

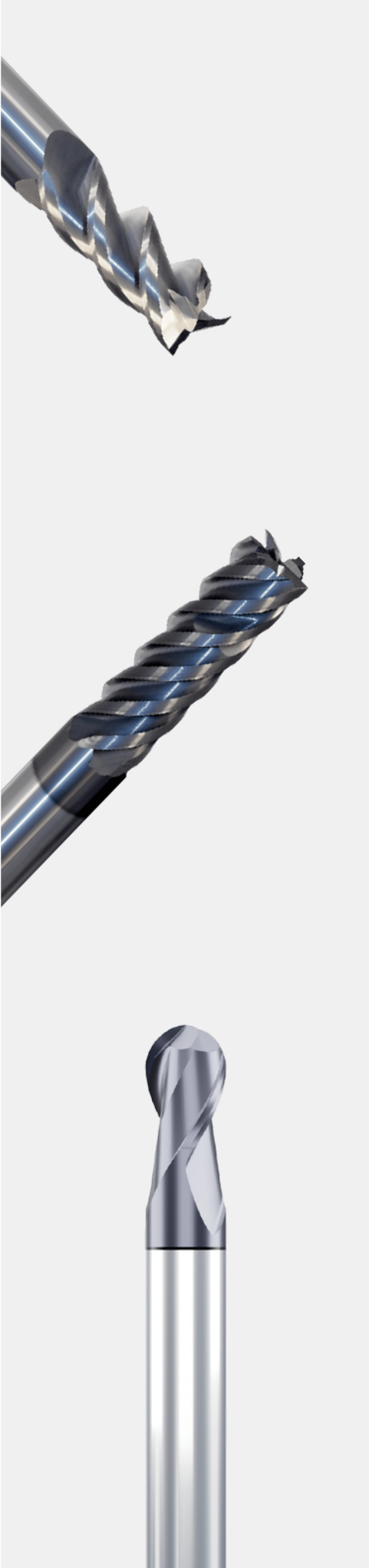
KOMPLE KARBÜR TAKIMLAR

SOLID CARBIDE
TOOLS

2026 | CATALOG

www.euroloy.com

 **EUROLOY**
CARBIDE TOOLS



İçindekiler

TABLE OF CONTENTS

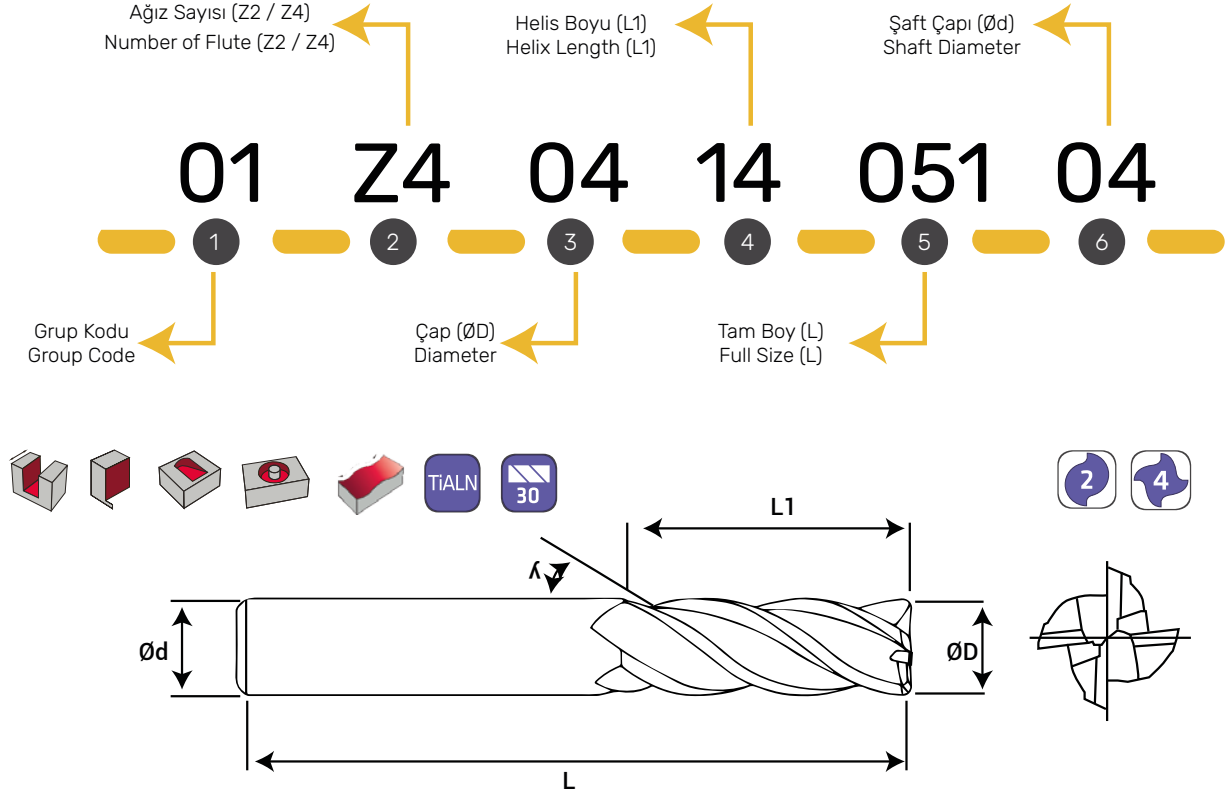
Karbür Frezeleme Kodlama Sistemi <i>Carbide Endmill Coding System</i>	L 4
Komple Karbür Frezeler - Ürün & Uygulama Genel Bakış <i>Solid Carbide Endmills - Product & Application Overview</i>	L 5
Karbür Takımlar <i>Solid Carbide Tools</i>	L 7
Karbür Düz Freze <i>Flat Carbide Endmill</i>	L 10
Karbür Uzun Düz Freze <i>Long Flat Carbide Endmill</i>	L 11
Karbür Küre Freze <i>Ball Nose Carbide Endmill</i>	L 12
Karbür Uzun Küre Freze <i>Ball Nose Long Carbide Endmill</i>	L 13
Karbür Pirr Freze <i>Carbide Pirr Endmill</i>	L 16
Karbür Köşe Radyüs Freze <i>Corner Radius Carbide Endmill</i>	L 18
Karbür Köşe Radyüs Uzun Freze <i>Corner Radius Long Carbide Endmill</i>	L 19
Karbür Alüminyum Finiş Freze <i>Carbide Aluminium Finishing Endmill</i>	L 20
Karbür Alüminyum Uzun Finiş Freze <i>Long Carbide Aluminium Finishing Endmill</i>	L 21
Karbür Alüminyum Performans Freze <i>Carbide Aluminium Performance Endmill</i>	L 22



Karbür Alüminyum Uzun Performans Freze <i>Long Carbide Aluminium Performance Endmill</i>	L 23
Karbür Alüminyum Küre Freze <i>Ball Nose Carbide Aluminium Endmill</i>	L 24
Karbür Alüminyum Uzun Küre Freze <i>Ball Nose Long Carbide Aluminium Endmill</i>	L 25
Karbür Kaba Talaş Freze <i>Carbide Roughing Endmill</i>	L 27
Karbür Uzun Kaba Talaş Freze <i>Long Carbide Roughing Endmill</i>	L 28
Karbür Finiş Freze Z6 <i>Carbide Finishing Endmill Z6</i>	L 29
Karbür Uzun Finiş Freze Z6 <i>Long Carbide Finishing Endmill Z6</i>	L 30
Karbür İç Bükey Freze <i>Carbide Rounding Concave Cutter</i>	L 32
Karbür T Freze <i>Carbide T-Slot Endmill</i>	L 33
3D Karbür Matkap <i>3D Carbide Drill</i>	L 34
5D Karbür Matkap <i>5D Carbide Drill</i>	L 38
Karbür Mikro Matkap <i>Carbide Micro Drill</i>	L 42
Karbür Ekstra Uzun Matkap <i>Extra Long Carbide Drill</i>	L 43

KARBÜR FREZELEME KODLAMA SİSTEMİ

CARBIDE ENDMILL CODING SYSTEM



Grup Kodu / Group Code							
1	01	Z4	04	14	051	04	
01	Karbür Düz Freze (45HRC) Flat Carbide Endmill (45HRC)	02	Karbür Uzun Düz Freze (45HRC) Long Flat Carbide Endmill (45HRC)	03	Karbür Küre Freze (45HRC & 60HRC) Ball Nose Carbide Endmill (45HRC & 60HRC)		
04	Karbür Uzun Küre Freze (45HRC & 60HRC) Ball Nose Long Carbide Endmill (45HRC & 60HRC)	05	Karbür Pirr Freze (60HRC) Carbide Pirr Endmill (60HRC)	06	Karbür Köşe Radyüs Freze (55≤HRC) Corner Radius Carbide Endmill (55≤HRC)		
07	Karbür Köşe Radyüs Uzun Freze (55≤HRC) Corner Radius Long Carbide Endmill (55≤HRC)	08	Karbür Alüminyum Finiş Freze Carbide Aluminium Finishing Endmill	09	Karbür Alüminyum Uzun Finiş Freze Long Carbide Aluminium Finishing Endmill		
10	Karbür Alüminyum Performans Freze Carbide Aluminium Performance Endmill	11	Karbür Alüminyum Uzun Performans Freze Long Carbide Aluminium Performance Endmill	12	Karbür Alüminyum Küre Freze Ball Nose Carbide Aluminium Endmill		
13	Karbür Alüminyum Uzun Küre Freze Ball Nose Long Carbide Aluminium Endmill	14	Karbür Kaba Talaş Freze Ball Roughing Endmill	15	Karbür Uzun Kaba Talaş Freze Long Roughing Endmill		
16	Karbür Finiş Freze Z6 Carbide Finishing Endmill Z6	17	Karbür Uzun Finiş Freze Z6 Long Carbide Finishing Endmill Z6	18	Karbür İç Bükey Freze Carbide Rounding Concave Cutter		
19	Karbür T Freze Carbide T-Slot Endmill	20	3D Karbür Matkap 3D Carbide Drill	21	5D Karbür Matkap 5D Carbide Drill		
22	Karbür Mikro Matkap Carbide Micro Drill	23	Karbür Ekstra Uzun Matkap Extra Long Carbide Drill				

