

Jöyer 

High Performance Tools



Değiştirilebilir Uç Matkap ;

Yaprak Matkap

Hızlı Matkap(Speed Drill)

2023 Katolog



İçindekiler

Yaprak Matkap 3-71

Hızlı Matkap 73-92

Giriş

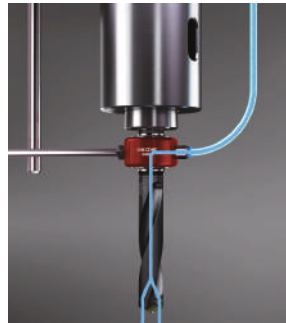
Yaprak matkabı, JOYER tarafından üretilen değiştirilebilir uçlu bir matkap ucu sistemidir. Yaprak matkabı geleneksel takım tezgahlarında ve CNC takım tezgahlarında kullanılabilir, doğrudan takım değiştirme, yeniden taşlamaya gerek yok, daha yüksek delme hızı ve diğer özellikler büyük ölçüde delme verimliliğini artırır. Özellikle büküm matkabı ile karşılaştırıldığında, verimlilik büyük ölçüde geliştirilmiş ve geleneksel takım tezgahları ve CNC makineleri için en iyi seçim haline gelmiştir delik işleminin kalitesini ve verimliliğini artırmak için araçlar. Yaprak matkabı, takım tutucu ve kesici uçtan ve soğutmayı gerçekleştirmek için bir dizi yağ halkasından oluşur dış soğutmadan iç soğutmaya kadar geleneksel takım tezgahının sistemi. Takım tutucu şunlardan yapılmıştır ısıl işlem ve hassas işleme sonrası yüksek mukavemetli ısıya dayanıklı alaşımlı çelik. Ekleme toz metalurjisi yüksek hız çeliği ve çimentolu karbürden yapılmıştır. Uç çapı aralığı: 09,5 mm ila 114 mm, sırasıyla çelik, paslanmaz çelikten delme yapabilir, alaşımlı çelik, dökme demir, çelik, alüminyum alaşımlı malzemeler vb.

Avantajlar

- © Yüksek aşınmaya dayanıklı malzeme, üst düzey kaplama ve hassas taşlama teknolojisi, % 50 ~ % 200% geleneksel büküm matkabından daha verimli.
- © Basit ve kullanışlı değiştirilebilir uç yapısı, uçların değiştirilmesini sağlayabilir doğrudan takım tezgahı.
- © Toz yüksek hız çeliği ve çimentolu karbür ile iki malzeme daha yaygın olarak kullanılmaktadır.
- © Mors konik ve Yanal sabitleme tipi şaftlı, hem geleneksel makine için kullanılabilir aletler ve CNC takım tezgahları.
- © Sadece 16 tutucu, 09,5-0114 mm kesici uçları kaplayabilir.
- © Tutucu iç soğutma tasarımı, mükemmel talaş kaldırma performansına ve soğutma etkisine sahiptir.

Yaprak matkap seçimi

Yaprak matkabı bir takım tutucu ve kesici uçtan oluşur. Takım tutucunun merkezi tasarlanmıştır dahili soğutma ile. Bir tür tutucu, farklı uçlara uyarlanabilir satın alma maliyetini azaltmak için teknik özellikler. Ekler iki seri ithal toza sahiptir yüksek hızlı çelik ve ithal karbür. Lütfen çalışmanıza göre doğru türü seçin koşul.



Geleneksel takım tezgahları için lütfen toz yüksek hız çeliği serisini seçin.



CNC makineleri için lütfen toz yüksek hızı seçin orta ve düşük hızlı delme için çelik serisi ve yüksek hızlı delme için karbür serisi.

İŞLEME DAVASI 1

Çalışma malzemesi: ZG20Mn

Ekipman: Soğutucu: Radyal sondaj makinesi Emülsifiye sıvı (Sbar)

Delik çapı: 42.0mm

Delik derinliği: 280mm (delikten)

Parametre: $V_c = 33 \text{ m/dak}$ $f_n = 0.25 \text{ mm/r}$



İşleme verimliliği: Büküm matkabı saatte 8 delik açabilir, maça matkabı 12 delik açabilir saatte sondaj verimliliği % 50 arttı.

