS / PASLANMAZ ÇELİK KALİTE
AM	STEEL AUSTENITIC STAINLESS STEEL / ÇELİK KALİTE
AN	ALUMINIUM ALLOYS AGED AND HARDENED / ALÜMİNYUM VE
HN	ALUMINIUM ALLOYS / ALAŞIMLI ALÜMİNYUM
BN	BRASS / PİRİNÇ
CN	BRONZE AND ELECTROLYTIC COPPER / BRONZ VE ELEKTROLİTİK BAKIR

Parting-off

MATERIAL MALZEME		CUTTING WIDTH				
		2 mm	3 mm	4 mm	5 mm	6 mm
K	GK	0.05-0.12	0.10-0.25	0.10-0.30	0.10-0.35	0.10-0.40
	NK	0.05-0.10	0.10-0.20	0.10-0.25	0.10-0.30	0.10-0.35
P	LP	0.02-0.15	0.03-0.20	0.08-0.30	0.10-0.40	0.12-0.50
	MP	0.02-0.15	0.03-0.20	0.08-0.30	0.10-0.40	0.12-0.50
	HP	0.02-0.15	0.03-0.20	0.08-0.30	0.10-0.40	0.12-0.50
	AP	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
	AM	0.02-0.08	0.03-0.13	0.08-0.20	0.10-0.30	0.12-0.35
N	AN	0.05-0.10	0.05-0.20	0.05-0.25	0.05-0.30	0.05-0.35
	HN	0.05-0.10	0.05-0.20	0.05-0.25	0.05-0.30	0.05-0.35
	BN	0.05-0.10	0.05-0.20	0.05-0.25	0.05-0.30	0.05-0.35
	CN	0.05-0.10	0.05-0.20	0.05-0.25	0.05-0.30	0.05-0.35

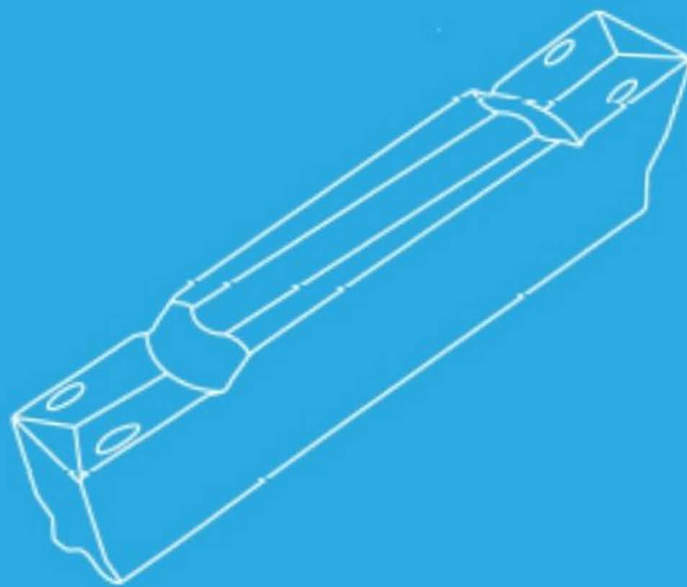
Facing

MATERIAL MALZEME		CUTTING WIDTH		
		3 mm	4 mm	5 mm
K	GK	0.05-0.10	0.05-0.12	0.05-0.15
	NK	0.05-0.10	0.05-0.12	0.05-0.15
P	LP	0.05-0.10	0.05-0.12	0.05-0.15
	MP	0.05-0.10	0.05-0.12	0.05-0.15
	HP	0.05-0.10	0.05-0.12	0.05-0.15
	AP	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
	AM	0.05-0.10	0.05-0.12	0.05-0.15
N	AN	0.05-0.15	0.08-0.15	0.08-0.15
	HN	0.05-0.15	0.08-0.15	0.08-0.15
	BN	0.05-0.15	0.08-0.15	0.08-0.15
	CN	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	GK	0.03-0.07	0.04-0.08	0.05-0.08	0.05-0.10	0.05-0.10	0.05-0.12
	NK	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	LP	0.03-0.08	0.04-0.09	0.05-0.10	0.05-0.12	0.05-0.15	0.05-0.20
	MP	0.03-0.08	0.04-0.09	0.05-0.10	0.05-0.12	0.05-0.15	0.05-0.20
	HP	0.03-0.07	0.04-0.08	0.05-0.08	0.05-0.10	0.05-0.12	0.05-0.15
	AP	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
	AM	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	AN	0.05-0.12	0.05-0.15	0.05-0.15	0.08-0.15	0.08-0.15	0.10-0.20
	HN	0.05-0.12	0.05-0.15	0.05-0.15	0.08-0.15	0.08-0.15	0.10-0.20
	BN	0.05-0.12	0.05-0.15	0.05-0.15	0.08-0.15	0.08-0.15	0.10-0.20
	CN	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



Kaliteleri
Grades

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

CB250

CS250

CB420

CB150

CB170

CS150

CB420

CB350

COATED

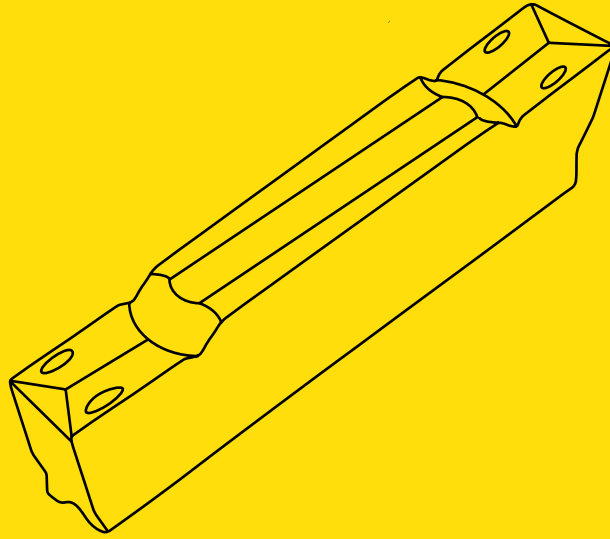
Kesme Parametreleri
Cutting Parameters

GK	GREY CAST IRON	GRİ DÖKME DEMİR
NK	NODULAR CAST IRON	NODÜLER DÖKME DEMİR
WK	WHITE CAST IRON	BEYAZ DÖKME DEMİR
SK	SINTERED MATERIAL	SİNERLİ MALZEME

HH	HARDENED STEEL	GÜÇLENDİRİLMİŞ ÇELİK
CH	CASE HARDENED STEEL	GÜÇLENDİRİLMİŞ ÇELİK KASA
BH	BEARING STEEL	RULMAN ÇELİĞİ
AS	SUPER ALLOYS (Ni Based)	SÜPER ALAŞIM

MATERIAL MALZEME		fn (mm/rev)	CUTTING CONDITION	PCBN						
				CB150	CB170	CS150	CB250	CS250	CB350	CB420
H	HH	0,05~0,15	○ ◊ ◈	80~180	80~180					80~150
			⊕ ◊ ◈	60~120	60~120					80~150
	CH	0,05~0,15	○ ◊ ◈	80~140	80~140					80~140
			⊕ ◊ ◈	60~100	60~100					80~140
	BH	0,05~0,15	○ ◊ ◈	80~120	80~120					80~120
			⊕ ◊ ◈	60~100	60~100					80~120

KESME/KANAL AÇMA GROOVING / **diamond**

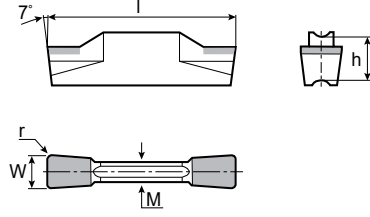


Kaliteleri
Grades

ISO DIN 513	N				
	N01	N10	N20	N30	N40
PCD			CP100		
		CP150			
		CP200			
	CP300				

MAGN

PARTING & GROOVING



ÜRÜN AÇIKLAMASI

DESCRIPTION



	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

ÖLÇÜLER

DIMENSIONS

PCD

CP100

CP150

CP200

CP300

Vc • fn



Kesme Parametreleri Cutting Parameters

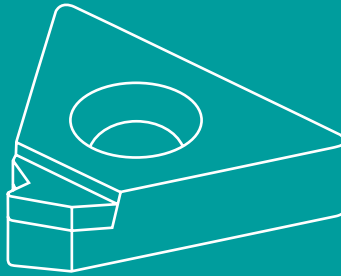
AN	ALUMINIUM ALLOYS	ALÜMİNYUM ALAŞIM	CN	BRONZE AND ELECTROLYTIC COPPER	BRONZ VE ELEKTROLİTİK BAKIR
SN	ALUMINIUM ALLOYS (Si≤15%)	ALÜMİNYUM ALAŞIM	NG	GRAPHITE	GRAFİT
HN	AL ALLOYS AGED AND HARDENED	YILLANDIRILMIŞ VE SERTLEŞTİRİLMİŞ ALAŞIMLAR	MH	HARD METAL (Co≤16%)	SERT METAL
BN	BRASS	PİRİNÇ	TS	TITANIUM ALLOYS	TİTANYUM ALAŞIMLAR

MATERIAL MALZEME		fn (mm/rev)	CUTTING CONDITION			PCD					
						CP100	CP150	CP200	CP300		
N	AN	0,05~0,15	○	⊕	⊖		600~2500	600~2500			
		0,05~0,15	○	⊕	⊖		600~2500	600~2500			
	SN	0,05~0,15	○	⊕	⊖		500~1500	500~1500			
		0,05~0,15	○	⊕	⊖		500~1500	500~1500			
	BN	0,05~0,15	○	⊕	⊖		400~1200	400~1200			
		0,05~0,15	○	⊕	⊖		400~1200	400~1200			
	GN	0,05~0,15	○	⊕	⊖		300~800	300~800			
		0,05~0,15	○	⊕	⊖		300~800	300~800			



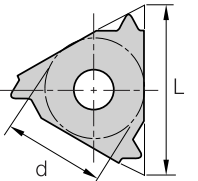
DİŞ AÇMA

THREADING / carbide





16	E	R	M	—	1.50
1	2	3	4		5

1 Insert Size (d)	
08	4,76mm
11	6,35mm
16	9,525mm
22	12,70mm
27	15,875mm



2 Insert Type	
E	External
I	Internal

3 Hand of Insert	
R	Right
L	Left

4 Chip Breaker	
M	 <p>Chip Breaker Type</p>
Non	 <p>Regular Type</p>

5* Pitch (Full Profile)	
0.35~6.0	mm
3~72	TPI

5* Pitch (Partial Profile)	
A	0.50~1.50
AG	0.50~3.00
G	1.75~3.00
N	3.50~5.00
Q	5.50~6.00

* Should use only one table based on profile type

* Should use only one table based on profile type

ISO
6

SP 7 4 30
10 11 12 13

6 Thread Standard

60	Partial Profile 60°
55	Partial Profile 55°
STACME	Stub ACME
UN	American UN
W	Whitworth for BSW, BSP
BSPT	British Standard Pipe Thread
ABUT	American Buttress
BBUT	British Buttress

SAGE	Metric Buttress DIN513
BUT	API Buttress Casing
APIRD	API Round Casing & Tubing
EL	Extreme Line Casing
NPT	NPT
NPTF	NPTF
NPS	NPS
PG	Pg DIN 40430

API	API
ISO	ISO Metric
UNJ	UNJ
MJ	ISO 5855
TR	Trapez DIN103
ACME	ACME
RD	Round DIN405

10 Coating & Material

CS	CVD Coated Carbide
PS	PVD Coated Carbide
PB	New PVD Coating
KS	Ceramic
SS	Cermet
US	Uncoated