KOMPLE KARBÜR TAKIMLAR - ÜRÜN & UYGULAMA GENEL BAKIŞI

SOLID CARBIDE ENDMILLS - PRODUCT & APPLICATION OVERVIEW

Takım Kodu No Team No	Ürün Product	Çubuk Kalitesi Carbide Rod Grade	Resim Image	Sayfa Page	Kaplama Coating	Kullanım Alanı Application Area	Ağız Sayısı Number of Flute	İş Parçası / Workpiece					
								P	M	K	N	S	H
								Çelik-Steel	Paslanmaz Çelik Stainless Steel	Dökme Demir Cast Iron	Demir Dışı Metal Non-ferrous Metal	Isıya Dirençli Alaşım Heat Resistant Alloy	Sertleştirilmiş Çelik Hardened Steel
01	Karbür Düz Freze Flat Carbide Endmill	KH103S		10	●	Genel General	4	★	○	★			
02	Karbür Uzun Düz Freze Long Flat Carbide Endmill	KH103S		11	●	Genel General	4	★	○	★			
03	Karbür Küre Freze Ball Nose Carbide Endmill	KH103S		12	●	Genel General	2-4	★	○	★			
04	Karbür Uzun Küre Freze Ball Nose Long Carbide Endmill	KH103S		13	●	Genel General	2-4	★	○	★			
05	Karbür Pirr Freze Carbide Pirr Endmill	KH103S		16	●	Genel General	4	★	○	★	○	★	
06	Karbür Köşe Radyüs Freze Corner Radius Carbide Endmill	KH103S		18	●	Yüksek Hız High Speed	4	★		○		★	★
07	Karbür Köşe Radyüs Uzun Freze Corner Radius Long Carbide Endmill	KH103S		19	●	Yüksek Hız High Speed	4	★		○		★	★
08	Karbür Alüminyum Finiş Freze Carbide Aluminium Finishing Endmill	KH100SR		20	○	Alüminyum Finiş Aluminum Finish	2-3				★		
09	Karbür Alüminyum Uzun Finiş Freze Long Carbide Aluminium Finishing Endmill	KH100SR		21	○	Alüminyum Finiş Aluminum Finish	2-3				★		
10	Karbür Alüminyum Performans Freze Carbide Aluminium Performance Endmill	KH100SR		22	○	Alüminyum Performans Aluminum Performance	3				★		
11	Karbür Alüminyum Uzun Performans Freze Long Carbide Aluminium Performance Endmill	KH100SR		23	○	Alüminyum Performans Aluminum Performance	3				★		
12	Karbür Alüminyum Küre Freze Ball Nose Carbide Aluminium Endmill	KH100SR		24	○	Alüminyum Aluminum	2				★		
13	Karbür Alüminyum Uzun Küre Freze Ball Nose Long Carbide Aluminium Endmill	KH100SR		25	○	Alüminyum Aluminum	2				★		
14	Karbür Kaba Talaş Freze Carbide Roughing Endmill	KH103S		27	●	Genel General	4	★				○	
15	Karbür Uzun Kaba Talaş Freze Long Carbide Roughing Endmill	KH103S		28	●	Genel General	4	★				○	
16	Karbür Finiş Freze Z6 Carbide Finishing Endmill Z6	KH103S		29	●	Genel General	6	★	★			★	○

○ Kaplamalı / Coated
● Kaplamasız / Uncoated

★ Önerilir / Recommended
○ İkincil Seçenek / Secondary Option

KOMPLE KARBÜR TAKIMLAR - ÜRÜN & UYGULAMA GENEL BAKIŞI

SOLID CARBIDE ENDMILLS – PRODUCT & APPLICATION OVERVIEW

Takım Kodu No Team No	Ürün Product	Çubuk Kalitesi Carbide Rod Grade	Resim Image	Sayfa Page	Kaplama Coating	Kullanım Alanı Application Area	Ağız Sayısı Number of Flute	İş Parçası / Workpiece					
								P Çelik-Steel	M Paslanmaz Çelik Stainless Steel	K Dökme Demir Cast Iron	N Demir Dışı Metal Non-ferrous Metal	S Isıya Dirençli Alaşım Heat Resistant Alloy	H Sertleştirilmiş Çelik Hardened Steel
17	Karbür Uzun Finit Freze Z6 Long Carbide Finishing Endmill Z6	KH103S		30	●	Genel General	6	★	★			★	○
18	Karbür İç Bükey Freze Carbide Rounding Concave Cutter	KH103S		32	●	Genel General	4-6-8	★	○	★	○		
19	Karbür T Freze Carbide T-Slot Endmill	KH103S		33	●	Genel General	-						
20	3D Karbür Matkap 3D Carbide Drill	KH103S		34	●	Genel General	-	★	○	★		○	
21	5D Karbür Matkap 5D Carbide Drill	KH103S		38	●	Genel General	-	★	○	★		○	
22	Karbür Mikro Matkap Carbide Micro Drill	KH103S		42	●	Genel General	-	★	○	★		○	
23	Karbür Ekstra Uzun Matkap Extra Long Carbide Drill	KH103S		43	●	Genel General	-	★	○	★		○	

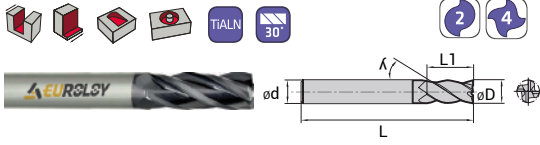
○ Kaplamalı / Coated
● Kaplamasız / Uncoated