İŞLEME DAVASI 2

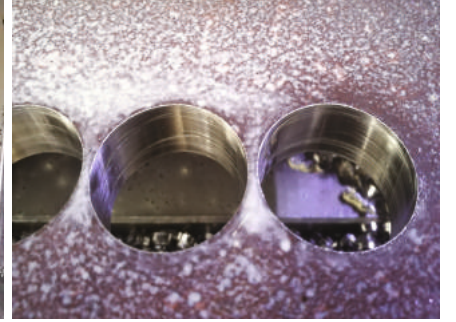
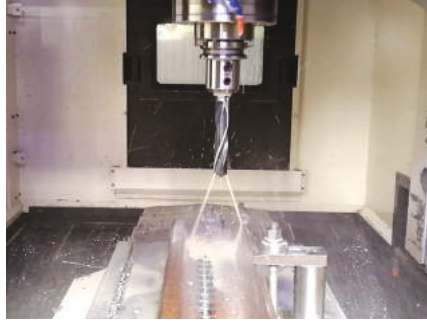
Çalışma malzemesi: PD3 (HRC32)

Ekipman: VMCSoğutucu: Emülsifiye sıvı (Sbar)

Delik çapı: 31.0mm

Delik derinliği: 17mm (delikten)

Parametre: $V_c = 40 \text{ m/dak}$ $f_n = 0.20 \text{ mm/r}$



Ömür boyu: büküm matkabı sadece bir deliği bitirebilir, ancak maça matkabı 80 delik açabilir sürekli olarak.

İŞLEME DAVASI 3

Çalışma malzemesi: Q235

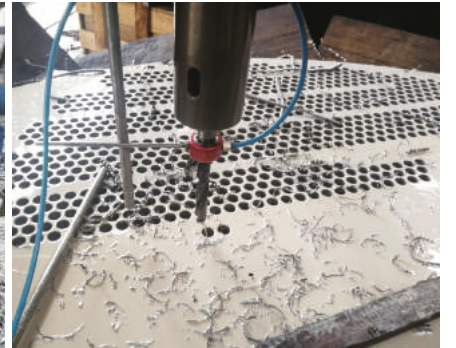
Ekipman: Soğutucu: Radyal sondaj makinesi

Emülsifiye sıvı 1bar (Yüksek basınçlı olmayan su pompası)

Delik çapı: 26.0mm Delik

derinliği: 14mm * 4 (yığın halka kesici)

Parametre: $V_c = 40.8 \text{ m / dak}$ $f_n = 0.20 \text{ mm / r}$



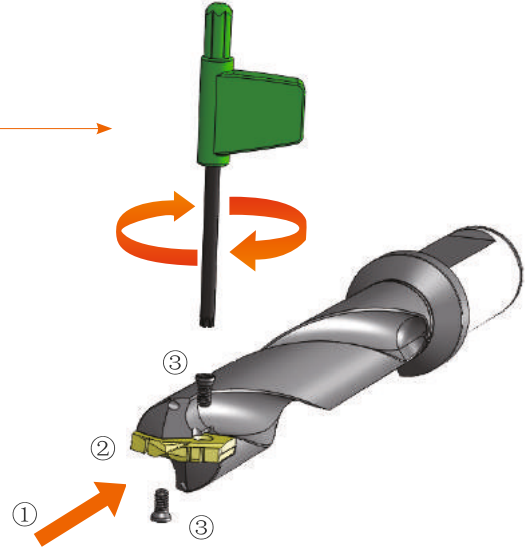
İşleme hassasiyeti: büküm matkap işleme delik toleransı:

H11-H10, maça matkap işleme deliktolerans: H9-H10.

Kurulum şeması

1. Kurulum prosedürü

Çap Aralığı	Sıkma Torku (Nm)	İngiliz anahtarı
9.5-12.5	0.5	T7
13.0-17.5	1.0	T8
18.0-24.5	1.8	T9
25.0-35.5	3.5	T15
36.0-65.0	5.0	T20
66.0-114.0	7.0	T25



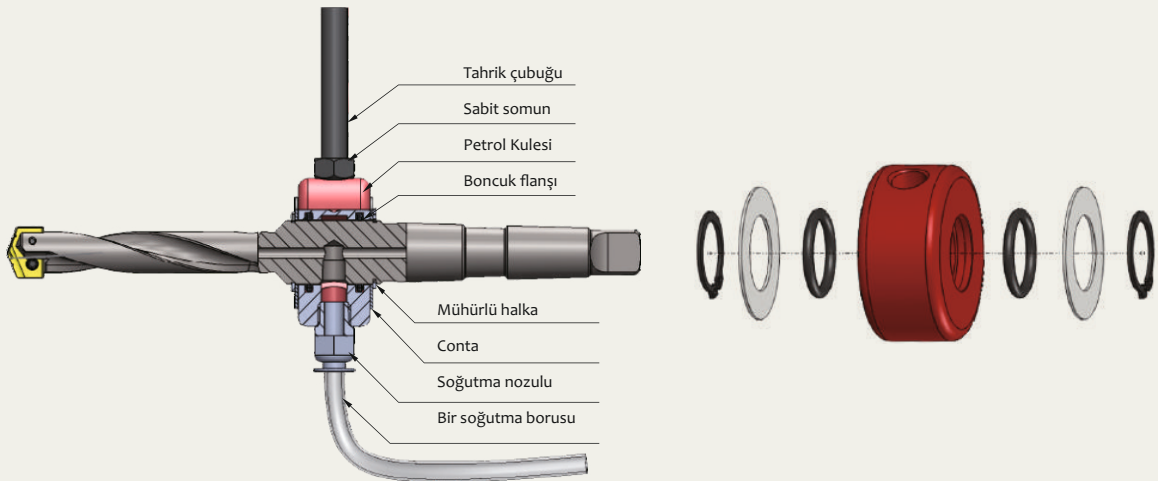
Kurulum prosedürü

Önce kesici ucu ve montaj oluğunu basınçlı hava ile temizleyin.