11 Workpiece Material

2	Non-Ferrous Material
4	Hardened Steel
5	Steel
7	Stainless Steel
8	Cast Iron
9	General Machining

12 Machining

1	Turning
2	Turning New
4	Threading
9	Milling

13 ISO Grade

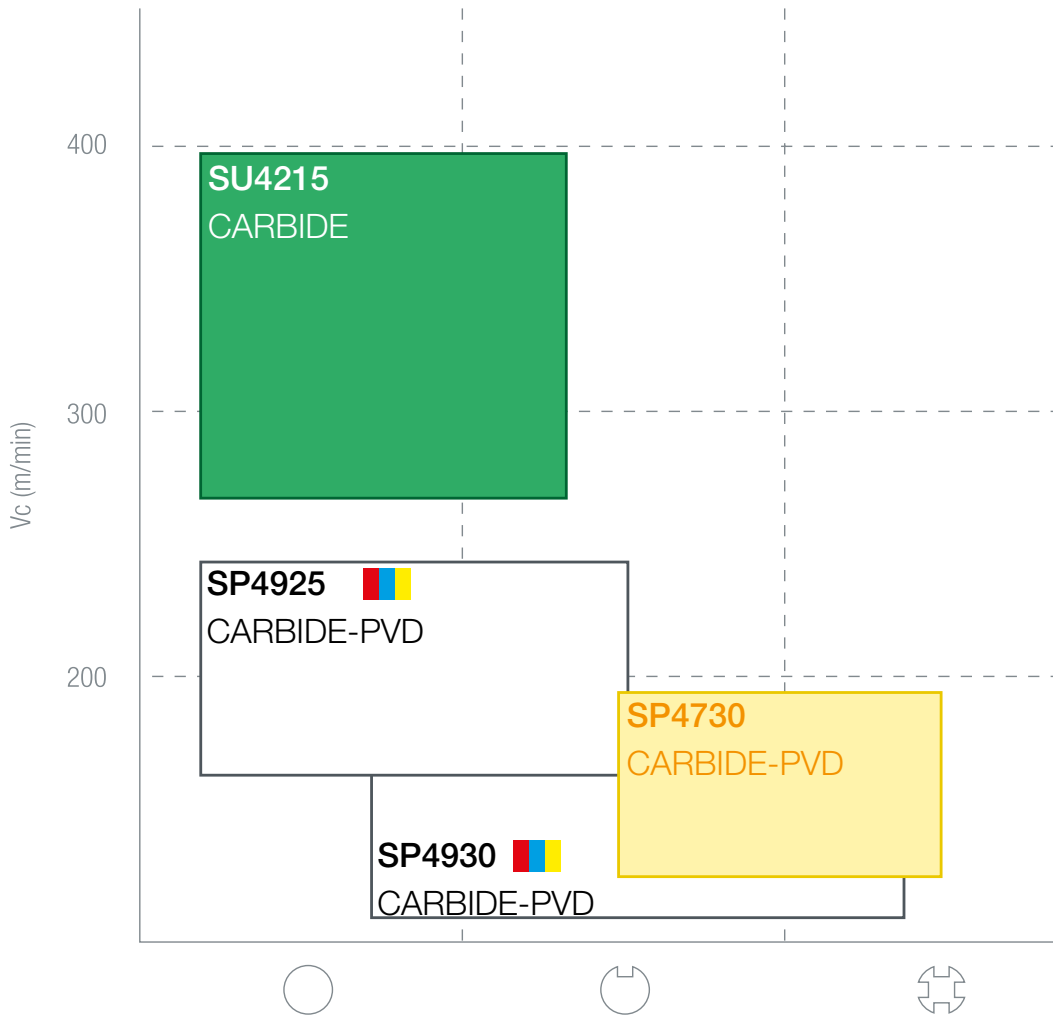
05	
10	
15	
20	
25	
30	
35	
40	
45	

Kaliteleri
GRADES

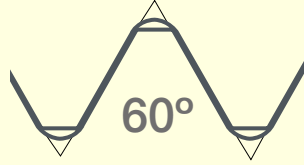
	P					M					K					N				
	P01	P10	P20	P30	P40	M01	M10	M20	M30	M40	K01	K10	K20	K30	K40	N01	N10	N20	N30	N40
CARBIDE CVD																				
CARBIDE PVD	SP4925					SP4925					SP4925									
	SP4930					SP4930					SP4930									
	SP4730					SP4930														
CARBIDE UNCOATED																SU4215				
CERMET UNCOATED																				

Range ISO **P** **M** **K**

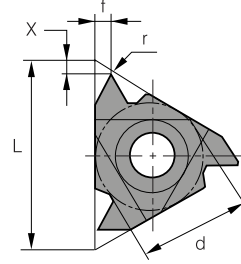
Kaliteleri
Grades



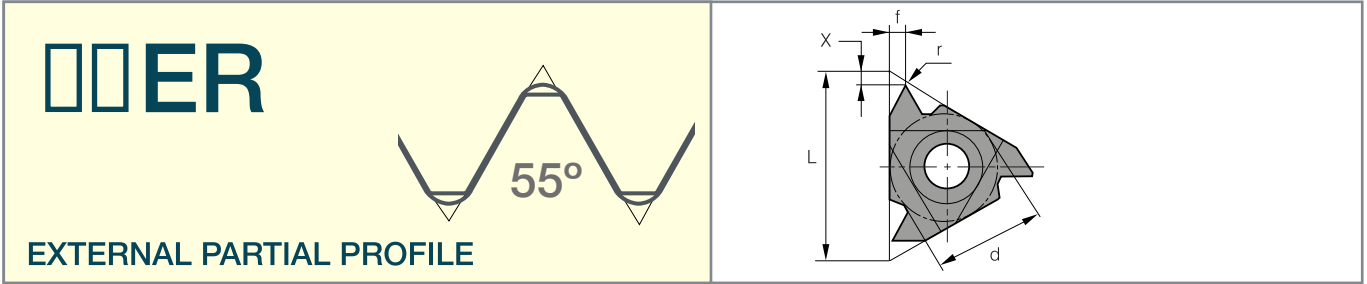
□□IR



INTERNAL PARTIAL PROFILE

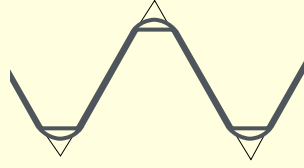


ÜRÜN AÇIKLAMASI DESCRIPTION		ÖLÇÜLER DIMENSIONS							CARBIDE			
			d	l	hmin	x	f	SP4925	SP4930	SP4730	SU4215	
	08IR-A60	0.5~1.5	48-16	4.76	8	0.05	0.6	0.7	●			
	11IR-A60	0.5~1.5	48-16	6.35	11	0.05	0.8	0.9	●	●	●	●
	16IR-A60	0.5~1.5	48-16	9.525	16	0.05	0.8	0.9	●			
	16IR-G60	1.75~3.0	14-8	9.525	16	0.27	1.2	1.7	●	●		●
	16IR-AG60	0.5~3.0	48-8	9.525	16	0.08	1.2	1.7	●	●	●	
	22IR-N60	3.5~5.0	7-5	12.7	22	0.53	1.7	2.5	●	●	●	
	27IR-Q60	5.5~6.0	4.5-4	15.875	27	0.64	2.1	3.1	●			
	16IRM-AG60	0.5~3.0	48-8	9.525	16	0.08	1.2	1.7	●			

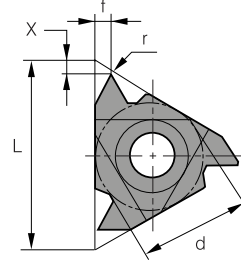


ÜRÜN AÇIKLAMASI DESCRIPTION		ÖLÇÜLER DIMENSIONS							CARBIDE			
			d	l	hmin	x	f	SP4925	SP4930	SP4730	SU4215	
	11ER-A55	0.5~1.5	48-16	6.35	11	0.05	0.8	0.9	●	●	●	●
	16ER-A55	0.5~1.5	48-16	9.525	16	0.05	0.8	0.9	●		●	
	16ER-G55	1.75~3.0	14-8	9.525	16	0.27	1.2	1.7	●	●		
	16ER-AG55	0.5~3.0	48-8	9.525	16	0.08	1.2	1.7	●	●	●	●
	22ER-N55	3.5~5.0	7-5	12.7	22	0.53	1.7	2.5	●	●	●	
	27ER-Q55	5.5~6.0	4.5-4	15.875	27	0.64	2.1	3.1	●			
	16ERM-AG55	0.5~3.0	48-8	9.525	16	0.08	1.2	1.7	●			

IR

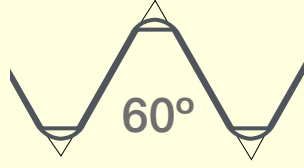


INTERNAL PARTIAL PROFILE

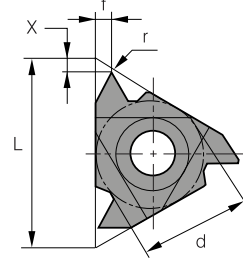


ÜRÜN AÇIKLAMASI DESCRIPTION		ÖLÇÜLER DIMENSIONS							CARBIDE			
			d	l	hmin	x	f	SP4925	SP4930	SP4730	SU4215	
	08IR-A55	0.5~1.5	48-16	4.76	8	0.05	0.6	0.7	●			
	11IR-A55	0.5~1.5	48-16	6.35	11	0.05	0.8	0.9	●	●	●	●
	16IR-A55	0.5~1.5	48-16	9.525	16	0.05	0.8	0.9	●			
	16IR-G55	1.75~3.0	14-8	9.525	16	0.27	1.2	1.7	●		●	●
	16IR-AG55	0.5~3.0	48-8	9.525	16	0.08	1.2	1.7	●	●	●	
	22IR-N55	3.5~5.0	7-5	12.7	22	0.53	1.7	2.5	●	●	●	
	27IR-Q55	5.5~6.0	4.5-4	15.875	27	0.64	2.1	3.1	●			
	16IRM-AG55	0.5~3.0	48-8	9.525	16	0.08	1.2	1.7	●			

11ER



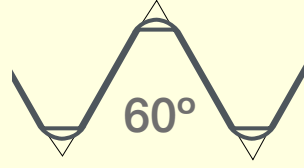
EXTERNAL METRIC



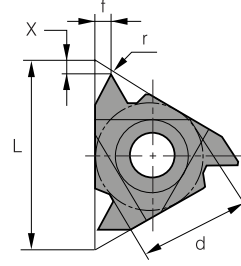
ÜRÜN AÇIKLAMASI DESCRIPTION	ÖLÇÜLER DIMENSIONS							CARBIDE			
		d	l	hmin	x	f	SP4925	SP4930	SP4730	SU4215	
11ER-0.35ISO	0.35	6.35	11	0.21	0.8	0.4	●				
11ER-0.40ISO	0.40	6.35	11	0.25	0.7	0.4	●				
11ER-0.45ISO	0.45	6.35	11	0.28	0.7	0.4	●				
11ER-0.50ISO	0.50	6.35	11	0.31	0.6	0.4	●				
11ER-0.60ISO	0.60	6.35	11	0.37	0.6	0.6	●				
11ER-0.70ISO	0.70	6.35	11	0.43	0.6	0.6	●				
11ER-0.75ISO	0.75	6.35	11	0.46	0.6	0.6	●				
11ER-0.80ISO	0.80	6.35	11	0.49	0.6	0.6	●				
11ER-1.00ISO	1.00	6.35	11	0.61	0.7	0.7	●	●	●		
11ER-1.25ISO	1.25	6.35	11	0.77	0.8	0.9	●				
11ER-1.50ISO	1.50	6.35	11	0.92	0.8	1.0	●	●	●		
11ER-1.75ISO	1.75	6.35	11	1.07	0.8	1.1	●				
11ER-2.00ISO	2.00	6.35	11	1.15	0.9	1.1	●				
16ER-0.35ISO	0.35	9.525	16	0.21	0.8	0.4	●				
16ER-0.40ISO	0.40	9.525	16	0.25	0.7	0.4	●				
16ER-0.45ISO	0.45	9.525	16	0.28	0.7	0.4	●				
16ER-0.50ISO	0.50	9.525	16	0.31	0.6	0.4	●				
16ER-0.60ISO	0.60	9.525	16	0.37	0.6	0.6	●				
16ER-0.70ISO	0.70	9.525	16	0.43	0.6	0.6	●				
16ER-0.75ISO	0.75	9.525	16	0.46	0.6	0.6	●	●	●		
16ER-0.80ISO	0.80	9.525	16	0.49	0.6	0.6	●				
16ER-1.00ISO	1.00	9.525	16	0.61	0.7	0.7	●	●	●		
16ER-1.25ISO	1.25	9.525	16	0.77	0.8	0.9	●	●	●		
16ER-1.50ISO	1.50	9.525	16	0.92	0.8	1.0	●	●	●		
16ER-1.75ISO	1.75	9.525	16	1.07	0.9	1.2	●	●	●		
16ER-2.00ISO	2.00	9.525	16	1.23	1.0	1.3	●	●	●		
16ER-2.50ISO	2.50	9.525	16	1.53	1.1	1.5	●	●	●		
16ER-3.00ISO	3.00	9.525	16	1.84	1.2	1.6	●	●	●		