★ Önerilir / Recommended
○ İkincil Seçenek / Secondary Option

KARBÜR TAKIMLAR

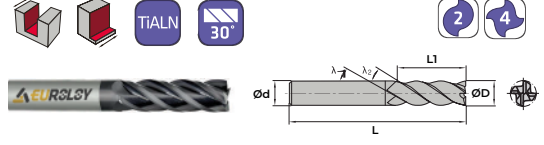
SOLID CARBIDE TOOLS

01

KARBÜR DÜZ FREZE
FLAT CARBIDE ENDMILLÇap:Ø3 - Ø20
Diameter:Ø3 - Ø20

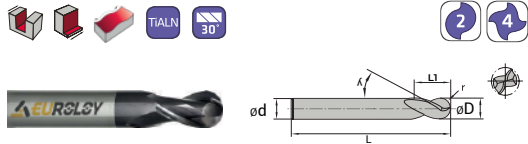
Sayfa -Page: 10

02

KARBÜR UZUN DÜZ FREZE
LONG FLAT CARBIDE ENDMILLÇap:Ø3 - Ø20
Diameter:Ø3 - Ø20

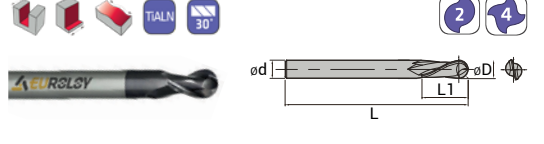
Sayfa -Page:11

03

KARBÜR KÜRE FREZE
BALL NOSE CARBIDE ENDMILLÇap:Ø3 - Ø20
Diameter:Ø3 - Ø20

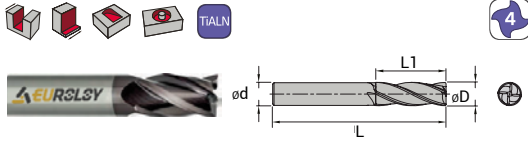
Sayfa-Page:12

04

KARBÜR UZUN KÜRE FREZE
BALL NOSE LONG CARBIDE ENDMILLÇap:Ø3 - Ø20
Diameter:Ø3 - Ø20

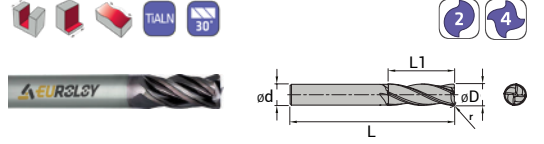
Sayfa -Page:13

05

KARBÜR PİRR FREZE
CARBIDE PİRR ENDMILLÇap:Ø6 - Ø20
Diameter:Ø6 - Ø20

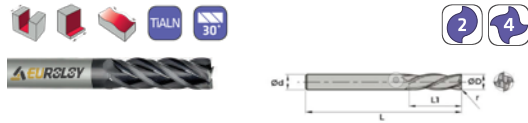
Sayfa-Page:16

06

KARBÜR KÖŞE RADYUS FREZE
CORNER RADIUS CARBIDE ENDMILLÇap:Ø3 - Ø20
Diameter:Ø3 - Ø20

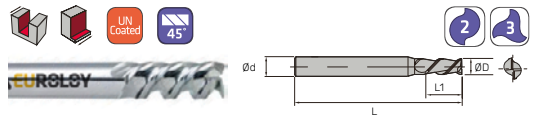
Sayfa-Page:18

07

KARBÜR KÖŞE RADYUS UZUN FREZE
CORNER RADIUS LONG CARBIDE ENDMILLÇap:Ø3 - Ø20
Diameter:Ø3 - Ø20

Sayfa-Page: 19

08

KARBÜR ALUMİNYUM FİNİŞ FREZE
CARBIDE ALUMINUM FINISHING ENDMILLÇap:Ø3 - Ø20
Diameter:Ø3 - Ø20

Sayfa-Page:20

KARBÜR TAKIMLAR

SOLID CARBIDE TOOLS

09 KARBÜR ALÜMİNYUM UZUN FİNİŞ FREZE
LONG CARBIDE ALUMINIUM FINISHING ENDMILL

Çap:Ø3 - Ø20
Diameter:Ø3 - Ø20

Sayfa -Page: 21

10 KARBÜR ALÜMİNYUM PERFORMANS FREZE
CARBIDE ALUMINIUM PERFORMANCE ENDMILL

Çap:Ø3 - Ø20
Diameter:Ø3 - Ø20

Sayfa -Page:22

11 KARBÜR ALÜMİNYUM UZUN PERFORMANS FREZE
LONG C. ALUMINIUM PERFORMANCE ENDMILL

Çap:Ø3 - Ø20
Diameter:Ø3 - Ø20

Sayfa -Page: 23

12 KARBÜR ALÜMİNYUM KÜRE FREZE
BALL NOSE CARBIDE ALUMINIUM ENDMILL

Çap:Ø3 - Ø20
Diameter:Ø3 - Ø20

Sayfa -Page:24

13 KARBÜR UZUN KABA TALAŞ FREZE
LONG CARBIDE ROUGHING ENDMILL

Çap:Ø6 - Ø25
Diameter:Ø6 - Ø25

Sayfa -Page: 25

14 KARBÜR KABA TALAŞ FREZE
CARBIDE ROUGHING ENDMILL

Çap:Ø6 - Ø28
Diameter:Ø6 - Ø28

Sayfa -Page:27

15 KARBÜR UZUN FİNİŞ FREZE Z6
LONG CARBIDE FINISHING ENDMILL Z6

Çap:Ø6 - Ø25
Diameter:Ø6 - Ø25

Sayfa -Page: 28

16 KARBÜR FİNİŞ FREZE Z6
CARBIDE FINISHING ENDMILL Z6

Çap:Ø6 - Ø28
Diameter:Ø6 - Ø28

Sayfa -Page:29

17 KARBÜR UZUN FİNİŞ FREZE Z6
LONG CARBIDE FINISHING ENDMILL Z6

Çap:Ø6 - Ø25
Diameter:Ø6 - Ø25

Sayfa -Page: 30

18 KARBÜR İÇ BÜKEY FREZE
CARBIDE ROUNDING CONCAVE CUTTER

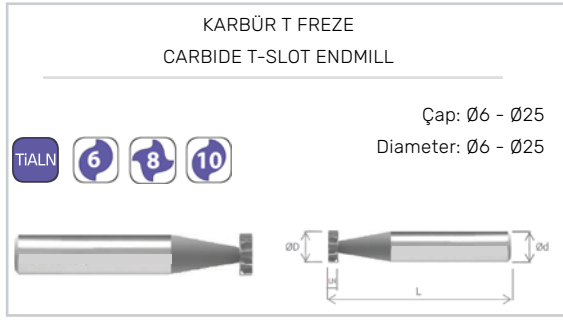
Çap:Ø8 - Ø22
Diameter:Ø8 - Ø22

Sayfa -Page:32

KARBÜR TAKIMLAR

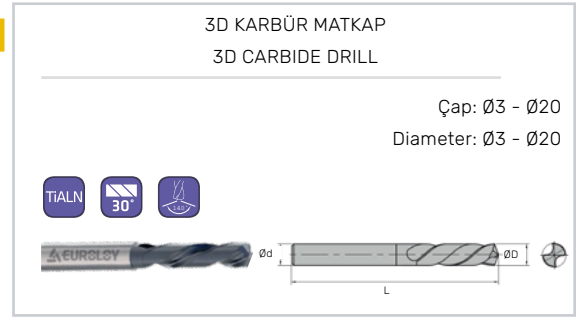
SOLID CARBIDE TOOLS

19



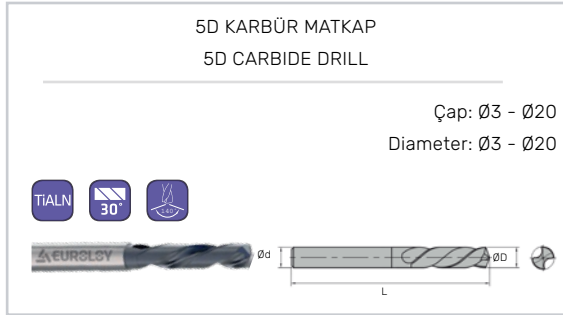
Sayfa -Page: 33

20



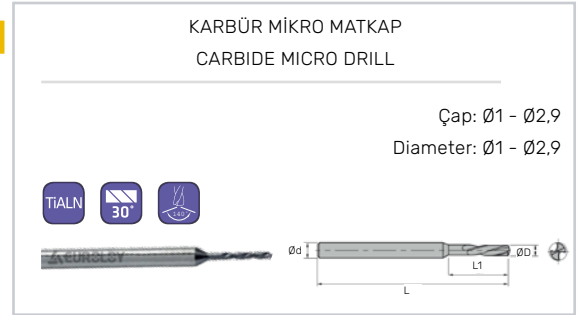
Sayfa -Page: 34

21



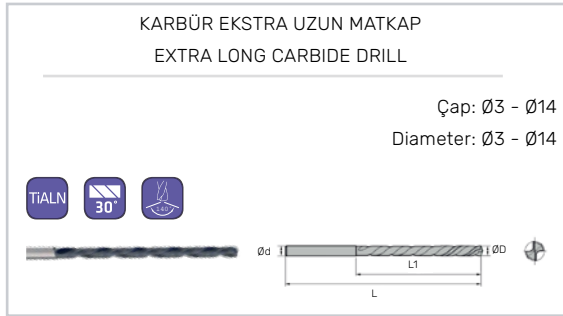
Sayfa -Page:38

22



Sayfa -Page: 42

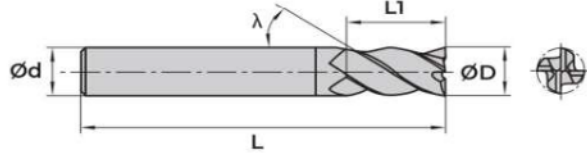
23



Sayfa -Page:43

01

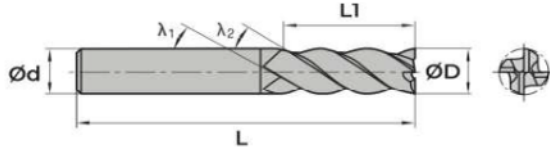
KARBÜR DÜZ FREZE FLAT CARBIDE ENDMILL



Sipariş Kodu (Z:2) Order Code(Z:2)	Sipariş Kodu (Z:4) Order Code(Z:4)	Ø D(mm)	L1(mm)	L(mm)	Ø d(mm)
01Z2031205003	01Z4031205003	3	12	50	3
01Z2041405104	01Z4041405104	4	14	51	4
01Z2051605105	01Z4051605105	5	16	51	5
01Z2061905806	01Z4061905806	6	19	58	6
01Z2072006407	01Z4072006407	7	20	64	7
01Z2082006408	01Z4082006408	8	20	64	8
01Z2092107309	01Z4092107309	9	21	73	9
01Z2102107310	01Z4102107310	10	21	73	10
01Z2112508411	01Z4112508411	11	25	84	11
01Z2122508412	01Z4122508412	12	25	84	12
01Z2133208413	01Z4133208413	13	32	84	13
01Z2143208414	01Z4143208414	14	32	84	14
01Z2153209315	01Z4153209315	15	32	93	15
01Z2163209316	01Z4163209316	16	32	93	16
01Z2183509318	01Z4183509318	18	35	93	18
01Z2203810020	01Z4203810020	20	38	100	20
01Z2223810022	01Z4223810022	22	38	100	22
01Z2243810024	01Z4243810024	24	38	100	24
01Z2253810025	01Z4253810025	25	38	100	25

02

KARBÜR UZUN DÜZ FREZE LONG FLAT CARBIDE ENDMILL

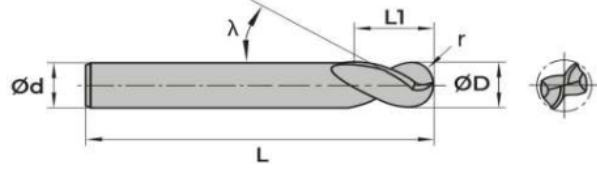


Sipariş Kodu (Z:2) Order Code(Z:2)	Sipariş Kodu (Z:4) Order Code(Z:4)	ØD(mm)	L1(mm)	L(mm)	Ød(mm)
02Z2032007503	02Z4032007503	3	20	75	3
02Z2042007504	02Z4042007504	4	20	75	4
02Z2052507505	02Z4052507505	5	25	75	5
02Z2063007506	02Z4063007506	6	30	75	6
02Z2083007508	02Z4083007508	8	30	75	8
02Z2032010003	02Z4032010003	3	20	100	3
02Z2042010004	02Z4042010004	4	20	100	4
02Z2052510005	02Z4052510005	5	25	100	5
02Z2064010006	02Z4064010006	6	40	100	6
02Z2084510008	02Z4084510008	8	45	100	8
02Z2104510010	02Z4104510010	10	45	100	10
02Z2124510012	02Z4124510012	12	45	100	12
02Z2144510014	02Z4144510014	14	45	100	14
02Z2164510016	02Z4164510016	16	45	100	16
02Z2184510018	02Z4184510018	18	45	100	18
02Z2204510020	02Z4204510020	20	45	100	20
02Z2086515008	02Z4086515008	8	65	150	8
02Z2106515010	02Z4106515010	10	65	150	10
02Z2126515012	02Z4126515012	12	65	150	12
02Z2146515014	02Z4146515014	14	65	150	14
02Z2167515016	02Z4167515016	16	75	150	16
02Z2187515018	02Z4187515018	18	75	150	18
02Z2207515020	02Z4207515020	20	75	150	20
02Z2227515022	02Z4227515022	22	75	150	22
02Z2247515024	02Z4247515024	24	75	150	24
02Z2257515025	02Z4257515025	25	75	150	25

03

KARBÜR KÜRE FREZE

BALL NOSE CARBIDE ENDMILL

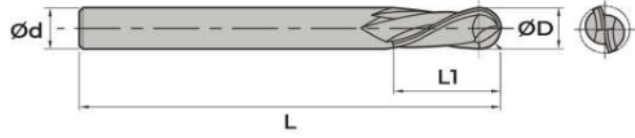


Sipariş Kodu (Z:2) Order Code(Z:2)	Sipariş Kodu (Z:4) Order Code(Z:4)	$\varnothing D$ (mm)	L_1 (mm)	L (mm)	$\varnothing d$ (mm)
03Z2031205003A	03Z4031205003A	3	12	50	3
03Z2041405104A	03Z4041405104A	4	14	51	4
03Z2051605105A	03Z4051605105A	5	16	51	5
03Z2061905806A	03Z4061905806A	6	19	58	6
03Z2072006407A	03Z4072006407A	7	20	64	7
03Z2082006408A	03Z4082006408A	8	20	64	8
03Z2092107309A	03Z4092107309A	9	21	73	9
03Z2102107310A	03Z4102107310A	10	21	73	10
03Z2112508411A	03Z4112508411A	11	25	84	11
03Z2122508412A	03Z4122058412A	12	25	84	12
03Z2132508413A	03Z4132508413A	13	32	84	13
03Z2143208414A	03Z4143208414A	14	32	84	14
03Z2163209316A	03Z4163209316A	16	32	93	16
03Z2183509318A	03Z4183509318A	18	35	93	18
03Z2203810020A	03Z4203810020A	20	38	100	20
03Z2203810022A	03Z4203810022A	22	38	100	22
03Z2403810024A	03Z4403810024A	24	38	100	24
03Z2253810025A	03Z4253810025A	25	38	100	25

04

KARBÜR UZUN KÜRE FREZE

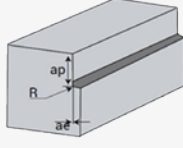
BALL NOSE LONG CARBIDE ENDMILL



Sipariş Kodu (Z:2) Order Code(Z:2)	Sipariş Kodu (Z:4) Order Code(Z:4)	Ø D(mm)	L1(mm)	L(mm)	Ø d(mm)
04Z2032007503A	04Z4032007503A	3	20	75	3
04Z2042007504A	04Z4042007504A	4	20	75	4
04Z2052007505A	04Z4052007505A	5	25	75	5
04Z2063007506A	04Z4063007506A	6	30	75	6
04Z2083007508A	04Z4083007508A	8	30	75	8
04Z2032010003A	04Z4032010003A	3	20	100	3
04Z2042010004A	04Z4042010004A	4	20	100	4
04Z2052510005A	04Z4052510005A	5	25	100	5
04Z2064010006A	04Z4064010006A	6	40	100	6
04Z2084510008A	04Z4084510008A	8	45	100	8
04Z2104510010A	04Z4104510010A	10	45	100	10
04Z2124510012A	04Z4124510012A	12	45	100	12
04Z2144510014A	04Z4144510014A	14	45	100	14
04Z2164510016A	04Z4164510016A	16	45	100	16
04Z2184510018A	04Z4184510018A	18	45	100	18
04Z2204510020A	04Z4204510020A	20	45	100	20
04Z2086515008A	04Z4086515008A	8	65	150	8
04Z2106515010A	04Z4106515010A	10	65	150	10
04Z2126515012A	04Z4126515012A	12	65	150	12
04Z2146515014A	04Z4146515014A	14	65	150	14
04Z2167515016A	04Z4167515016A	16	75	150	16
04Z2187515018A	04Z4187515018A	18	75	150	18
04Z2207515020A	04Z4207515020A	20	75	150	20
04Z2227515022A	04Z4227515022A	22	75	150	22
04Z2247515024A	04Z4247515024A	24	75	150	24
04Z2257515025A	04Z4257515025A	25	75	150	25