22ER

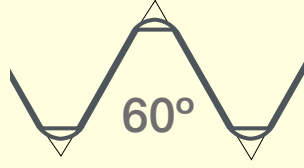


EXTERNAL METRIC

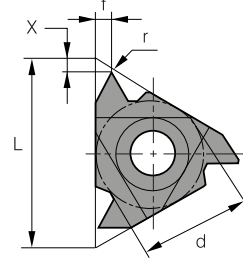


ÜRÜN AÇIKLAMASI DESCRIPTION	ÖLÇÜLER DIMENSIONS								CARBIDE			
		d	l	hmin	x	f	SP4925	SP4930	SP4730	SU4215		
	22ER-3.50ISO	3.50	12.7	22	2.15	1.6	2.3	●	●	●		
	22ER-4.00ISO	4.00	12.7	22	2.45	1.6	2.3	●	●	●		
	22ER-4.50ISO	4.50	12.7	22	2.78	1.7	2.4	●	●	●		
	22ER-5.00ISO	5.00	12.7	22	3.07	1.7	2.5	●	●	●		
	22ER-5.50ISO	5.50	12.7	22	3.37	1.9	2.5	●				
	22ER-6.00ISO	6.00	12.7	22	3.68	2.0	2.9	●				
	16ERM-1.00ISO	1.00	9.525	16	0.61	0.7	0.7	●				
	16ERM-1.25ISO	1.25	9.525	16	0.77	0.8	0.9	●				
	16ERM-1.50ISO	1.50	9.525	16	0.92	0.8	1.0	●				
	16ERM-1.75ISO	1.75	9.525	16	1.07	0.9	1.2	●				
	16ERM-2.00ISO	2.00	9.525	16	1.23	1.0	1.3	●				
	16ERM-2.50ISO	2.50	9.525	16	1.53	1.1	1.5	●				
	16ERM-3.00ISO	3.00	9.525	16	1.84	1.2	1.6	●				
	16ERM-3.50ISO	3.50	9.525	16	2.15	1.6	2.3	●				

IR



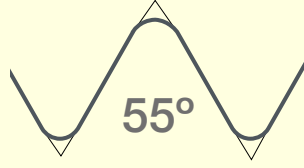
INTERNAL METRIC



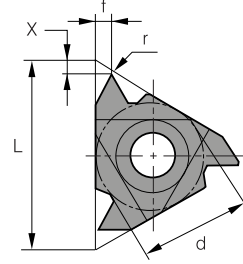
ÜRÜN AÇIKLAMASI DESCRIPTION	ÖLÇÜLER DIMENSIONS							CARBIDE			
		d	l	hmin	x	f	SP4925	SP4930	SP4730	SU4215	
11IR-0.35ISO	0.35	6.35	11	0.21	0.8	0.4	●				
11IR-0.40ISO	0.40	6.35	11	0.25	0.7	0.4	●				
11IR-0.45ISO	0.45	6.35	11	0.28	0.7	0.4	●				
11IR-0.50ISO	0.50	6.35	11	0.31	0.6	0.4	●				
11IR-0.60ISO	0.60	6.35	11	0.37	0.6	0.6	●				
11IR-0.70ISO	0.70	6.35	11	0.43	0.6	0.6	●				
11IR-0.75ISO	0.75	6.35	11	0.46	0.6	0.6	●				
11IR-0.80ISO	0.80	6.35	11	0.49	0.6	0.6	●				
11IR-1.00ISO	1.00	6.35	11	0.61	0.7	0.7	●	●	●		
11IR-1.25ISO	1.25	6.35	11	0.77	0.8	0.9	●				
11IR-1.50ISO	1.50	6.35	11	0.92	0.8	1.0	●	●	●		
11IR-1.75ISO	1.75	6.35	11	1.07	0.8	1.1	●				
11IR-2.00ISO	2.00	6.35	11	1.15	0.9	1.1	●				
16IR-0.35ISO	0.35	9.525	16	0.21	0.8	0.4	●				
16IR-0.40ISO	0.40	9.525	16	0.25	0.7	0.4	●				
16IR-0.45ISO	0.45	9.525	16	0.28	0.7	0.4	●				
16IR-0.50ISO	0.50	9.525	16	0.31	0.6	0.4	●				
16IR-0.60ISO	0.60	9.525	16	0.37	0.6	0.6	●				
16IR-0.70ISO	0.70	9.525	16	0.43	0.6	0.6	●				
16IR-0.75ISO	0.75	9.525	16	0.46	0.6	0.6	●	●	●		
16IR-0.80ISO	0.80	9.525	16	0.49	0.6	0.6	●				
16IR-1.00ISO	1.00	9.525	16	0.61	0.7	0.7	●	●	●		
16IR-1.25ISO	1.25	9.525	16	0.77	0.8	0.9	●	●	●		
16IR-1.50ISO	1.50	9.525	16	0.92	0.8	1.0	●	●	●		
16IR-1.75ISO	1.75	9.525	16	1.07	0.9	1.2	●	●	●		
16IR-2.00ISO	2.00	9.525	16	1.23	1.0	1.3	●	●	●		
16IR-2.50ISO	2.50	9.525	16	1.53	1.1	1.5	●	●	●		
16IR-3.00ISO	3.00	9.525	16	1.84	1.2	1.6	●	●	●		



11ER



EXTERNAL WHITWORTH



ÜRÜN AÇIKLAMASI

DESCRIPTION

ÖLÇÜLER

DIMENSIONS

CARBIDE

SP4925

SP4930

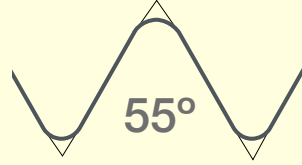
SP4730

SU4215

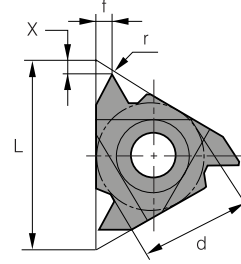


DESCRIPTION	d	l	hmin	x	f	DIMENSIONS				
						SP4925	SP4930	SP4730	SU4215	
11ER-14W	14	6,35	11	1,16	0,9	1,1	●			
11ER-16W	16	6,35	11	1,02	0,9	1,1	●			
11ER-18W	18	6,35	11	0,9	0,8	1	●			
11ER-19W	19	6,35	11	0,86	0,8	1	●			
11ER-20W	20	6,35	11	0,81	0,8	0,9	●			
11ER-22W	22	6,35	11	0,74	0,8	0,9	●			
11ER-24W	24	6,35	11	0,68	0,7	0,8	●			
11ER-26W	26	6,35	11	0,63	0,7	0,7	●			
11ER-28W	28	6,35	11	0,58	0,6	0,7	●			
11ER-32W	32	6,35	11	0,51	0,6	0,6	●			
11ER-36W	36	6,35	11	0,45	0,6	0,6	●			
11ER-40W	40	6,35	11	0,41	0,6	0,6	●			
11ER-48W	48	6,35	11	0,34	0,6	0,6	●			
11ER-56W	56	6,35	11	0,29	0,7	0,4	●			
11ER-60W	60	6,35	11	0,27	0,7	0,4	●			
11ER-72W	72	6,35	11	0,23	0,7	0,4	●			
16ER-8W	8	9,52	16	2,03	1,2	1,5	●			
16ER-9W	9	9,52	16	1,81	1,2	1,7	●			
16ER-10W	10	9,52	16	1,63	1,1	1,5	●			
16ER-11W	11	9,52	16	1,48	1,1	1,5	●	●	●	
16ER-12W	12	9,52	16	1,36	1,1	1,4	●			
16ER-14W	14	9,52	16	1,16	1	1,2	●	●	●	
16ER-16W	16	9,52	16	1,02	0,9	1,1	●			
16ER-18W	18	9,52	16	0,9	0,8	1	●			
16ER-19W	19	9,52	16	0,86	0,8	1	●	●	●	
16ER-20W	20	9,52	16	0,81	0,8	0,9	●			
16ER-22W	22	9,52	16	0,74	0,8	0,9	●			
16ER-24W	24	9,52	16	0,68	0,7	0,8	●			

16ER

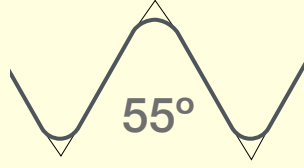


EXTERNAL WHITWORTH

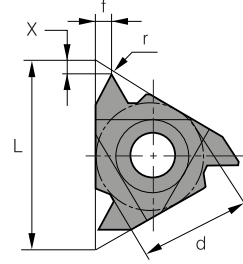


ÜRÜN AÇIKLAMASI DESCRIPTION		ÖLÇÜLER DIMENSIONS							CARBIDE				
			d	l	hmin	x	f	SP4925	SP4930	SP4730	SU4215		
	16ER-26W		26	9,52	16	0,63	0,7	0,7	●				
	16ER-28W		28	9,52	16	0,58	0,6	0,7	●				
	16ER-30W		30	9,52	16	0,55	0,6	0,7	●				
	16ER-32W		32	9,52	16	0,51	0,6	0,6	●				
	16ER-36W		36	9,52	16	0,45	0,6	0,6	●				
	16ER-40W		40	9,52	16	0,41	0,6	0,6	●				
	16ER-48W		48	9,52	16	0,34	0,6	0,6	●				
	16ER-56W		56	9,52	16	0,29	0,7	0,4	●				
	16ER-60W		60	9,52	16	0,27	0,7	0,4	●				
	16ER-72W		72	9,52	16	0,23	0,7	0,4	●				
	22ER-5W		5	12,7	22	3,25	1,7	2,4	●				
	22ER-6W		6	12,7	22	2,71	1,6	2,3	●				
	22ER-7W		7	12,7	22	3,32	1,6	2,3	●				
	27ER-4W		4	15,88	27	4,07	2	2,9	●				
	27ER-4.5W		4,5	15,88	27	3,61	1,8	2,6	●				
		16ERM-8W		8	9,52	16	2,03	1,2	1,5	●			
		16ERM-11W		11	9,52	16	1,48	1,1	1,5	●			
16ERM-14W			14	9,52	16	1,16	1	1,2	●				
16ERM-24W			24	9,52	16	0,68	0,7	0,8	●				

11IR



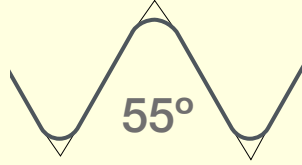
INTERNAL WHITWORTH



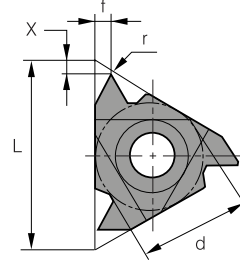
ÜRÜN AÇIKLAMASI DESCRIPTION	ÖLÇÜLER DIMENSIONS							CARBIDE			
		d	l	hmin	x	f	SP4925	SP4930	SP4730	SU4215	
11IR-14W	14	6,35	11	1,16	0,9	1,1	●				
11IR-16W	16	6,35	11	1,02	0,9	1,1	●				
11IR-18W	18	6,35	11	0,9	0,8	1	●				
11IR-19W	19	6,35	11	0,86	0,8	1	●				
11IR-20W	20	6,35	11	0,81	0,8	0,9	●				
11IR-22W	22	6,35	11	0,74	0,8	0,9	●				
11IR-24W	24	6,35	11	0,68	0,7	0,8	●				
11IR-26W	26	6,35	11	0,63	0,7	0,7	●				
11IR-28W	28	6,35	11	0,58	0,6	0,7	●				
11IR-32W	32	6,35	11	0,51	0,6	0,6	●				
11IR-36W	36	6,35	11	0,45	0,6	0,6	●				
11IR-40W	40	6,35	11	0,41	0,6	0,6	●				
11IR-48W	48	6,35	11	0,34	0,6	0,6	●				
11IR-56W	56	6,35	11	0,29	0,7	0,4	●				
11IR-60W	60	6,35	11	0,27	0,7	0,4	●				
11IR-72W	72	6,35	11	0,23	0,7	0,4	●				
16IR-8W	8	9,52	16	2,03	1,2	1,5	●				
16IR-9W	9	9,52	16	1,81	1,2	1,7	●				
16IR-10W	10	9,52	16	1,63	1,1	1,5	●				
16IR-11W	11	9,52	16	1,48	1,1	1,5	●	●	●		
16IR-12W	12	9,52	16	1,36	1,1	1,4	●				
16IR-14W	14	9,52	16	1,16	1	1,2	●	●	●		
16IR-16W	16	9,52	16	1,02	0,9	1,1	●				
16IR-18W	18	9,52	16	0,9	0,8	1	●				
16IR-19W	19	9,52	16	0,86	0,8	1	●				
16IR-20W	20	9,52	16	0,81	0,8	0,9	●				
16IR-22W	22	9,52	16	0,74	0,8	0,9	●				
16IR-24W	24	9,52	16	0,68	0,7	0,8	●				



□□IR

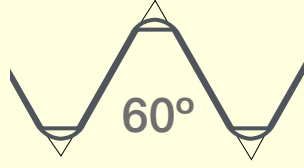


INTERNAL WHITWORTH

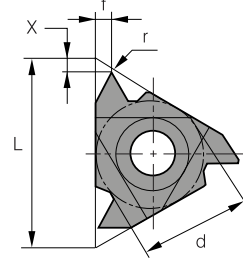



ÜRÜN AÇIKLAMASI DESCRIPTION		ÖLÇÜLER DIMENSIONS							CARBIDE			
			d	l	hmin	x	f	SP4925	SP4930	SP4730	SU4215	
	16IR-26W	26	9,52	16	0,63	0,7	0,7	●				
	16IR-28W	28	9,52	16	0,58	0,6	0,7	●				
	16IR-30W	30	9,52	16	0,55	0,6	0,7	●				
	16IR-32W	32	9,52	16	0,51	0,6	0,6	●				
	16IR-36W	36	9,52	16	0,45	0,6	0,6	●				
	16IR-40W	40	9,52	16	0,41	0,6	0,6	●				
	16IR-48W	48	9,52	16	0,34	0,6	0,6	●				
	16IR-56W	56	9,52	16	0,29	0,7	0,4	●				
	16IR-60W	60	9,52	16	0,27	0,7	0,4	●				
	16IR-72W	72	9,52	16	0,23	0,7	0,4	●				
	22IR-5W	5	12,7	22	3,25	1,7	2,4	●				
	22IR-6W	6	12,7	22	2,71	1,6	2,3	●				
	22IR-7W	7	12,7	22	3,32	1,6	2,3	●				
	27IR-4W	4	15,88	27	4,07	2	2,9	●				
27IR-4.5W	4,5	15,88	27	3,61	1,8	2,6	●					
	16IRM-11W	11	9,52	16	1,48	1,1	1,5	●				
	16IRM-14W	14	9,52	16	1,16	1	1,2	●				

11ER



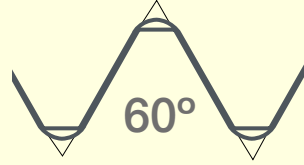
EXTERNAL UN



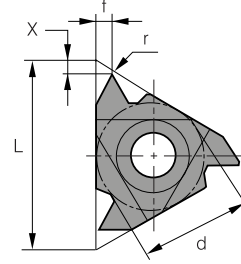
ÜRÜN AÇIKLAMASI DESCRIPTION	ÖLÇÜLER DIMENSIONS							CARBIDE			
		d	l	hmin	x	f	SP4925	SP4930	SP4730	SU4215	
11ER-14UN	14	6,35	11	1,11	0,9	1,1	●				
11ER-16UN	16	6,35	11	0,97	0,9	1,1	●				
11ER-18UN	18	6,35	11	0,87	0,8	1	●				
11ER-20UN	20	6,35	11	0,78	0,8	0,9	●				
11ER-24UN	24	6,35	11	0,65	0,7	0,8	●				
11ER-27UN	27	6,35	11	0,58	0,7	0,8	●				
11ER-28UN	28	6,35	11	0,56	0,6	0,7	●				
11ER-32UN	32	6,35	11	0,49	0,6	0,6	●				
11ER-36UN	36	6,35	11	0,43	0,6	0,6	●				
11ER-40UN	40	6,35	11	0,39	0,6	0,6	●				
11ER-44UN	44	6,35	11	0,35	0,6	0,6	●				
11ER-48UN	48	6,35	11	0,32	0,6	0,6	●				
11ER-56UN	56	6,35	11	0,28	0,7	0,4	●				
11ER-64UN	64	6,35	11	0,24	0,8	0,4	●				
11ER-72UN	72	6,35	11	0,22	0,8	0,4	●				
16ER-8UN	8	9,52	16	1,95	1,2	1,6	●				
16ER-9UN	9	9,52	16	1,73	1,2	1,7	●				
16ER-10UN	10	9,52	16	1,56	1,1	1,5	●				
16ER-11UN	11	9,52	16	1,42	1,1	1,5	●				
16ER-11.5UN	11,5	9,52	16	1,35	1,1	1,5	●				
16ER-12UN	12	9,52	16	1,3	1,1	1,4	●				
16ER-13UN	13	9,52	16	1,2	1	1,3	●				
16ER-14UN	14	9,52	16	1,11	0,9	1,2	●				
16ER-16UN	16	9,52	16	0,97	0,9	1,1	●				
16ER-18UN	18	9,52	16	0,87	0,8	1	●	●	●		
16ER-20UN	20	9,52	16	0,78	0,8	0,9	●	●	●		
16ER-24UN	24	9,52	16	0,65	0,7	0,8	●	●	●		
16ER-27UN	27	9,52	16	0,58	0,7	0,8	●				



□□ER



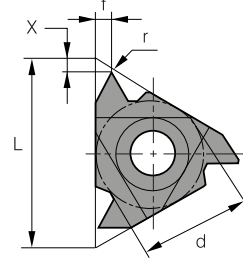
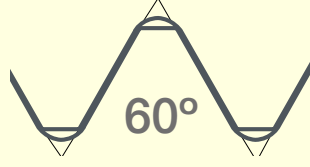
EXTERNAL UN



ÜRÜN AÇIKLAMASI DESCRIPTION		ÖLÇÜLER DIMENSIONS							CARBIDE			
			d	l	hmin	x	f	SP4925	SP4930	SP4730	SU4215	
	16ER-28UN		28	9,52	16	0,56	0,6	0,7	●			
	16ER-32UN		32	9,52	16	0,49	0,6	0,6	●			
	16ER-36UN		36	9,52	16	0,43	0,6	0,6	●			
	16ER-40UN		40	9,52	16	0,39	0,6	0,6	●			
	16ER-44UN		56	9,52	16	0,28	0,7	0,4	●			
	16ER-48UN		64	9,52	16	0,24	0,8	0,4	●			
	16ER-56UN		56	9,52	16	0,28	0,7	0,4	●			
	16ER-64UN		64	9,52	16	0,24	0,8	0,4	●			
	16ER-72UN		72	9,52	16	0,22	0,8	0,4	●			
	22ER-5UN		5	12,7	22	3,12	1,6	2,3	●			
	22ER-6UN		6	12,7	22	2,6	1,6	2,3	●			
	22ER-7UN		7	12,7	22	2,22	1,6	2,3	●			
	27ER-4UN		4	15,88	27	3,89	1,8	2,7	●			
	27ER-4.5UN		4,5	15,88	27	3,46	1,7	2,4	●			
	16ERM-12UN		12	9,52	16	1,3	1,1	1,4	●			
	16ERM-16UN		16	9,52	16	0,97	0,9	1,1	●			
	16ERM-18UN		18	9,52	16	0,87	0,8	1	●			

11IR

INTERNAL UN



ÜRÜN AÇIKLAMASI

DESCRIPTION

ÖLÇÜLER

DIMENSIONS

CARBIDE

SP4925

SP4930

SP4730

SU4215



11IR-14UN

14

6,35

11

1,11

0,9

1,1

●

11IR-16UN

16

6,35

11

0,97

0,9

1,1

●

11IR-18UN

18

6,35

11

0,87

0,8

1

●

11IR-20UN

20

6,35

11

0,78

0,8

0,9

●

11IR-24UN

24

6,35

11

0,65

0,7

0,8

●

11IR-27UN

27

6,35

11

0,58

0,7

0,8

●

11IR-28UN

28

6,35

11

0,56

0,6

0,7

●

11IR-32UN

32

6,35

11

0,49

0,6

0,6

●

11IR-36UN

36

6,35

11

0,43

0,6

0,6

●

11IR-40UN

40

6,35

11

0,39

0,6

0,6

●

11IR-44UN

44

6,35

11

0,35

0,6

0,6

●

11IR-48UN

48

6,35

11

0,32

0,6

0,6

●

11IR-56UN

56

6,35

11

0,28

0,7

0,4

●

11IR-64UN

64

6,35

11

0,24

0,8

0,4

●

11IR-72UN

72

6,35

11

0,22

0,8

0,4

●

16IR-8UN

8

9,52

16

1,95

1,2

1,6

●

16IR-9UN

9

9,52

16

1,73

1,2

1,7

●

16IR-10UN

10

9,52

16

1,56

1,1

1,5

●

16IR-11UN

11

9,52

16

1,42

1,1

1,5

●

16IR-11.5UN

11,5

9,52

16

1,35

1,1

1,5

●

16IR-12UN

12

9,52

16

1,3

1,1

1,4

●

16IR-13UN

13

9,52

16

1,2

1

1,3

●

16IR-14UN

14

9,52

16

1,11

0,9

1,2

●

16IR-16UN

16

9,52

16

0,97

0,9

1,1

●

16IR-18UN

18

9,52

16

0,87

0,8

1

●

●

●

16IR-20UN

20

9,52

16

0,78

0,8

0,9

●

●

●

16IR-24UN

24

9,52

16

0,65

0,7

0,8

●

●

●

16IR-27UN

27

9,52

16

0,58

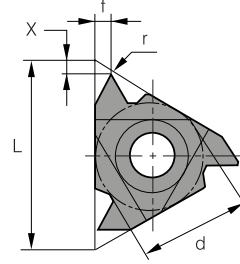
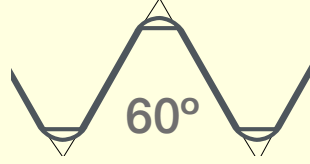
0,7