UYGULAMA ALANLARI

APPLICATIONS

								
			$ae = 1.0 \times \emptyset$ $ap(mm) = 0.5 \times \emptyset$		$ae = 0.5 \times \emptyset$ $ap(mm) = 1.0 \times \emptyset$		$ae = 0.1 \times \emptyset$ $ap(mm) = 1.5 \times \emptyset$	
ISO	Malzeme / Material	HB	fz (mm)	Vc m/min	fz (mm)	Vc m/min	fz (mm)	Vc m/min
P	Alaşımsız Çelik Unalloyed steel	190	F0,1	145	F0,4	175	F0,6	290
	Düşük Alaşımlı Çelik Low-alloyed steel	240	F0,1	110	F0,4	135	F0,6	230
	Yüksek Alaşımlı Çelik High alloyed steel	380	F0,2	80	F0,5	100	F0,6	200
	Ferritik/Martensitik Paslanmaz Çelik Ferritic/martensitic stainless steel	200	F0,2	80	F0,5	90	F0,4	150
M	Östenitik Paslanmaz Çelik Austenitic stainless steel	200	F0,1	70	F0,4	80	F0,6	120
	Dupleks (Östenitik/Ferritik) Paslanmaz Çelik Duplex (austenitic/ferritic) stainless steel	260	F0,2	60	F0,5	70	F0,4	90
K	Dövülebilir Dökme Demir Malleable cast iron	200	F0,1	150	F0,4	180	F0,6	250
	Gri Dökme Demir Gray cast iron	180	F0,1	150	F0,4	180	F0,6	250
	Sfero Dökme Demir Nodular cast iron	215	F0,1	160	F0,4	190	F0,6	270
N	Alüminyum bazlı alaşımlar Aluminium based alloys	100	F0,3	680	F0,3	835	F0,9	950
	Alüminyum bazlı alaşımlar Aluminium based alloys	75	F0,3	230	F0,3	305	F0,9	410
	Alüminyum bazlı alaşımlar Aluminium based alloys	130	F0,3	100	F0,3	130	F0,9	195
	Bakır ve Bakır alaşımları Copper and copper alloys	90	F0,3	130	F0,3	170	F0,9	245
S	Demir bazlı Süper alaşımlar Iron based superalloys	350	F0,2	25	F0,5	30	F0,7	40
	Nikel bazlı Süper alaşımlar Nickel based super alloys	320	F0,2	40	F0,5	50	F0,7	70

UYGULAMA ALANLARI

APPLICATIONS

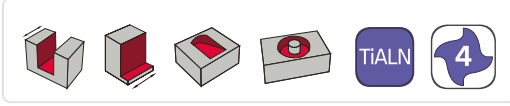
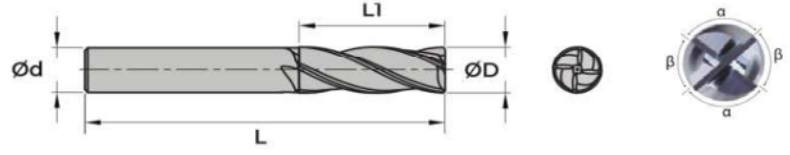
Ağız Başı İlerleme Tablosu

Feed per Tooth Chart

Ø	2	3	4	6	8	10	12	14	16	20	25
fz(mm)	0.079	0.118	0.157	0.236	0.315	0.394	0.472	0.551	0.630	0.787	0.984
F0,1	0.012	0.016	0.021	0.029	0.037	0.046	0.054	0.062	0.071	0.087	0.108
	0.0005	0.0006	0.0008	0.0011	0.0015	0.0018	0.0021	0.0025	0.0028	0.0034	0.0043
F0,2	0.011	0.015	0.018	0.025	0.032	0.038	0.045	0.052	0.058	0.072	0.089
	0.0004	0.0006	0.0007	0.0010	0.0012	0.0015	0.0018	0.0020	0.0023	0.0028	0.0035
F0,3	0.027	0.033	0.040	0.053	0.066	0.079	0.092	0.105	0.118	0.145	0.177
	0.0010	0.0013	0.0016	0.0021	0.0026	0.0031	0.0036	0.0041	0.0047	0.0057	0.0070
F0,4	0.025	0.029	0.034	0.044	0.053	0.062	0.072	0.081	0.091	0.110	0.133
	0.0010	0.0012	0.0013	0.0017	0.0021	0.0025	0.0028	0.0032	0.0036	0.0043	0.0052
F0,5	0.023	0.027	0.030	0.037	0.044	0.051	0.058	0.065	0.072	0.086	0.104
	0.0009	0.0011	0.0012	0.0015	0.0017	0.0020	0.0023	0.0026	0.0028	0.0034	0.0041
F0,6	0.028	0.035	0.041	0.054	0.067	0.080	0.093	0.106	0.119	0.145	0.177
	0.0011	0.0014	0.0016	0.0021	0.0027	0.0032	0.0037	0.0042	0.0047	0.0057	0.0070
F0,7	0.025	0.031	0.036	0.047	0.057	0.068	0.079	0.089	0.100	0.121	0.148
	0.0010	0.0012	0.0014	0.0018	0.0023	0.0027	0.0031	0.0035	0.0039	0.0048	0.0058
F0,8	0.038	0.046	0.053	0.069	0.085	0.100	0.116	0.131	0.147	0.178	0.217
	0.0015	0.0018	0.0021	0.0027	0.0033	0.0039	0.0046	0.0052	0.0058	0.0070	0.0085

05


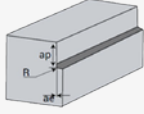
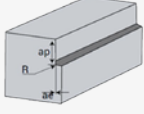
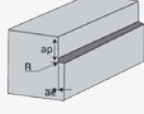
KARBÜR PİRR FREZE CARBIDE PIRR ENDMILL



Sipariş Kodu (Z:4) Order Code(Z:4)	Ø D(mm)	L1(mm)	L(mm)	Ø d(mm)
05Z4030905806	3	9	58	6
05Z4041105806	4	11	58	6
05Z4051405806	5	14	58	6
05Z4061905806	6	19	58	6
05Z4072006407	7	20	64	7
05Z4082006408	8	20	64	8
05Z4092107309	9	21	73	9
05Z4102107310	10	21	73	10
05Z4112508411	11	25	84	11
05Z4122508412	12	25	84	12
05Z4133208413	13	32	84	13
05Z4143208414	14	32	84	14
05Z4153209315	15	32	93	15
05Z4163209316	16	32	93	16
05Z4183509318	18	35	93	18
05Z4203810020	20	38	100	20

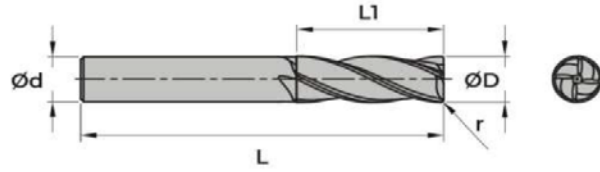
UYGULAMA ALANLARI

APPLICATIONS

											
			PIRR FREZE / PIRR ENDMILL			PIRR FREZE / PIRR ENDMILL			PIRR FREZE / PIRR ENDMILL		
			ap(mm) = 3.0 x Ø			ap(mm) = 3.0 x Ø			ap(mm) = 3.5 x Ø		
ISO	Malzeme / Material	HB	ae	fz (mm)	Vc m/min	ae	fz (mm)	Vc m/min	ae	fz (mm)	Vc m/min
P	Alaşimsız Çelik <i>Unalloyed steel</i>	190	0.15 x Ø	F0,1	250	0.10 x Ø	F0,1	275	0.07 x Ø	F0,4	303
	Düşük Alaşımli Çelik <i>Low-alloyed steel</i>	240	0.15 x Ø	F0,1	240	0.10 x Ø	F0,2	264	0.07 x Ø	F0,4	290
	Yüksek Alaşımli Çelik <i>High alloyed steel</i>	320	0.15 x Ø	F0,2	140	0.10 x Ø	F0,2	154	0.07 x Ø	F0,5	169
	Ferritik/Martensitik Paslanmaz Çelik <i>Ferritic/martensitic stainless steel</i>	200	0.15 x Ø	F0,2	120	0.10 x Ø	F0,2	132	0.07 x Ø	F0,5	145
M	Östenitik Paslanmaz Çelik <i>Austenitic stainless steel</i>	200	0.15 x Ø	F0,2	150	0.10 x Ø	F0,2	165	0.07 x Ø	F0,5	182
	Dupleks (Östenitik/Ferritik) Paslanmaz Çelik <i>Duplex (austenitic/ferritic) stainless steel</i>	260	0.15 x Ø	F0,2	130	0.10 x Ø	F0,2	143	0.07 x Ø	F0,5	157
K	Dövülebilir Dökme Demir <i>Malleable cast iron</i>	200	0.15 x Ø	F0,1	235	0.10 x Ø	F0,1	259	0.07 x Ø	F0,4	284
	Gri Dökme Demir <i>Gray cast iron</i>	180	0.15 x Ø	F0,1	240	0.10 x Ø	F0,1	264	0.07 x Ø	F0,4	290
	Sfero Dökme Demir <i>Nodular cast iron</i>	215	0.15 x Ø	F0,1	245	0.10 x Ø	F0,1	270	0.07 x Ø	F0,4	296
N	Alüminyum bazlı alaşımlar <i>Aluminium based alloys</i>	100	0.15 x Ø	F0,4	950	0.10 x Ø	F0,4	1140	0.07 x Ø	F0,6	1140
	Alüminyum bazlı alaşımlar <i>Aluminium based alloys</i>	75	0.15 x Ø	F0,4	410	0.10 x Ø	F0,4	492	0.07 x Ø	F0,6	492
	Alüminyum bazlı alaşımlar <i>Aluminium based alloys</i>	130	0.15 x Ø	F0,4	195	0.10 x Ø	F0,4	234	0.07 x Ø	F0,6	234
S	Bakır ve Bakır alaşımları <i>Copper and copper alloys</i>	90	0.15 x Ø	F0,4	245	0.10 x Ø	F0,4	294	0.07 x Ø	F0,6	294
	Demir bazlı Süper alaşımlar <i>Nickel based superalloys</i>	350	0.05 x Ø	F0,3	55	0.05 x Ø	F0,3	55	0.05 x Ø	F0,3	55
	Nikel bazlı Süper alaşımlar <i>Titanium based alloys</i>	320	0.05 x Ø	F0,3	120	0.05 x Ø	F0,3	120	0.05 x Ø	F0,3	120

06

KARBÜR KÖŞE RADYÜS FREZE CORNER RADIUS CARBIDE ENDMILL

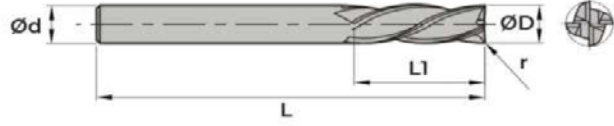


Sipariş Kodu (Z:2) Order Code(Z:2)	Sipariş Kodu (Z:4) Order Code(Z:4)	Ø D(mm)	L1(mm)	L(mm)	Ø d(mm)
06Z2031205003R#	06Z4031205003R#	3	12	50	3
06Z2041405104R#	06Z4041405104R#	4	14	51	4
06Z2051605105R#	06Z4051605105R#	5	16	51	5
06Z2061905806R#	06Z4061905806R#	6	19	58	6
06Z2072006407R#	06Z4072006407R#	7	20	64	7
06Z2082006408R#	06Z4082006408R#	8	20	64	8
06Z2092107309R#	06Z4092107309R#	9	21	73	9
06Z2102107310R#	06Z4102107310R#	10	21	73	10
06Z2112508411R#	06Z4112508411R#	11	25	84	11
06Z2122508412R#	06Z4122508412R#	12	25	84	12
06Z2133208413R#	06Z4133208413R#	13	32	84	13
06Z2143208414R#	06Z4143208414R#	14	32	84	14
06Z2153209315R#	06Z4153209315R#	15	32	93	15
06Z2163209316R#	06Z4163209316R#	16	32	93	16
06Z2183509318R#	06Z4183509318R#	18	35	93	18
06Z2203810020R#	06Z4203810020R#	20	38	100	20
06Z2223810022R#	06Z4223810022R#	22	38	100	22
06Z2243810024R#	06Z4243810024R#	24	38	100	24
06Z2253810025R#	06Z4253810025R#	25	38	100	25

07

KARBÜR KÖŞE RAYDÜS UZUN FREZE

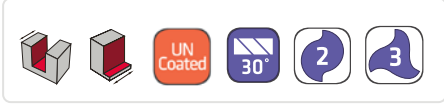
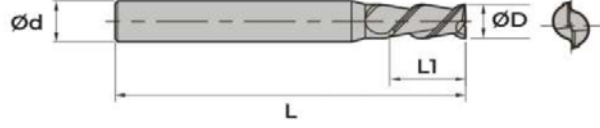
CORNER RADIUS LONG CARBIDE ENDMILL



Sipariş Kodu (Z:2) Order Code(Z:2)	Sipariş Kodu (Z:4) Order Code(Z:4)	Ø D(mm)	L1(mm)	L(mm)	Ø d(mm)
07Z2032007503R#	07Z4032007503R#	3	20	75	3
07Z2042007504R#	07Z4042007504R#	4	20	75	4
07Z2052507506R#	07Z4052507506R#	5	25	75	5
07Z2063007506R#	07Z4063007506R#	6	30	75	6
07Z2083007508R#	07Z4083007508R#	8	30	75	8
07Z2032010003R#	07Z4032010003R#	3	20	100	3
07Z2042010004R#	07Z4042010004R#	4	20	100	4
07Z2052510005R#	07Z4052510005R#	5	25	100	5
07Z2064010006R#	07Z4064010006R#	6	40	100	6
07Z2084510008R#	07Z4084510008R#	8	45	100	8
07Z2104510010R#	07Z4104510010R#	10	45	100	10
07Z2124510012R#	07Z4124510012R#	12	45	100	12
07Z2144510014R#	07Z4144510014R#	14	45	100	14
07Z2164510016R#	07Z4164510016R#	16	45	100	16
07Z2184510018R#	07Z4184510018R#	18	45	100	18
07Z2204510020R#	07Z4204510020R#	20	45	100	20
07Z2086515008R#	07Z4086515008R#	8	65	150	8
07Z2106515010R#	07Z4106515010R#	10	65	150	10
07Z2126515012R#	07Z4126515012R#	12	65	150	12
07Z2146515014R#	07Z4146515014R#	14	65	150	14
07Z2167515016R#	07Z4167515016R#	16	75	150	16
07Z2187515018R#	07Z4187515018R#	18	75	150	18
07Z2207515020R#	07Z4207515020R#	20	75	150	20
07Z2227515022R#	07Z4227515022R#	22	75	150	22
07Z2247515024R#	07Z4247515024R#	24	75	150	24
07Z2257515025R#	07Z4257515025R#	25	75	150	25

08

KARBÜR ALÜMİNYUM FİNİŞ FREZE CARBIDE ALUMINIUM FINISHING ENDMILL

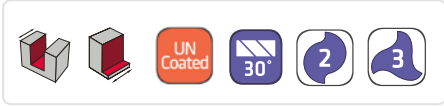
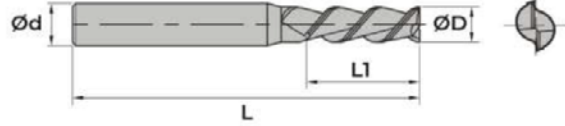


Sipariş Kodu (Z:2) Order Code(Z:2)	Sipariş Kodu (Z:4) Order Code(Z:4)	Ø D(mm)	L1(mm)	L(mm)	Ø d(mm)
08Z2031205003	08Z4031205003	3	12	50	3
08Z2041405105	08Z4041405105	4	14	51	4
08Z2051605105	08Z4051605105	5	16	51	5
08Z2061905806	08Z4061905806	6	19	58	6
08Z2072006007	08Z4072006007	7	20	60	7
08Z2082006408	08Z4082006408	8	20	64	8
08Z2092106709	08Z4092106709	9	21	67	9
08Z2102107310	08Z4102107310	10	21	73	10
08Z2112507512	08Z4112507512	11	25	75	11
08Z2122508412	08Z4122508412	12	25	84	12
08Z2133208413	08Z4133208413	13	32	84	13
08Z2143208414	08Z4143208414	14	32	84	14
08Z2153209315	08Z4153209315	15	32	93	15
08Z2163209316	08Z4163209316	16	32	93	16
08Z2183509318	08Z4183509318	18	35	93	18
08Z2203810020	08Z4203810020	20	38	100	20

09

KARBÜR ALÜMİNYUM UZUN FİNİŞ FREZE

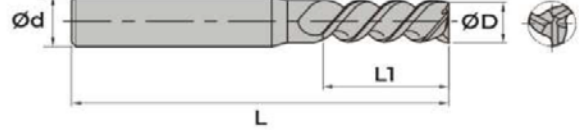
LONG CARBIDE ALUMINIUM FINISHING ENDMILL



Sipariş Kodu (Z:2) Order Code(Z:2)	Sipariş Kodu (Z:4) Order Code(Z:4)	ØD(mm)	L1(mm)	L(mm)	Ød(mm)
09Z2032007503	09Z3032007503	3	20	75	3
09Z2042007504	09Z3042007504	4	20	75	4
09Z2052507505	09Z3052507505	5	25	75	5
09Z2063007506	09Z3063007506	6	30	75	6
09Z2083007508	09Z3083007508	8	30	75	8
09Z2032010003	09Z3032010003	3	20	100	3
09Z2042010004	09Z3042010004	4	20	100	4
09Z2052510005	09Z3052510005	5	25	100	5
09Z2063010006	09Z3063010006	6	30	100	6
09Z2083010008	09Z3083010008	8	30	100	8
09Z2104510010	09Z3104510010	10	45	100	10
09Z2124510012	09Z3124510012	12	45	100	12
09Z2144510014	09Z3144510014	14	45	100	14
09Z2164510016	09Z3164510016	16	45	100	16
09Z2184510018	09Z3184510018	18	45	100	18
09Z2204510020	09Z3204510020	20	45	100	20
09Z2086515008	09Z3086515008	8	65	150	8
09Z2106515010	09Z3106515010	10	65	150	10
09Z2126515012	09Z3126515012	12	65	150	12
09Z2146515014	09Z3146515014	14	65	150	14
09Z2167515016	09Z3167515016	16	75	150	16
09Z2187515018	09Z3187515018	18	75	150	18
09Z2207515020	09Z3207515020	20	75	150	20

10

KARBÜR ALÜMİNYUM PERFORMANS FREZE CARBIDE ALUMINIUM PERFORMANCE ENDMILL

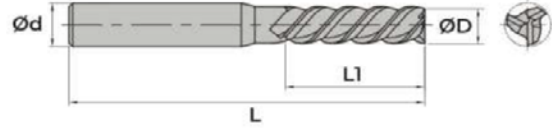


Sipariş Kodu (Z:3) Order Code(Z:3)	ØD(mm)	L1(mm)	L(mm)	Ød(mm)
10Z3031205003	3	12	50	3
10Z3041405104	4	14	51	4
10Z3051605105	5	16	51	5
10Z3061905806	6	19	58	6
10Z3072006407	7	20	64	7
10Z3082006408	8	20	64	8
10Z3092107309	9	21	73	9
10Z3102107310	10	21	73	10
10Z3112508411	11	25	84	11
10Z3122508412	12	25	84	12
10Z3133208413	13	32	84	13
10Z3143208414	14	32	84	14
10Z3153209315	15	32	93	15
10Z3163209316	16	32	93	16
10Z3183509318	18	35	93	18
10Z3203810020	20	38	100	20

11

KARBÜR ALÜMİNYUM UZUN PERFORMANS FREZE

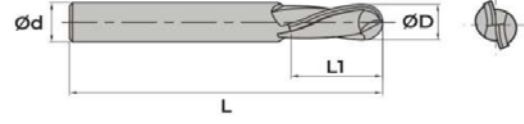
LONG CARBIDE ALUMINIUM PERFORMANCE ENDMILL



Sipariş Kodu (Z:3) Order Code(Z:3)	ØD(mm)	L1(mm)	L(mm)	Ød(mm)
11Z3032007503	3	20	75	3
11Z3042007504	4	20	75	4
11Z3052507505	5	25	75	5
11Z3063007506	6	30	75	6
11Z3083007508	8	30	75	8
11Z3032010003	3	20	100	3
11Z3042010004	4	20	100	4
11Z3052510005	5	25	100	5
11Z3063010006	6	30	100	6
11Z3083010008	8	30	100	8
11Z3104510010	10	45	100	10
11Z3124510012	12	45	100	12
11Z3144510014	14	45	100	14
11Z3164510016	16	45	100	16
11Z3184510018	18	45	100	18
11Z3204510020	20	45	100	20
11Z3086515008	8	65	150	8
11Z3106515010	10	65	150	10
11Z3126515012	12	65	150	12
11Z3146515014	14	65	150	14
11Z3167515016	16	75	150	16
11Z3187515018	18	75	150	18
11Z3207515020	20	75	150	20

12

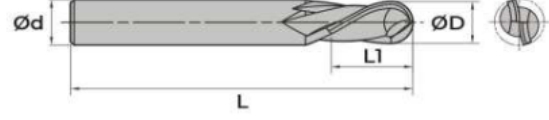
KARBÜR ALÜMİNYUM KÜRE FREZE BALL NOSE CARBIDE ALUMINIUM ENDMILL



Sipariş Kodu (Z:2) Order Code(Z:2)	ØD(mm)	L1(mm)	L(mm)	Ød(mm)
12Z2031205003	3	12	50	3
12Z2041405104	4	14	51	4
12Z2051605105	5	16	51	5
12Z2061905806	6	19	58	6
12Z2082006408	8	20	64	8
12Z2102107310	10	21	73	10
12Z2122508412	12	25	84	12
12Z2143208414	14	32	84	14
12Z2163209316	16	32	93	16
12Z2183509318	18	35	93	18
12Z2203810020	20	38	100	20