0,8

●

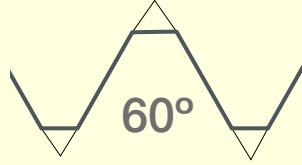
□□IR

INTERNAL UN

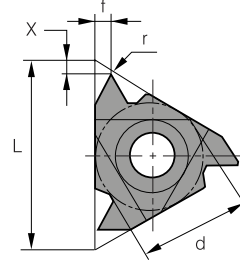


ÜRÜN AÇIKLAMASI DESCRIPTION		ÖLÇÜLER DIMENSIONS							CARBIDE			
			d	l	hmin	x	f	SP4925	SP4930	SP4730	SU4215	
	16IR-28UN	28	9,52	16	0,56	0,6	0,7	●				
	16IR-32UN	32	9,52	16	0,49	0,6	0,6	●				
	16IR-36UN	36	9,52	16	0,43	0,6	0,6	●				
	16IR-40UN	40	9,52	16	0,39	0,6	0,6	●				
	16IR-44UN	44	9,52	16	0,35	0,6	0,6	●				
	16IR-48UN	48	9,52	16	0,32	0,6	0,6	●				
	16IR-56UN	56	9,52	16	0,28	0,7	0,4	●				
	16IR-64UN	64	9,52	16	0,24	0,8	0,4	●				
	16IR-72UN	72	9,52	16	0,22	0,8	0,4	●				
	22IR-5UN	5	12,7	22	3,12	1,6	2,3	●				
	22IR-6UN	6	12,7	22	2,6	1,6	2,3	●				
	22IR-7UN	7	12,7	22	2,22	1,6	2,3	●				
	27IR-4UN	4	15,88	27	3,89	1,8	2,7	●				
	27IR-4.5UN	4,5	15,88	27	3,46	1,7	2,4	●				
	16IRM-12UN	12	9,52	16	1,3	1,1	1,4	●				
	16IRM-16UN	16	9,52	16	0,97	0,9	1,1	●				
	16IRM-18UN	18	9,52	16	0,87	0,8	1	●				

IR

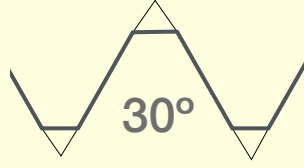


INTERNAL NPT

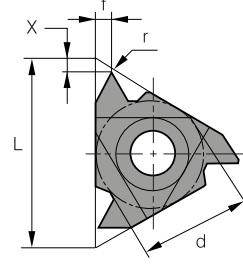


ÜRÜN AÇIKLAMASI DESCRIPTION		ÖLÇÜLER DIMENSIONS							CARBIDE			
			d	l	hmin	x	f	SP4925	SP4930	SP4730	SU4215	
	11IR-14NPT	14	6,35	11	1,33	0,8	1	●	●	●		
	11IR-18NPT	18	6,35	11	1,01	0,8	1	●				
	11IR-27NPT	27	6,35	11	0,66	0,7	0,8	●				
	16IR-11.5NPT	11,5	9,52	16	1,64	1,1	1,5	●				
	16IR-14NPT	14	9,52	16	1,33	0,9	1,2	●				
	16IR-18NPT	18	9,52	16	1,01	0,8	1	●				
	16IR-27NPT	27	9,52	16	0,66	0,7	0,8	●				
	16IR-8NPT	8	9,52	16	2,42	1,3	1,8	●				
	16IRM-11.5NPT	11,5	9,52	16	1,64	1,1	1,5	●				
	16IRM-14NPT	14	9,52	16	1,33	0,9	1,2	●				

□□ER

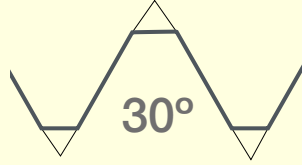


EXTERNAL TRAPEZ

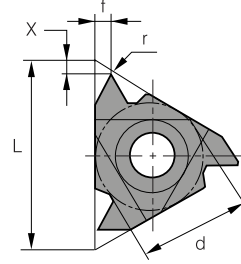


ÜRÜN AÇIKLAMASI DESCRIPTION		ÖLÇÜLER DIMENSIONS						CARBIDE				
			d	l	hmin	x	f	SP4925	SP4930	SP4730	SU4215	
	11ER-1.5TR		1,5	6,35	11	0,9	0,8	0,9	●			
	16ER-1.5TR		1,5	9,52	16	0,9	1	1,1	●			
	16ER-2.0TR		2	9,52	16	1,25	1	1,3	●			
	16ER-3.0TR		3	9,52	16	1,75	1,3	1,5	●			
	22ER-4.0TR		4	12,7	22	2,25	1,8	1,9	●			
	22ER-5.0TR		5	12,7	22	2,75	2	2,4	●			
	22ER-6.0TR		6	12,7	22	3,5	2	2,4	●			
	27ER-7.0TR		7	15,88	27	4	2,2	2,6	●			
	16ERM-2.0TR		2	9,52	16	1,25	1	1,3	●			
	16ERM-3.0TR		3	9,52	16	1,75	1,3	1,5	●			

IR

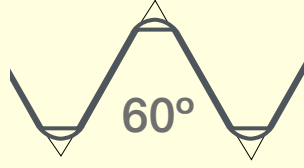


INTERNAL TRAPEZ

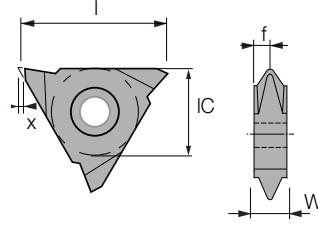


ÜRÜN AÇIKLAMASI DESCRIPTION		ÖLÇÜLER DIMENSIONS							CARBIDE			
			d	l	hmin	x	f	SP4925	SP4930	SP4730	SU4215	
	11IR-1.5TR		1,5	6,35	11	0,9	0,8	0,9	●			
	16IR-1.5TR		1,5	9,52	16	0,9	1	1,1	●			
	16IR-2.0TR		2	9,52	16	1,25	1	1,3	●			
	16IR-3.0TR		3	9,52	16	1,75	1,3	1,5	●			
	22IR-4.0TR		4	12,7	22	2,25	1,8	1,9	●			
	22IR-5.0TR		5	12,7	22	2,75	2	2,4	●			
	22IR-6.0TR		6	12,7	22	3,5	2	2,4	●			
	27IR-7.0TR		7	15,88	27	4	2,2	2,6	●			
	16IRM-2.0TR		2	9,52	16	1,25	1	1,3	●			
	16IRM-3.0TR		3	9,52	16	1,75	1,3	1,5	●			