13

KARBÜR ALÜMİNYUM UZUN KÜRE FREZE BALL NOSE LONG CARBIDE ALUMINIUM ENDMILL



Sipariş Kodu (Z:2) Order Code(Z:2)	ØD(mm)	L1(mm)	L(mm)	Ød(mm)
13Z2032007503	3	20	75	3
13Z2042007504	4	20	75	4
13Z2052507505	5	25	75	5
13Z2063007506	6	30	75	6
13Z2083007508	8	30	75	8
13Z2032010003	3	20	100	3
13Z2042010004	4	20	100	4
13Z2052510005	5	25	100	5
13Z2063010006	6	30	100	6
13Z2083010008	8	30	100	8
13Z2104510010	10	45	100	10
13Z2124510012	12	45	100	12
13Z2144510014	14	45	100	14
13Z2164510016	16	45	100	16
13Z2184510018	18	45	100	18
13Z2204510020	20	45	100	20

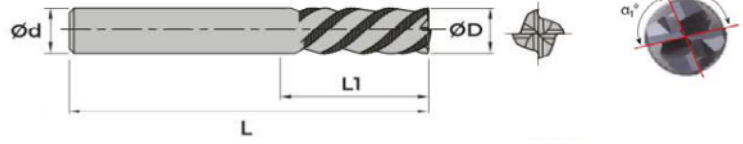
UYGULAMA ALANLARI

APPLICATIONS

			$ae = 1.0 \times \varnothing$ $ap(mm) = 0.5 \times \varnothing$		$ae = 0.5 \times \varnothing$ $ap(mm) = 1.0 \times \varnothing$		$ae = 0.1 \times \varnothing$ $ap(mm) = 1.5 \times \varnothing$	
ISO	Material	HB	fz (mm)	Vc m/min	fz (mm)	Vc m/min	fz (mm)	Vc m/min
N	Alüminyum Al >99% Aluminum Al >99%	30	F0,1	810	F0,2	880	F0,3	950
	Alüminyum: Dövülmüş veya Dövülmüş ve Soğuk Şekillendirilmiş, Yaşlandırılmayan / Aluminum Wrought or wrought and coldworked, non-aging	60	F0,1	810	F0,2	870	F0,3	940
	Alüminyum: Dövülmüş veya Dövülmüş ve Yaşlandırılmış Aluminum Wrought or wrought and aged	100	F0,1	730	F0,2	780	F0,3	850
	Alüminyum: Dökme, Yaşlandırılmayan Aluminum Cast, non-aging	75	F0,1	810	F0,2	870	F0,3	94
	Alüminyum: Dökme veya Dökülmüş ve Aluminum Cast or cast and aged	90	F0,1	730	F0,2	790	F0,3	850
	Alüminyum: Dökme, 13-15% Si Aluminum Cast, 13-15% Si	130	F0,1	325	F0,2	350	F0,3	380
	Alüminyum: Dökme, 16-22% Si Aluminum Cast, 16-22% Si	130	F0,1	245	F0,2	265	F0,3	285
	Bakır: Otomat Alaşımlar, > 1% Pb Copper Free cutting alloys, > 1% Pb	110	F0,1	405	F0,2	435	F0,3	470
	Bakır: Kurşunlu Bronzlar, < 1% Pb Copper Brass, leaded bronzes, < 1% Pb	90	F0,1	405	F0,2	435	F0,3	470
Bakır: Bronz ve Kurşunsuz Bakır, Elektrolitik Bakır Copper Bronze and non-leaded copper, electrolytic copper	100	F0,1	285	F0,2	305	F0,3	330	

14

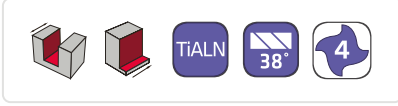
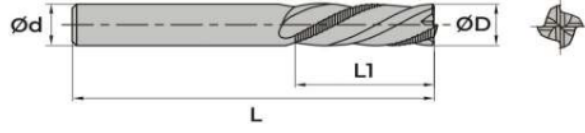
KARBÜR KABA TALAŞ FREZE CARBIDE ROUGHING ENDMILL



Sipariş Kodu (Z:4) Order Code(Z:4)	$\varnothing D$ (mm)	L_1 (mm)	L (mm)	$\varnothing d$ (mm)
14Z4061905706	6	19	57	6
14Z4082006308	8	20	63	8
14Z4102107210	10	21	72	10
14Z4122508312	12	25	83	12
14Z4143208314	14	32	83	14
14Z4163209216	16	32	92	16
14Z4183509218	18	35	92	18
14Z4209810020	20	38	100	20
14Z4223810022	22	38	100	22
14Z4243810024	24	38	100	24
14Z4253810025	25	38	100	25

15

KARBÜR UZUN KABA TALAŞ FREZE LONG CARBIDE ROUGHING ENDMILL

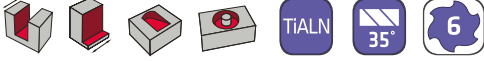
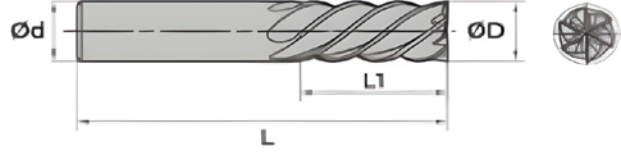


Sipariş Kodu (Z:4) Order Code(Z:4)	Ø D(mm)	L1(mm)	L(mm)	Ø d(mm)
15Z4063010006	6	30	100	6
15Z4083010008	8	30	100	8
15Z4104510010	10	45	100	10
15Z4124510012	12	45	100	12
15Z4144510014	14	45	100	14
15Z4164510016	16	45	100	16
15Z4184510018	18	45	100	18
15Z4204510020	20	45	100	20
15Z4086515008	8	65	150	8
15Z4106515010	10	65	150	10
15Z4126515012	12	65	150	12
15Z4146515014	14	65	150	14
15Z4167515016	16	75	150	16
15Z4187515018	18	75	150	18
15Z4207515020	20	75	150	20
15Z4227515022	22	75	150	22
15Z4247515024	24	75	150	24
15Z4257515025	25	75	150	25

16

KARBÜR FİNİŞ FREZE Z6

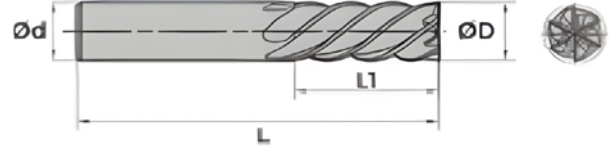
CARBIDE FINISHING ENDMILL Z6



Sipariş Kodu (Z:6) Order Code(Z:6)	ØD(mm)	L1(mm)	L(mm)	Ød(mm)
16Z6061905806	6	19	57	6
16Z6082006408	8	20	63	8
16Z6102107310	10	21	72	10
16Z6122508412	12	25	83	12
16Z6143208414	14	32	83	14
16Z6163209316	16	32	92	16
16Z6183509318	18	35	92	18
16Z6203810020	20	38	100	20
16Z6223810022	22	38	100	22
16Z6243810024	24	38	100	24
16Z6253810025	25	38	100	25

17

KARBÜR UZUN FİNİŞ FREZE Z6 LONG CARBIDE FINISHING ENDMILL Z6



Sipariş Kodu (Z:6) Order Code(Z:6)	Ø D(mm)	L1(mm)	L(mm)	Ø d(mm)
17Z6063010006	6	30	100	6
17Z6083010008	8	30	100	8
17Z6086515008	8	65	150	8
17Z6106515010	10	65	150	10
17Z6126515012	12	65	150	12
17Z6146515014	14	65	150	14
17Z6167515016	16	75	150	16
17Z6187515018	18	75	150	18
17Z6207515020	20	75	150	20
17Z6227515022	22	75	150	22
17Z6247515024	24	75	150	24
17Z6257515025	25	75	150	25

UYGULAMA ALANLARI

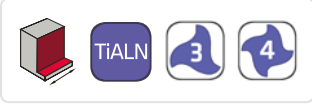
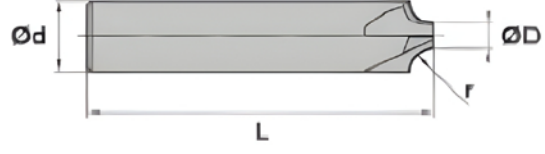
APPLICATIONS

			FİNİŞ İŞLEME / FINISHING		
			GRUPLAR / GROUPS		
ap(mm) = 2.0 - 4.0 x Ø					
ISO	Malzeme / Material	HB	ap (mm)	fz (mm)	Vc m/min
P	Alaşsız Çelik <i>Unalloyed steel</i>	190	0.10(0.05-0.2)	0.03	366
	Düşük Alaşımli Çelik <i>Low-alloyed steel</i>	240	0.10(0.05-0.2)	0.03	351
	Yüksek Alaşımli Çelik <i>High alloyed steel</i>	320	0.10(0.05-0.2)	0.03	205
	Ferritik/Martensitik Paslanmaz Çelik <i>Ferritic/martensitic stainless steel</i>	200	0.10(0.05-0.2)	0.03	176
M	Östenitik Paslanmaz Çelik <i>Austenitic stainless steel</i>	200	0.10(0.05-0.2)	0.03	220
	Dupleks (Östenitik/Ferritik) Paslanmaz Çelik <i>Duplex (austenitic/ferritic) stainless steel</i>	260	0.10(0.05-0.2)	0.03	190
	Dövülebilir Dökme Demir <i>Malleable cast iron</i>	200	0.10(0.05-0.2)	0.03	344
K	Gri Dökme Demir <i>Gray cast iron</i>	180	0.10(0.05-0.2)	0.03	351
	Sfero Dökme Demir <i>Nodular cast iron</i>	215	0.10(0.05-0.2)	0.03	359
	Alüminyum bazlı alaşımlar <i>Aluminium based alloys</i>	100	0.10(0.05-0.2)	0.03	1140
N	Alüminyum bazlı alaşımlar <i>Aluminium based alloys</i>	75	0.10(0.05-0.2)	0.03	492
	Alüminyum bazlı alaşımlar <i>Aluminium based alloys</i>	130	0.10(0.05-0.2)	0.03	234
	Bakır ve Bakır alaşımları <i>Copper and copper alloys</i>	90	0.10(0.05-0.2)	0.03	294
S	Nikel bazlı Süper alaşımlar <i>Nickel based superalloys</i>	350	0.10(0.05-0.2)	0.03	50
	Titanyum bazlı Süper alaşımlar <i>Titanium based alloys</i>	320	0.10(0.05-0.2)	0.03	105