VER



EXTERNAL PARTIAL PROFILE



ÜRÜN AÇIKLAMASI

DESCRIPTION



VER11-A60
VER16-A60
VER16-G60
VER16-AG60
VER22-N60

ÖLÇÜLER

DIMENSIONS



0.5~1.5

48-16

d

l

W

x

f

●

●

●

●

CARBIDE

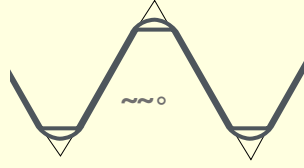
SP4925

SP4930

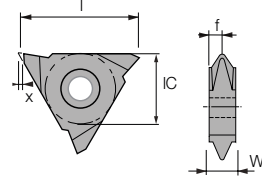
SP4730

SU4215

VER



EXTERNAL PARTIAL PROFILE



ÜRÜN AÇIKLAMASI

DESCRIPTION

ÖLÇÜLER

DIMENSIONS

CARBIDE

SP4925

SP4930

SP4730

SU4215



VER11-A55

0.5~1.5 48-16

6.35

11

3.2

0.8

2.7

●

VER16-A55

0.5~1.5 48-16

9.525

16

3.5

1.1

2.7

●

VER16-G55

1.75~3.0 14-8

9.525

16

3.5

1.1

1.9

●

VER16-AG55

0.5~3.0 48-8

9.525

16

3.5

1.1

1.9

●

VER22-N55

3.5~5.0 7-5

12.7

22

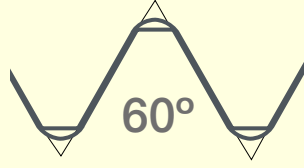
4.8

1.1

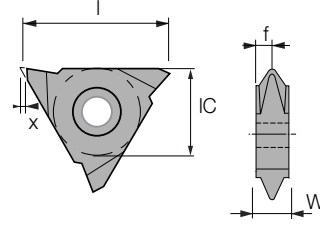
2.3

●

VER



EXTERNAL METRIC



ÜRÜN AÇIKLAMASI

DESCRIPTION

ÖLÇÜLER

DIMENSIONS

CARBIDE

SP4925

SP4930

SP4730

SU4215



d

l

W

x

f



VER11-0.75ISO

0.75

6.35

11

3.2

0.7

2.6

●

VER11-1.00ISO

1.00

6.35

11

3.2

0.7

2.5

●

VER11-1.50ISO

1.50

6.35

11

3.2

0.7

2.2

●

VER11-1.75ISO

1.75

6.35

11

3.2

0.7

2.1

●

VER11-2.00ISO

2.00

6.35

11

3.2

0.7

1.9

●



VER16-0.35ISO

0.35

9.525

16

3.5

1.1

3.2

●

VER16-0.40ISO

0.40

9.525

16

3.5

1.1

3.2

●

VER16-0.50ISO

0.50

9.525

16

3.5

1.1

3.0

●

VER16-0.75ISO

0.75

9.525

16

3.5

1.1

3.0

●

VER16-0.80ISO

0.80

9.525

16

3.5

1.1

3.0

●

VER16-1.00ISO

1.00

9.525

16

3.5

1.1

2.9

●

VER16-1.25ISO

1.25

9.525

16

3.5

1.1

2.7

●

VER16-1.50ISO

1.50

9.525

16

3.5

1.1

2.6

●

VER16-1.75ISO

1.75

9.525

16

3.5

1.1

2.4

●

VER16-2.00ISO

2.00

9.525

16

3.5

1.1

2.3

●

VER16-2.50ISO

2.50

9.525

16

3.5

1.1

2.1

●

VER16-3.00ISO

3.00

9.525

16

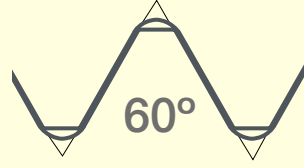
3.5

1.1

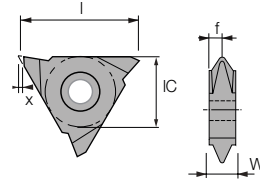
2.0

●

VER



EXTERNAL UN



ÜRÜN AÇIKLAMASI

DESCRIPTION

ÖLÇÜLER

DIMENSIONS

CARBIDE

SP4925

SP4930

SP4730

SU4215



d

l

w

x

f



VER11-20UN

VER11-18UN

VER11-16UN

VER11-14UN

VER11-12UN



VER16-32UN

VER16-28UN

VER16-24UN

VER16-20UN

VER16-18UN

VER16-16UN

VER16-14UN

VER16-12UN

VER16-10UN

VER16-08UN

20

6.35

11

3.2

0.69

2.3

18

6.35

11

3.2

0.69

2.2

16

6.35

11

3.2

0.69

2.2

14

6.35

11

3.2

0.69

2.0

12

6.35

11

3.2

0.69

1.8

32

9.525

16

3.5

1.1

3.0

28

9.525

16

3.5

1.1

3.0

24

9.525

16

3.5

1.1

2.9

20

9.525

16

3.5

1.1

2.7

18

9.525

16

3.5

1.1

2.6

16

9.525

16

3.5

1.1

2.55

14

9.525

16

3.5

1.1

2.5

12

9.525

16

3.5

1.1

2.2

10

9.525

16

3.5

1.1

2.1

8

9.525

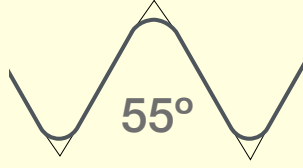
16

3.5

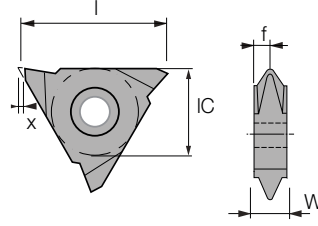
1.1

2.0

VER



EXTERNAL WHITWORTH



ÜRÜN AÇIKLAMASI

DESCRIPTION

ÖLÇÜLER

DIMENSIONS

CARBIDE

SP4925

SP4930

SP4730

SU4215



d

l

W

x

f



VER11-19W

19

6.35

11

3.2

0.7

2.3

●

VER11-14W

14

6.35

11

3.2

0.7

2.0

●

VER11-11W

11

6.35

11

3.2

0.7

1.7

●



VER16-19W

19

9.525

16

3.5

1.1

2.7

●

VER16-18W

18

9.525

16

3.5

1.1

2.6

●

VER16-16W

16

9.525

16

3.5

1.1

2.6

●

VER16-14W

14

9.525

16

3.5

1.1

2.4

●

VER16-12W

12

9.525

16

3.5

1.1

2.2

●

VER16-11W

11

9.525

16

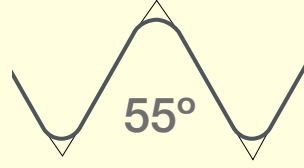
3.5

1.1

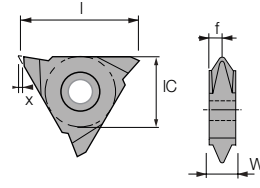
2.1

●

VER



EXTERNAL BSPT



ÜRÜN AÇIKLAMASI

DESCRIPTION



VER16-28BSPT
VER16-19BSPT
VER16-14BSPT
VER16-11BSPT

ÖLÇÜLER

DIMENSIONS



	d	l	W	x	f
VER16-28BSPT	28	9.525	16	3.5	3.0
VER16-19BSPT	19	9.525	16	3.5	2.7
VER16-14BSPT	14	9.525	16	3.5	2.4
VER16-11BSPT	11	9.525	16	3.5	2.1

CARBIDE

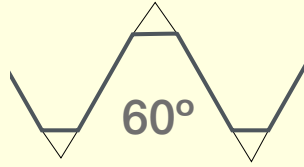
SP4925

SP4930

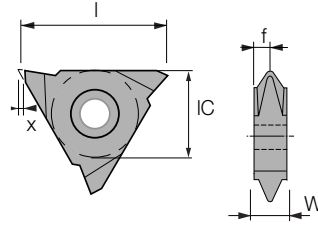
SP4730

SU4215

VER



EXTERNAL NPT



ÜRÜN AÇIKLAMASI

DESCRIPTION

ÖLÇÜLER

DIMENSIONS

CARBIDE

SP4925

SP4930

SP4730

SU4215



27

d

l

W

x

f

●

●

●



VER11-27NPT

18

6.35

11

3.2

0.7

2.0

●

●

●

VER11-18NPT

VER11-14NPT



VER16-27NPT

18

9.525

16

3.5

1.1

2.9

●

●

●

VER16-18NPT

VER16-11.5NPT

11.5

9.525

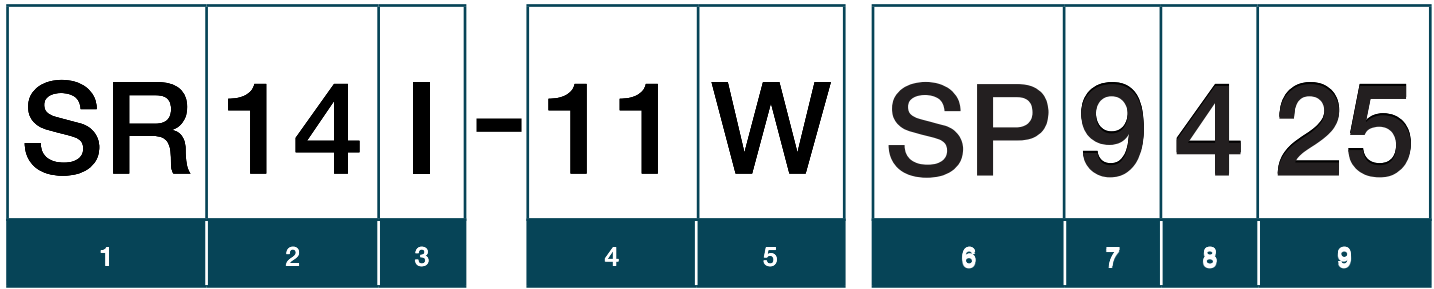
16

3.5

1.1

2.1

●



1	
SL	Screw on Left
SR	Screw on Right

2	Insert Length
12	12mm
14	14mm
21	21mm
30	30mm
40	40mm

3	Insert Type
E	External
I	Internal

4	Pitch (Full Profile)
0.35~6.0	mm
3~72	TPI

5	Thread Standard
ISO	Metric
W	Whitworth for BSW, BSP
BSPT	British Standard Pipe Thread
UN	American UN
NPT	NPT
NPTF	NPTF
PG	Pg DIN40430

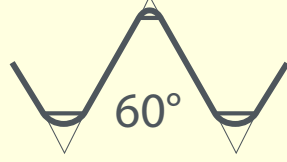
10	Coating & Material
CS	CVD Coated Carbide
PS	PVD Coated Carbide
PB	New PVD Coating
KS	Ceramic
SS	Cermet
US	Uncoated

11	Workpiece Material
2	Non-Ferrous Material
4	Hardened Steel
5	Steel
7	Stainless Steel
8	Cast Iron
9	General Machining

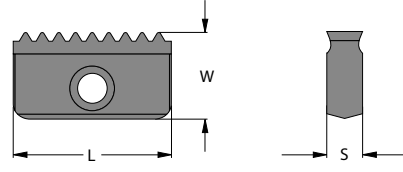
12	Machining
1	Turning
2	Turning New
4	Threading
9	Milling

13	ISO Grade
05	
10	
15	
20	
25	
30	
35	
40	
45	

SR□□



INTERNAL METRIC



ÜRÜN AÇIKLAMASI

ÖLÇÜLER

CARBIDE

DESCRIPTION

DIMENSIONS

SP4925



I

W

S



SR30I-1.50-ISO

1.50

30

16,7

5,6

●

SR30I-2.00-ISO

2.00

30

16,7

5,6

●

SR30I-3.00-ISO

3.00

30

16,7

5,6

●

SR30I-3.50-ISO

3.50

30

16,7

5,6

●

SR30I-4.00-ISO

4.00

30

16,7

5,6

●

SR30I-4.50-ISO

4.50

30

16,7

5,6

●

SR30I-5.00-ISO

5.00

30

16,7

5,6

●

SR40I-1.50-ISO

1.50

40

20,8

6,4

●

SR40I-2.00-ISO

2.00

40

20,8

6,4

●

SR40I-3.00-ISO

3.00

40

20,8

6,4

●

SR40I-3.50-ISO

3.50

40

20,8

6,4

●

SR40I-4.00-ISO

4.00

40

20,8

6,4

●

SR40I-4.50-ISO

4.50

40

20,8

6,4

●

SR40I-5.00-ISO

5.00

40

20,8

6,4

●

SR40I-5.50-ISO

5.50

40

20,8

6,4

●

SR40I-6.00-ISO

6.00

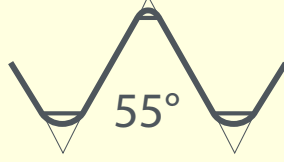
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20,8

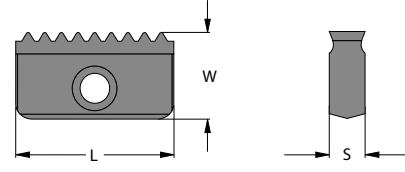
6,4

●

SR□□



INTERNAL WHITWORTH



ÜRÜN AÇIKLAMASI

ÖLÇÜLER

CARBIDE

DESCRIPTION

DIMENSIONS

SP4925



I

W

S



SR14I-24W

24

14

7.9

3.2

●

SR14I-20W

20

14

7.9

3.2

●

SR14I-19W

19

14

7.9

3.2

●

SR14I-16W

16

14

7.9

3.2

●

SR14I-14W

14

14

7.9

3.2

●

SR21I-11W

11

14

7.9

3.2

●

SR21I-20W

20

21

12.6

4.8

●

SR21I-19W

19

21

12.6

4.8

●

SR21I-16W

16

21

12.6

4.8

●

SR21I-14W

14

21

12.6

4.8

●

SR21I-11W

11

21

12.6

4.8

●

SR30I-16W

16

30

16.7

5.6

●

SR30I-14W

14

30

16.7

5.6

●

SR30I-11W

11

30

16.7

5.6

●

SR40I-11W

11

40

20.8

6.4

●

SR40I-8W

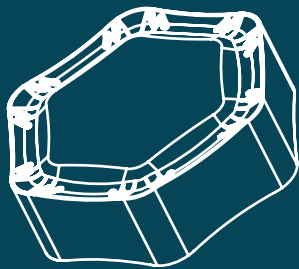
8

40

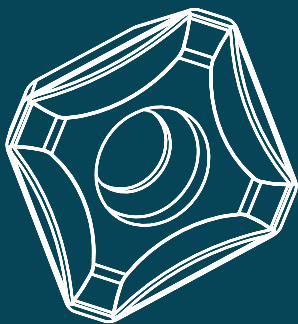
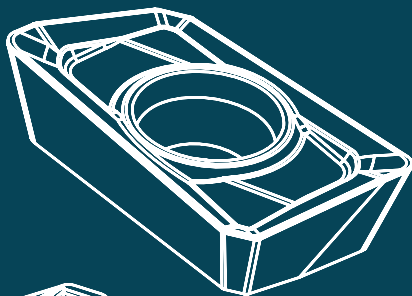
20.8

6.4

●










FREZELEME MILLING / carbide



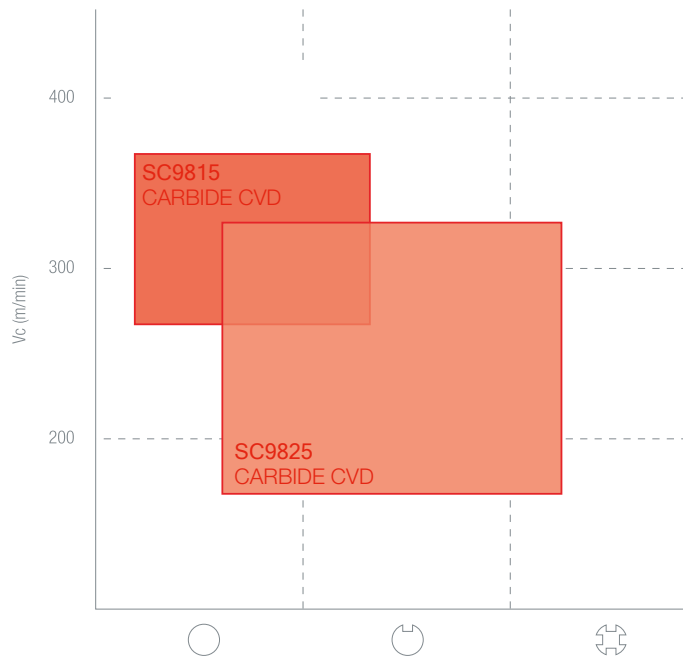
Kaliteleri Grades

	K					P					M					N				
	ISO DIN 513					ISO DIN 513					ISO DIN 513					ISO DIN 513				
	K01	K10	K20	K30	K40	P01	P10	P20	P30	P40	M01	M10	M20	M30	M40	N01	N10	N20	N30	N40
CARBIDE CVD																				
CARBIDE PVD		SC9815					SP9515						SP9725							
		SC9825						SP9525												
								SP9560												
CARBIDE UNCOATED																		SU9215		
CERMET UNCOATED																				

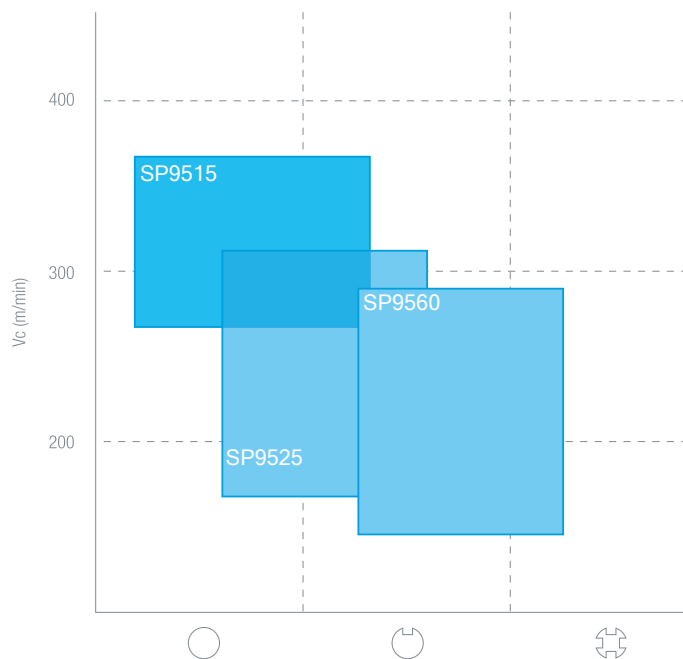
CVD Turning Grades

MATERIAL	GRADE	ISO	Color	Operation
P	SP9515	P05-P25	BLACK	MT-TiCN+TiC+Al ₂ O ₃ +TiN
				Milling grade for medium and roughing of steel New coating layer with superior wear resistance with high toughness substrate
	SP9525	P15-P35 M10-M20	BLACK	MT-TiCN+TiC+Al ₂ O ₃ +TiN
				Universal grade for interrupted machining of steel, cast-iron, hard to cut materials and stainless steel with stable machinability
	SP9560	P20-P30	YELLOW	MT-TiCN+Al ₂ O ₃ +TiN
				General machining of steel
M	SP9725	M20-M30	YELLOW	MT-TiCN+TiC+α-Al ₂ O ₃
				Medium to roughing of hard to cut materials and stainless steel 2-4 micron Nano AlCrN AlCrSiN coating
K	SC9815	K01-K10	BLACK	MT-TiCN+TiC+Al ₂ O ₃ +TiN
				As adapting highly hard substrate with superior PVD coated which has excellent resistance for thermal & oxidation, Excellent performance in casting iron continuous machining
	SC9825	K10-K20	BLACK	MT-TiCN+TiC+Al ₂ O ₃ +TiN
N	SU9215	K05-K25		General cutting for gray cast iron and ductile cast iron
			Silver	Ultra fine substrate
				Increased wear & chipping resistance as using a ultra fine substrate, Excellent tool life with special surface treatment & and sharp cutting edge of ALU chip breaker

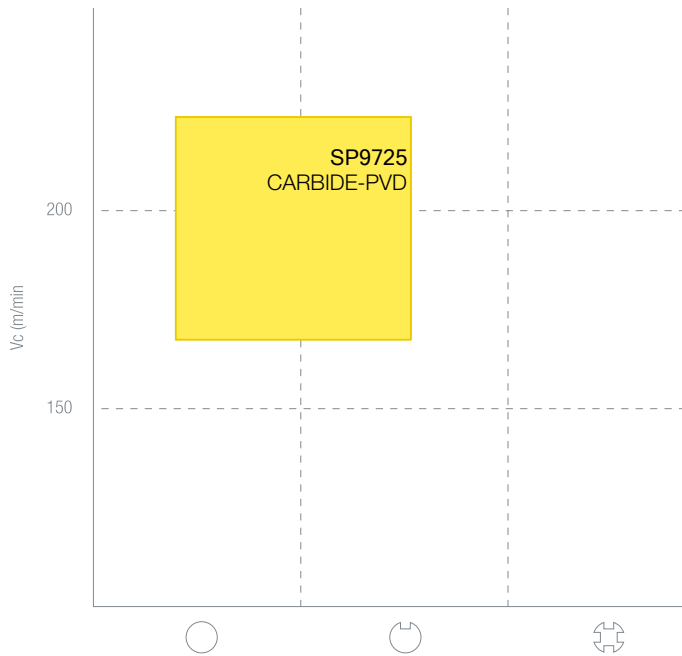
Range ISO **K**



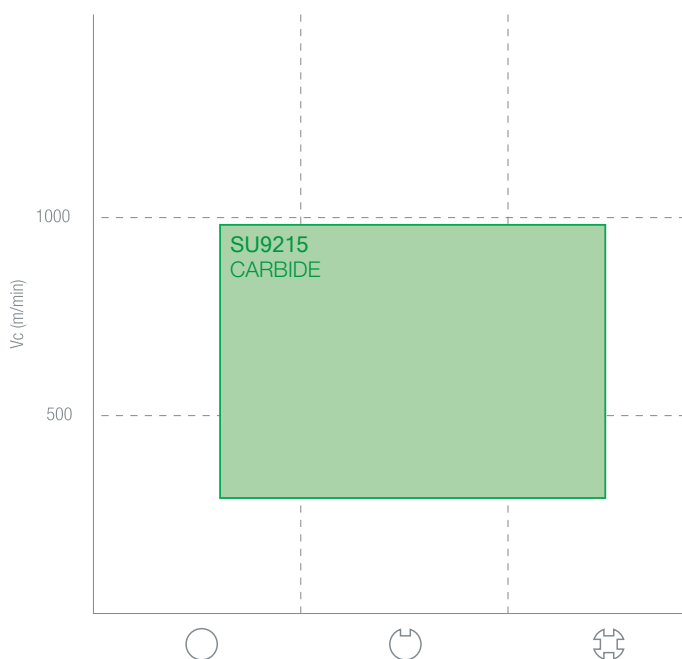
Range ISO **P**



Range ISO **M**

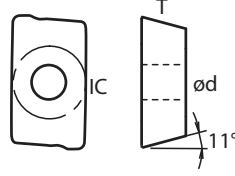


Range ISO **N**



POSITIVE 11°
with hole

AP □□



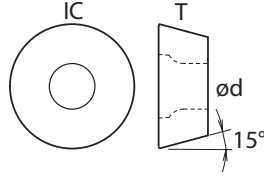
AP □□	1035 □□	1135 □□	1604 □□
IC	6,35	6,35	9,525
T	3,50	3,50	4,76
ød	2,80	2,80	4,50

ÜRÜN AÇIKLAMASI DESCRIPTION			Carbide					CARBIDE					
			SP9515	SP9525	SP5960	SC9815	SC9825	SP9725	SU9215				
	APMT	1003PDER-ALU							•				
		1604PDER-ALU							•				
	APKT	1135PDER-ALU							•				
		1604PDER-ALU							•				
		160420-ALU							•				
		160424-ALU							•				
	APKT	1204PER-ST		•									
		1705PER-ST		•									
	APMT	1135PDSR-QM		•	•								
	APMT	1135PDSR-QX		•									
	APMT	1035PDER-RM	•	•		•		•					
		1604PDER-RM	•	•				•					

Vc • fn • ap

POSITIVE 15°
with hole

RD□□



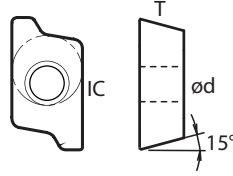
RD □□	0501□□	0802□□	1003□□	12T3□□	1604□□
IC	5,00	8,00	10,0	12,0	16,0
T	1,51	2,38	3,18	3,97	4,76
ød	2,20	2,80	3,80	4,40	5,00

ÜRÜN AÇIKLAMASI DESCRIPTION			Carbide					CARBIDE					
			SP9515	SP9525	SP9560	SC9818	SC9825	SP9725	SU9215				
	RDHX	1003M0		•				•					
		12T3M0		•				•					
	RDMW	0501M0			•								
	RDMX	0802M0		•				•					
		1003M0		•				•					
		12T3M0		•				•					
		1604M0		•				•					

Vc • fn • ap

**POSITIVE 15°
with hole**

RT



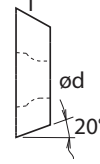
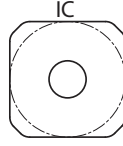
RT	0702□□	1003□□
IC	4,30	6,35
T	2,38	3,40
ød	2,20	2,90

ÜRÜN AÇIKLAMASI DESCRIPTION			Carbide					CARBIDE					
			SP9515	SP9525	SP9560	SC9818	SC9825	SP9725	SU9215				
	RT	070204-R-81	•		•								
		100308-R-81	•		•								

Vc • fn • ap




POSITIVE 20°
with hole

SE □□



SE □□ 12T3 □□

IC	12,7
T	3,97
ød	4,40

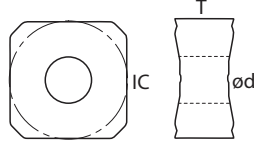
ÜRÜN AÇIKLAMASI DESCRIPTION			Carbide					CARBIDE			
			SP9515	SP9525	SP9560	SC9818	SC9825	SP9725	SU9215		
	SEET	12T3-FM	•	•				•			
	SEET	12T3-SM		•							
	SEHT	12T3-CM						•			

Vc • fn • ap




NEGATIVE
with hole

SNMX



SN □ □ 1205 □ □

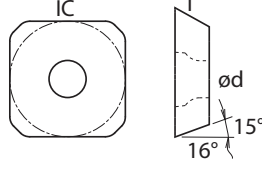
IC	12,7
T	5,75
ød	6,00

ÜRÜN AÇIKLAMASI DESCRIPTION			Carbide					CARBIDE					
			SP9515	SP9525	SP9560	SC9818	SC9825	SP9725	SU9215				
	SNMX	1205ANN		•	•	•	•	•					

Vc • fn • ap

POSITIVE 16°/ 15°
with hole

SO / SP □□



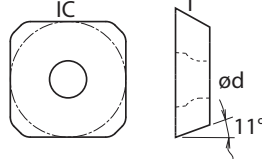
SO/SP □□	0803 □□	1204 □□
IC	12,7	12,7
T	3,97	4,18
ød	5,16	5,16

ÜRÜN AÇIKLAMASI DESCRIPTION			Carbide					CARBIDE			
			SP9515	SP9525	SP9560	SC9818	SC9825	SP9725	SU9215		
	SOMW	080315-FH		•							
	SPMW	120420-FH		•							