18

KARBÜR İÇ BÜKEY FREZE

CARBIDE ROUNDING CONCAVE CUTTER

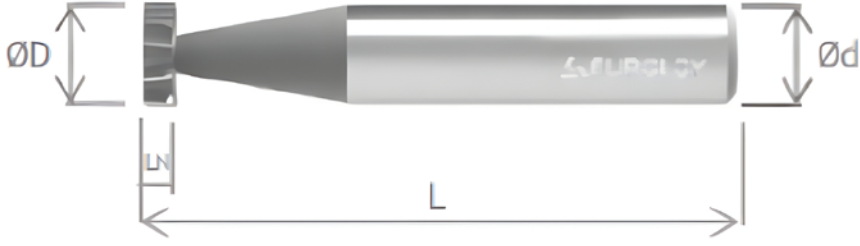


Sipariş Kodu (Z:4) Order Code(Z:4)	r(mm)	L(mm)	Ø d(mm)
22Z4061006308	1	63	8
22Z4061506709	1,5	67	9
22Z4062007210	2	72	10
22Z4062507511	2,5	75	11
22Z4063008312	3	83	12
22Z4063508313	3,5	83	13
22Z4064008314	4	83	14
22Z4064509215	4,5	92	15
22Z4065009216	5	92	16
22Z4066009218	6	92	18
22Z4068010022	8	100	22

19

KARBÜR T FREZE

CARBIDE T-SLOT ENDMILL



TiAlN

6

8

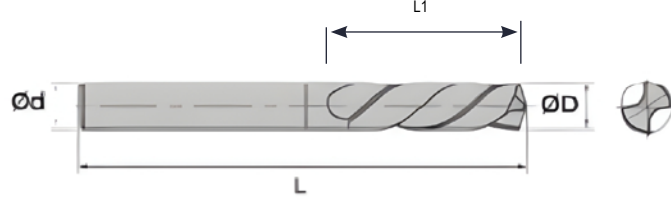
10

Sipariş Kodu Order Code	ØD (mm)	LN (mm)	L (mm)	d(mm)
23Z60605706LN#	6	1-1,5-2	57	6
23Z60806308LN#	8	1-1,5-2-2,5-3	63	8
23Z61007210LN#	10	2-2,5-3-4-5-6	72	10
23Z81208312LN#	12	2-2,5-3-4-5-6	83	12
23Z81408314LN#	14	2-2,5-3-4-5-6	83	14
23Z81609216LN#	16	2-2,5-3-4-5-6	92	16
23Z81809218LN#	18	2-2,5-3-4-5-6	92	18
23Z82010020LN#	20	2-2,5-3-4-5-6	100	20
23Z82210022LN#	22	2-2,5-3-4-5-6	100	22
23Z82410024LN#	24	2-2,5-3-4-5-6	100	24
23Z82510025LN#	25	2-2,5-3-4-5-6	100	25

20

3D KARBÜR MATKAP

3D CARBIDE DRILL



Sipariş Kodu Order Code	Ø D(mm)	L1 (mm)	L(mm)	Ø d(mm)
250303D04603	3,0	16	46	3
250313D05504	3,1	18	55	4
250323D05504	3,2	18	55	4
250333D05504	3,3	18	55	4
250343D05504	3,4	18	55	4
250353D05504	3,5	20	55	4
250363D05504	3,6	20	55	4
250373D05504	3,7	20	55	4
250383D05504	3,8	20	55	4
250393D05504	3,9	20	55	4
250403D06205	4,0	22	62	5
250413D06205	4,1	22	62	5
250423D06205	4,2	22	62	5
250433D06205	4,3	22	62	5
250443D06205	4,4	22	62	5
250453D06205	4,5	24	62	5
250463D06205	4,6	24	62	5
250473D06205	4,7	24	62	5
250483D06205	4,8	24	62	5
250493D06205	4,9	24	62	5
250503D06205	5,0	26	62	5
250513D06606	5,1	26	66	6
250523D06606	5,2	26	66	6
250533D06606	5,3	26	66	6
250543D06606	5,4	26	66	6
250553D06606	5,5	28	66	6

20

3D KARBÜR MATKAP

3D CARBIDE DRILL

Sipariş Kodu <i>Order Code</i>	ØD(mm)	L1 (mm)	L(mm)	Ød(mm)
250563D06606	5,6	28	66	6
250573D06606	5,7	28	66	6
250583D06606	5,8	28	66	6
250593D06606	5,9	28	66	6
250603D06606	6,0	28	66	6
250613D07407	6,1	31	74	7
250623D07407	6,2	31	74	7
250633D07407	6,3	31	74	7
250643D07407	6,4	31	74	7
250653D07407	6,5	31	74	7
250663D07407	6,6	31	74	7
250673D07407	6,7	31	74	7
250683D07407	6,8	31	74	7
250693D07408	6,9	34	74	8
250703D07408	7,0	34	74	8
250713D07908	7,1	34	79	8
250723D07908	7,2	34	79	8
250733D07908	7,3	34	79	8
250743D07908	7,4	34	79	8
250753D07908	7,5	34	79	8
250763D07908	7,6	37	79	8
250773D07908	7,7	37	79	8
250783D07908	7,8	37	79	8
250793D07908	7,9	37	79	8
250803D07908	8,0	37	79	8
250813D08409	8,1	37	84	9
250823D08409	8,2	37	84	9
250833D08409	8,3	37	84	9
250843D08409	8,4	37	84	9
250853D08409	8,5	37	84	9
250863D08409	8,6	40	84	9
250873D08409	8,7	40	84	9
250883D08409	8,8	40	84	9
250893D08409	8,9	40	84	9
250903D08410	9,0	40	84	10
250913D08910	9,1	40	89	10

20

3D KARBÜR MATKAP

3D CARBIDE DRILL

Sipariş Kodu <i>Order Code</i>	ØD(mm)	L1 (mm)	L(mm)	Ød(mm)
250923D08910	9,2	40	89	10
250933D08910	9,3	40	89	10
250943D08910	9,4	40	89	10
250953D08910	9,5	40	89	10
250963D08910	9,6	43	89	10
250973D08910	9,7	43	89	10
250983D08910	9,8	43	89	10
250993D08910	9,9	43	89	10
251003D08910	10	43	89	10
251053D09511	10,5	43	95	11
251103D09511	11	47	95	11
251153D10212	11,5	47	102	12
251203D10212	12	51	102	12
251253D10213	12,5	51	102	13
251303D10213	13	51	102	13
251353D10714	13,5	51	107	14
251403D10714	14	54	107	14
251453D11115	14,5	54	111	15
251503D11115	15	56	111	15
251553D11516	15,5	56	115	16
251603D11516	16	58	115	16
251653D11517	16,5	58	115	17
251703D11517	17	58	115	17
251753D11518	17,5	62	115	18
251803D12318	18	62	123	18
251853D12319	18,5	62	123	19
251903D12319	19	62	123	19
251953D13120	19,5	66	131	20
252003D13120	20	66	131	20

20

3D KARBÜR MATKAP

3D CARBIDE DRILL

Kesme Parametreleri Vc(m/dak) Cutting Parameters Vc(m/min)		
P	Alaşımsız Çelik / <i>Non-Alloy Steel</i>	80-105 ●
	Çelik / <i>Steel</i>	80-100 ●
	Temperlenmiş Çelik / <i>Tempered Steel</i>	80-100 ●
	Soguk İş Takım Çeliği / <i>Cold-Work Tool Steel</i>	60-80 ○
	Sıcak İş Takım Çeliği / <i>Hot-Work Tool Steel</i>	60-80 ○
M	AISI 304 - 416 - 420	30-40 ○
	AISI 316 - 440	30-40 ○
	17-4 PH 15-5 PH	25-30 ○
	Krom-Kobalt Alaşımı / <i>Chrome-Cobalt Alloy</i>	25-30 ○
	Dupleks F51 / <i>Duplex F51</i>	15-25 ○
	Süper Dupleks F55 / <i>Super Duplex F55</i>	15-25 ○
	Gri Dökme Demir / <i>Grey Cast Iron</i>	140-170 ●
K	Alaşımlı Dökme Demir / <i>Alloy Cast Iron</i>	100-130 ●
	Hassas Döküm / <i>Precision Cast</i>	80-110 ●
S	Titanyum / <i>Titanium</i>	30-40 ○
	Titanyum Alaşımları / <i>Titanium Alloys</i>	25-30 ○
H	≤54 HRc	60-80 ○
	> 54 HRc	40-55 ○

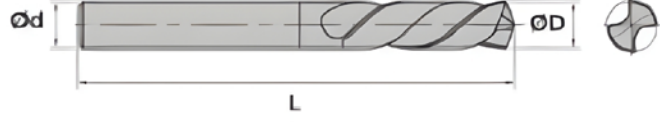
Devir Başına İlerleme (mm/dev) Feed Per Revolution (mm/rev)	
Ø	
3	0,025
4	0,03
5	0,042
6	0,052
7	0,082
8	0,12
9	0,140
10	0,16
12	0,190
14	0,22
16	0,240
18	0,26
20	0,290

- Önerilir / *Recommended*
- İkincil Seçenek / *Secondary Option*

21

5D KARBÜR MATKAP

5D CARBIDE DRILL



Sipariş Kodu Order Code	Ø D(mm)	L1 (mm)	L(mm)	Ø d(mm)
260305D06606	3,0	23	66	6
260315D06606	3,1	23	66	6
260325D06606	3,2	23	66	6
260335D06606	3,3	23	66	6
260345D06606	3,4	23	66	6
260355D06606	3,5	23	66	6
260365D06606	3,6	23	66	6
260375D06606	3,7	23	66	6
260385D07706	3,8	29	77	6
260395D07706	3,9	29	77	6
260405D07706	4,0	29	77	6
260415D07706	4,1	29	77	6
260425D07706	4,2	29	77	6
260435D07706	4,3	29	77	6
260445D07706	4,4	29	77	6
260455D07706	4,5	29	77	6
260465D07706	4,6	29	77	6
260475D08206	4,7	29	82	6
260475D08206	4,8	35	82	6
260495D08206	4,9	35	82	6
260505D08206	5,0	35	82	6
260515D08206	5,1	35	82	6
260525D08206	5,2	35	82	6
260535D08206	5,3	35	82	6
260545D08206	5,4	35	82	6
260555D08206	5,5	35	82	6

21

5D KARBÜR MATKAP

5D CARBIDE DRILL

Sipariş Kodu <i>Order Code</i>	ØD(mm)	L1 (mm)	L(mm)	Ød(mm)
260565D08206	5,6	35	82	6
260575D08206	5,7	35	82	6
260585D08206	5,8	35	82	6
260595D08206	5,9	35	82	6
260605D08206	6,0	35	82	6
260615D09108	6,1	43	91	8
260625D09108	6,2	43	91	8
260635D09108	6,3	43	91	8
260645D09108	6,4	43	91	8
260655D09108	6,5	43	91	8
260665D09108	6,6	43	91	8
260675D09108	6,7	43	91	8
260685D09108	6,8	43	91	8
260695D09108	6,9	43	91	8
260705D09108	7,0	43	91	8
260715D09108	7,1	43	91	8
260725D09108	7,2	43	91	8
260735D09108	7,3	43	91	8
260745D09108	7,4	43	91	8
260755D09108	7,5	43	91	8
260765D09108	7,6	43	91	8
260775D09108	7,7	43	91	8
260785D09108	7,8	43	91	8
260795D09108	7,9	43	91	8
260805D09108	8,0	43	91	8
260815D10310	8,1	49	103	10
260825D10310	8,2	49	103	10
260835D10310	8,3	49	103	10
260845D10310	8,4	49	103	10
260855D10310	8,5	49	103	10
260865D10310	8,6	49	103	10
260875D10310	8,7	49	103	10
260885D10310	8,8	49	103	10
260895D10310	8,9	49	103	10
260905D10310	9,0	49	103	10
260915D10310	9,1	49	103	10