Vc • fn • ap

POSITIVE 11°
without hole

SPKN



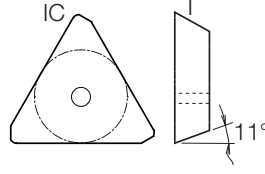
SP □□	1203 □□	1504 □□
IC	12,7	15,875
T	3,18	4,76
ød		

ÜRÜN AÇIKLAMASI DESCRIPTION			Carbide					CARBIDE				
			SP9515	SP9525	SP9560	SC9818	SC9825	SP9725	SU9215			
	SPKN	1203EDR-SU		•								
		1203EDSR-SU		•		•		•				
		1504EDSR-SU		•				•				
	SPKN	1203EDFR				•	•					
		1203EDTR		•								
		1504EDTL							•			
		1504EDTR							•			

Vc • fn • ap

POSITIVE 11°
with hole

TPKN



TP □□	1603 □□	2204 □□
IC	9,525	12,7
T	3,18	4,76
Ød	-	-

ÜRÜN AÇIKLAMASI DESCRIPTION			Carbide					CARBIDE			
			SP9515	SP9525	SP9560	SC9818	SC9825	SP9725	SU9215		
	TPKN	1603PDTR-SU		•				•			
		2204PDTR-SU		•				•			

Vc • fn • ap

**BALL NOSE
with hole**

TW



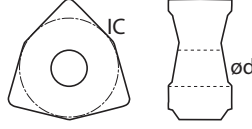
TW	08□□	10□□	12□□	16□□	20□□	25□□
r	12,7	12,7	12,7	12,7	12,7	12,7
T	4,76	4,76	4,76	4,76	4,76	4,76
Ød	5,16	5,16	5,16	5,16	5,16	5,16

ÜRÜN AÇIKLAMASI DESCRIPTION		Carbide						CARBIDE					
		SP9515	SP9525	SP9560	SC9818	SC9825	SP9725	SU9215					
	TW	08020	•										
		10025	•										
		12025	•										
		16030	•										
		20030	•										
		25040	•										

Vc • fn • ap ▶


NEGATIVE
with hole

WNMU



WN □ □ 0806 □ □

IC	12,7
T	6,40
ød	4,40

ÜRÜN AÇIKLAMASI DESCRIPTION			Carbide					CARBIDE			
			SP9515	SP9525	SP9560	SC9818	SC9825	SP9725	SU9215		
	WNMU	080608EN-GM		•		•		•			

Vc • fn • ap


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						CARBIDE					
		PS5915	PS5925	PS5960	CS8915	CS8925	PS7925	US2915					
K	KG				220-350	120-250							
	KN				180-280	100-200							
P	PL	200-280	220-300	240-320									
	PM	200-280	220-300	240-320									
	PH	180-260	200-280	220-300									
	PA	160-230	180-250	200-270									
M	MM						160-280						
	MA						140-260						
N	NA							400-1000					
	NH							300-800					
	NB							300-600					
	NC							200-500					

Cutting Parameters a_p (mm) & f_n (mm/rev)


AP □ □		1035	1135	1204	1604	1705					
Material	Chip Breaker	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)
K	RM	0,8-8,0	0,1-0,25								
P	ST/RM	0,8-8,0	0,08-0,2	1,0-9,0	0,1-0,2	1,0-11,0	0,1-0,25	1,0-14,0	0,1-0,25	1,0-15,0	0,1-0,25
P	QM/QX			0,7-3,0	0,5-1,2						
M	RM	0,8-8,0	0,05-0,15					1,0-14,0	0,1-0,2		
N	ALU	0,8-8,0	0,15-0,3	1,0-9,0	0,15-0,3			1,0-14,0	0,15-0,3		

RD □ □		0501	0802	1003	12T3	1604					
Material	Chip Breaker	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)
K	-					0,5-4,0	0,08-0,4	0,5-5,0	0,08-0,6	0,6-7,0	0,1-0,6
P	-	0,25-2,5	0,1-0,25	0,4-3,5	0,07-0,35	0,5-4,0	0,08-0,3	0,5-5,0	0,08-0,4	0,6-7,0	0,1-0,5
M	-					0,5-4,0	0,08-0,25	0,5-5,0	0,08-0,25	0,6-7,0	0,1-0,4
N	-										

RT		0702	1003	-	-	-					
Material	Chip Breaker	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)
K											
P	R-81	0,5-5,0	0,05-0,3	0,5-7,0	0,08-0,3						
M	R-81	0,5-5,0	0,05-0,25	0,5-7,0	0,05-0,25						
N											

SE □ □		12T3	-	-	-	-					
Material	Chip Breaker	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)
K											
P	FM/SM	1,0-10,0	0,1-0,3								
M	FM/SM	1,0-10,0	0,1-0,25								
N	CM	1,0-10,0	0,1-0,35								


Cutting Parameters ap (mm) & fn (mm/rev)

SNMX		1205	-	-	-	-
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Material	Chip Breaker	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)
K	-	1,0~7,0	0,1~0,4								
P	-	1,0~7,0	0,1~0,35								
M	-	1,0~7,0	0,1~0,35								
N											

SOMW		0803	-	-	-	-
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Material	Chip Breaker	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)
K	FH	0,5~1,0	0,5~2,0								
P	FH	0,5~1,0	0,5~2,0								
M	FH	0,5~1,0	0,4~1,0								
N											

SPMW		1204	-	-	-	-
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Material	Chip Breaker	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)
K	FH	0,8~1,5	0,5~1,8								
P	FH	0,8~1,5	0,8~2,0								
M	FH	0,8~1,5	0,4~1,0								
N											

SPKN		1203	1504	-	-	-
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Material	Chip Breaker	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)	ap (mm)	fn (mm/rev)
K	SU	0,8~8,0	0,05~0,3	1,0~10,0	0,05~0,3						
P	SU	0,8~8,0	0,05~0,2	1,0~10,0	0,05~0,2						
M	SU	0,8~8,0	0,05~0,2	1,0~10,0	0,05~0,2						
N											


Cutting Parameters a_p (mm) & f_n (mm/rev)

TPKN		1603	2204	-	-	-
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Material	Chip Breaker	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)
K	SU	1,0-12,0	0,05-0,3	1,0-15,0	0,1-8,0						
P	SU	1,0-12,0	0,05-0,25	1,0-15,0	0,8-8,0						
M	SU	1,0-12,0	0,05-0,2	1,0-15,0	0,8-8,0						
N											

TW	08020	10025	12025	16030	20030	25040
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Material	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)
K	0,2-0,4	0,1-0,3	0,2-0,7	0,1-0,3	0,5-0,84	0,1-0,3	0,5-1,12	0,1-0,3	0,8-1,4	0,1-0,3	0,8-1,75	0,1-0,3
P	0,25-0,5	0,1-0,25	0,3-0,7	0,1-0,25	0,36-0,84	0,1-0,25	0,48-1,12	0,1-0,25	0,6-1,4	0,1-0,25	0,75-1,75	0,1-0,25
M	0,2-0,4	0,1-0,2	0,2-0,5	0,1-0,2	0,3-0,6	0,1-0,2	0,4-0,8	0,1-0,2	0,5-1,0	0,1-0,2	0,7-1,25	0,1-0,2
N												

WNMU		080608	-	-	-	-
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Material	Chip Breaker	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)
K	GM	1,0-8,0	0,1-0,30								
P	GM	1,0-8,0	0,1-0,25								
M	GM	1,0-8,0	0,1-0,20								
N											

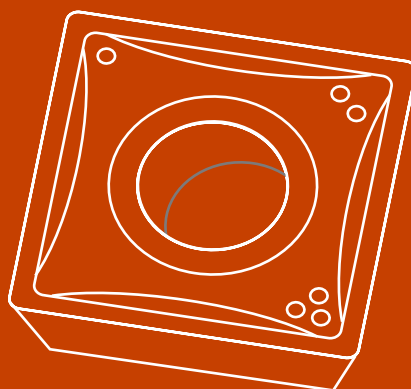
3PGX		1004	1505	-	-	-
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Material	Chip Breaker	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)	a_p (mm)	f_n (mm/rev)
K	M	1,0-7,0	0,09-0,2	1,0-11,0	0,1-0,2						
P	M	1,0-7,0	0,07-0,15	1,0-11,0	0,12-0,25						
M	M	1,0-7,0	0,07-0,15	1,0-11,0	0,1-0,17						
N											

MILLING PVD Comparison Table

MATERIAL	EZEUS	ISCAR	SECO	TEAGUTEC	KYOCERA	SANDVIK	KENAMETAL	MITSUBISHI	WALTER	KORLOY
P										PC2005
						P20A				PC2010
	SP9515					GC1010		AP20M		PC2015
								MP6120	WKP25	
	SP9515							VP15TF		
	SP9525	IC903	MP3000	TT7070			KC522M			PC3500
		IC908		TT7080	PR730	GC1025	KCU20M	UP20M	WKP35	
	SP9560	IC950	F25M	TT7030		GC1030				
SP9515		F30M		PR830		KC935M			PC5300	
SP9525	IC928	F40M	TT8020	PR660	GC1030	KC7140	VP30RT	WKP35	PC5400	
M		IC903			PR730		KC5510			
							KC7020			
	SP9725	IC908				GC1125	KC522M	MP7130		
						GC1025	KC725M			
		IC900	F25M							
	SP9725	IC250	F30M	TT9030	PR1025	GC2030	KC735M		WQM35	PC5300
SP9525	IC928	F40M	TT9080	PR660	GC1030	KC722	KC7140	WSM35S	PC5400	
	IC328		TT8020					WSP45	PC3545	
S						GC1025		VP15TF		
		IC328	F40M	TT9030	PR620	GC1040	KC510M	VP30RT		
	SP9515	IC408	MS2050	TT9080	PR660	S40T	KCU30M	MP9130	WSM35S	PC5300
	SP9725			TT8020	PR1535				WSM45S	PC5400

DELİK DELME DRILLING / carbide



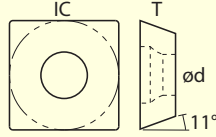
Kaliteleri
Grades

	K					P					M					N				
	ISO DIN 513					ISO DIN 513					ISO DIN 513					ISO DIN 513				
	K01	K10	K20	K30	K40	P01	P10	P20	P30	P40	M01	M10	M20	M30	M40	N01	N10	N20	N30	N40
CARBIDE CVD																				
CARBIDE PVD	SP9590					SP1720 SP9590					SP1720 SP9590									
CARBIDE UNCOATED																				
CERMET UNCOATED																				

DRILLING

POSITIVE 11°
with hole

SP □□



SP □□	0502□□	0602□□	07T3□□	0904□□	1104□□	1405□□
IC	5,56	6,00	7,94	9,80	11,50	14,30
T	2,38	2,38	3,97	4,30	4,76	5,56
ød	2,50	2,80	2,80	4,10	4,40	5,50

ÜRÜN AÇIKLAMASI

DESCRIPTION

CARBIDE PVD

SP9560

SP1720



SPMG050204-V

●

●

SPMG060204-V

●

●

SPMG07T308-V

●

●

SPMG090408-V

●

●

SPMG110408-V

●

●

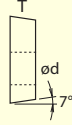
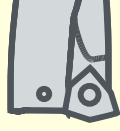
SPMG140512-V

●

●

**POSITIVE 7°
with hole**

WC□□



WC □□	0302□□	0402□□	0503□□	06T3□□	0804□□
IC	5,56	6,35	7,94	9,525	12,70
T	2,38	2,38	3,18	3,97	4,76
Ød	2,80	3,00	3,40	3,70	4,30

ÜRÜN AÇIKLAMASI

DESCRIPTION



WCMX030208-S	●	
WCMX040208-S	●	
WCMX050308-S	●	
WCMX06T308-S	●	●
WCMX080412-S	●	●

CARBIDE PVD

SP9560

SP1720