21

5D KARBÜR MATKAP

5D CARBIDE DRILL

Sipariş Kodu <i>Order Code</i>	ØD(mm)	L1 (mm)	L(mm)	Ød(mm)
260925D10310	9,2	49	103	10
260935D10310	9,3	49	103	10
260945D10310	9,4	49	103	10
260955D10310	9,5	49	103	10
260965D10310	9,6	49	103	10
260975D10310	9,7	49	103	10
260985D10310	9,8	49	103	10
260995D10310	9,9	49	103	10
261005D10310	10	49	103	10
261055D11812	10,5	56	118	12
261105D11812	11,0	56	118	12
261155D11812	11,5	56	118	12
261205D11812	12,0	56	118	12
261265D12414	12,5	60	124	14
261305D12414	13,0	60	124	14
261355D12414	13,5	60	124	14
261405D12414	14,0	60	124	14
261455D13316	14,5	63	133	16
261505D13316	15,0	63	133	16
261555D13316	15,5	63	133	16
261605D13316	16,0	63	133	16
261655D14318	16,5	71	143	18
261705D14318	17,0	71	143	18
261755D14318	17,5	71	143	18
261805D14318	18,0	71	143	20
261855D15320	18,5	77	153	20
261905D15320	19,0	77	153	20
261955D15320	19,5	77	153	20
262005D15320	20,0	77	153	20

21

5D KARBÜR MATKAP

5D CARBIDE DRILL

Kesme Parametreleri Vc(m/dak) Cutting Parameters Vc(m/min)		
P	Alaşımsız Çelik / <i>Non-Alloy Steel</i>	110-125 ●
	Çelik / <i>Steel</i>	100-120 ●
	Temperlenmiş Çelik / <i>Tempered Steel</i>	100-120 ●
	Soğuk İş Takım Çeliği / <i>Cold-Work Tool Steel</i>	70-90 ○
	Sıcak İş Takım Çeliği / <i>Hot-Work Tool Steel</i>	70-90 ○
M	AISI 304 - 416 - 420	55-65 ○
	AISI 316 - 440	55-65 ○
	17-4 PH 15-5 PH	50-55 ○
	Krom-Kobalt Alaşımı / <i>Chrome-Cobalt Alloy</i>	50-55 ○
	Dupleks F51 / <i>Duplex F51</i>	40-50 ○
	Süper Dupleks F55 / <i>Super Duplex F55</i>	40-50 ○
	Gri Dökme Demir / <i>Grey Cast Iron</i>	170-200 ●
K	Alaşımlı Dökme Demir / <i>Alloy Cast Iron</i>	130-150 ●
	Hassas Döküm / <i>Precision Cast</i>	110-130 ●
S	Titanyum / <i>Titanium</i>	55-65 ○
	Titanyum Alaşımları / <i>Titanium Alloys</i>	55-65 ○
H	≤54 HRc	60-80 ○
	> 54 HRc	40-55 ○

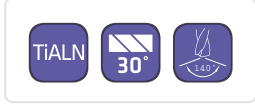
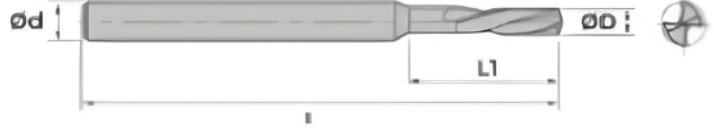
Devir Başına İlerleme (mm/dev) Feed Per Revolution (mm/rev)	
Ø	
3	0,03
4	0,045
5	0,85
6	0,17
7	0,19
8	0,21
9	0,23
10	0,25
12	0,27
14	0,29
16	0,31
18	0,33
20	0,35

● Önerilir / *Recommended* ○ İkincil Seçenek / *Secondary Option*

22

KARBÜR MİKRO MATKAP

CARBIDE MICRO DRILL

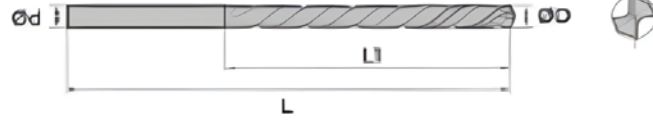


Sipariş Kodu Order Code	ØD(mm)	L1 (mm)	L(mm)	Ød(mm)
2701000805003	1	8	50	3
2701100805003	1,1	8	50	3
2701200805003	1,2	8	50	3
2701300805003	1,3	8	50	3
2701401005003	1,4	10	50	3
2701500805003	1,5	10	50	3
2701600805003	1,6	10	50	3
2701700805003	1,7	10	50	3
2701800805003	1,8	12	50	3
2701900805003	1,9	12	50	3
2702000805003	2	12	50	3
2702101205003	2,1	12	50	3
2702201205003	2,2	12	50	3
2702301405003	2,3	14	50	3
2702401405003	2,4	14	50	3
2702501405003	2,5	14	50	3
2702601405003	2,6	14	50	3
2702701405003	2,7	14	50	3
2702801405003	2,8	14	50	3
2702901405003	2,9	14	50	3

23

KARBÜR EKSTRA UZUN MATKAP

EXTRA LONG CARBIDE DRILL



Sipariş Kodu Order Code	ØD(mm)	L1 (mm)	L (mm)	Ød(mm)
2803003306104	3	33	61	4
2803103307504	3,1	33	75	4
2803203307504	3,2	33	75	4
2803303307504	3,3	33	75	4
2803403307504	3,4	33	75	4
2803503907504	3,5	39	75	4
2803603907504	3,6	39	75	4
2803703907504	3,7	39	75	4
2803803907504	3,8	39	75	4
2803903907504	3,9	39	75	4
2804004307504	4	43	75	4
2804104308605	4,1	43	86	5
2804204308605	4,2	43	86	5
2804304308605	4,3	43	86	5
2804404308605	4,4	43	86	5
2804504708605	4,5	47	86	5
2804604708605	4,6	47	86	5
2804704708605	4,7	47	86	5
2804804708605	4,8	47	86	5
2804904708605	4,9	47	86	5
2805005208605	5	52	86	5
2805105209306	5,1	52	93	6
2805205209306	5,2	52	93	6
2805305209306	5,3	52	93	6
2805405209306	5,4	52	93	6
2805505709306	5,5	57	93	6

23

KARBÜR EKSTRA UZUN MATKAP

EXTRA LONG CARBIDE DRILL

Sipariş Kodu Order Code	ØD(mm)	L1 (mm)	L (mm)	Ød(mm)
2805605709306	5,6	57	93	6
2805705709306	5,7	57	93	6
2805805709306	5,8	57	93	6
2805905709306	5,9	57	93	6
2806005709306	6	57	93	6
2806105710907	6,1	57	109	7
2806205710907	6,2	57	109	7
2806305710907	6,3	57	109	7
2806405710907	6,4	57	109	7
2806506310907	6,5	63	109	7
2806606310907	6,6	63	109	7
2806706310907	6,7	63	109	7
2806806310907	6,8	63	109	7
2806906310907	6,9	63	109	7
2807006310907	7	63	109	7
2807106911708	7,1	69	117	8
2807206911708	7,2	69	117	8
2807306911708	7,3	69	117	8
2807406911708	7,4	69	117	8
2807506911708	7,5	69	117	8
2807606911708	7,6	69	117	8
2807706911708	7,7	69	117	8
2807806911708	7,8	69	117	8
2807906911708	7,9	69	117	8
2808007511708	8	75	117	8
2808107512509	8,1	75	125	9
2808207512509	8,2	75	125	9
2808307512509	8,3	75	125	9
2808407512509	8,4	75	125	9
2808507512509	8,5	75	125	9
2808607512509	8,6	75	125	9
2808707512509	8,7	75	125	9
2808807512509	8,8	75	125	9
2808907512509	8,9	75	125	9
2809008112509	9	81	125	9

23

KARBÜR EKSTRA UZUN MATKAP

EXTRA LONG CARBIDE DRILL

Sipariş Kodu <i>Order Code</i>	ØD(mm)	L1 (mm)	L (mm)	Ød(mm)
2809108113310	9,1	81	133	10
2809208113310	9,2	81	133	10
2809308113310	9,3	81	133	10
2809408113310	9,4	81	133	10
2809508113310	9,5	81	133	10
2809608113310	9,6	81	133	10
2809708113310	9,7	81	133	10
2809808113310	9,8	81	133	10
2809908113310	9,9	81	133	10
2810008713310	10	87	133	10
2810508714211	10,5	87	142	11
2811008414211	11	94	142	11
2811509415112	11,5	94	151	12
2812010115112	12	101	151	12
2812510115113	12,5	101	151	13
2813010115113	13	101	151	13
2813510115114	13,5	101	151	14
2814010115114	14	101	151	14

23

KARBÜR EKSTRA UZUN MATKAP EXTRA LONG CARBIDE DRILL

Kesme Parametreleri Vc(m/dak) Cutting Parameters Vc(m/min)		
P	Alaşımsız Çelik / <i>Non-Alloy Steel</i>	80-105 ●
	Çelik / <i>Steel</i>	70-100 ●
	Temperlenmiş Çelik / <i>Tempered Steel</i>	70-95 ●
	Soğuk İş Takım Çeliği / <i>Cold-Work Tool Steel</i>	50-80 ●
	Sıcak İş Takım Çeliği / <i>Hot-Work Tool Steel</i>	50-80 ●
M	AISI 304 - 416 - 420	50-55 ○
	AISI 316 - 440	50-55 ○
	17-4 PH 15-5 PH	40-50 ○
	Krom-Kobalt Alaşımı / <i>Chrome-Cobalt Alloy</i>	40-50 ○
	Dupleks F51 / <i>Duplex F51</i>	30-40 ○
	Süper Dupleks F55 / <i>Super Duplex F55</i>	30-40 ○
	Gri Dökme Demir / <i>Grey Cast Iron</i>	140-170 ●
K	Alaşımlı Dökme Demir / <i>Alloy Cast Iron</i>	110-140 ●
	Hassas Döküm / <i>Precision Cast</i>	80-110 ●
S	Titanyum / <i>Titanium</i>	50-70 ○
	Titanyum Alaşımları / <i>Titanium Alloys</i>	40-60 ○
H	≤54 HRc	60-80 ○
	> 54 HRc	40-55 ○

Devir Başına İlerleme (mm/dev) Feed Per Revolution (mm/rev)	
Ø	
3	0,112
4	0,119
5	0,126
6	0,140
7	0,154
8	0,168
9	0,189
10	0,210
12	0,231
14	0,252
16	0,273
18	0,294
20	0,315

- Önerilir / *Recommended*
- İkincil Seçenek / *Secondary Option*

Engineered for Excellence.

#EuroloyExcellence



Italy Office



Via Leonardo Da Vinci, 4 – 20054
Milano MI ITALIA



(+39) 0282398309



info@euroloy.com

Turkey Office



Üsküdar Cad. YEDPA No:1
Ataşehir -İstanbul -TÜRKİYE



(+90) 850 933 3408



euroloytr@euroloy.com



euroloytools



Euroloy Cutting Tools