Eki tutucudaki montaj oluğuna yerleştirin ve eki hafifçe itin.

Eki sabitleme ile sabitleyin bolt.it kullanıcıların bir tork anahtarı kullanmaları önerilir olası ve sıkma torkları şekilde gösterilmiştir.

2. Yağ halkası düzeneğinin şematik diyagramı



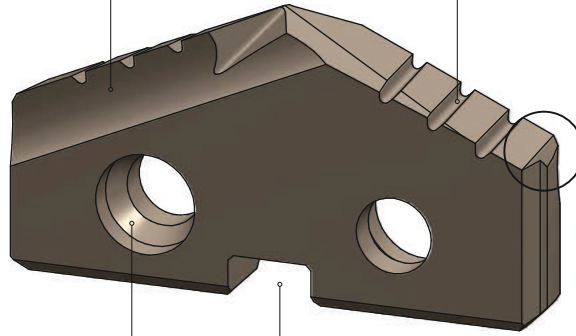
Ürün Yapısı

Talaş Kırıcı

- Kırık cips, cips kaldırmak kolay

Vida deliklerini sabitleyin

- Güvenli ve güvenilir sıkma, Delme sırasında stabiliteyi sağlar



Talaş bölme oluğu

- Kesme genişliğini azaltın
- Daha iyi talaş kaldırma
- Delme torkunu azaltın

Eğme

- Kesici ucun gücünü artırın
- Dış çapın aşınmasını ve yıpranmasını azaltın İş parçasının yüzeyindeki pürüzsüzlüğü artırın

Konum korusu

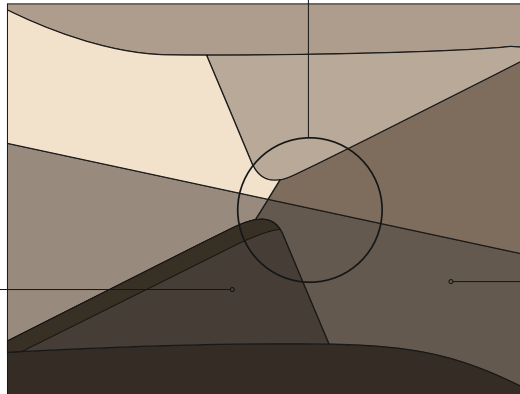
- Doğruluğunu sağlamak radyal yön

Karot delme

- Normal sondaj ürünlerine kıyasla % 20 aksenal direnci azaltan daha ince karot delme.
- Daha iyi kendinden merkezleme

XR keski kenar hatırlatan

- Kesme kenarlarının gücünü artırın
- Kararlılığı artırın



İki arka kanat yüzeyi

- İş parçası ile sürtünmeyi azaltın
- Daha iyi kendinden merkezleme
- Aksenal direnci azaltın

Yaprak matkap ucu

Model kodlama kuralı

C L — 0 — M 0130 — 15 X H

Büyük tip	Küçük tip	Küçük tip			Metrik ve Whitworth	Uç çapı	Malzeme	Geometri	Kaplama
		Bağlayıcı	Metrik	Whitworth					
S-Yaprak matkabı	P-ekle	Y	9.50~11.49	0.374"~0.452"	Metrik I- Whitworth	M0130-13mm	10-Toz yüksekliği hız çeliği	X Standardı delme noktası	H-C500
		Z	11.50~12.97	0.453"~0.511"		I0750-0.75"	15-Toz kobalt yüksek hız çeliği	V-Çift delme noktası	A-C300
		0	12.98~17.85	0.511"~0.703"			25-Toz kobalt bakımından zengin yüksek hız çeliği		
		1	17.86~24.60	0.703"~0.969"			SO-Karbür		
		2	24.61~35.5	0.969"~1.398"					
		3	35.51~47.99	1.398"~1.889"					
		4	48.00~65.00	1.89"~2.559"					
		5	63.50~76.99	2.5"~3.031"					
		6	77.00~89.09	3.031"~3.507"					
		7	89.10~101.6	3.508"~4"					
		8	101.61~114.30	4"~4.5"					

Yaprak matkap ucu

Model kodlama kuralı

D F T — 00 — M K 020 — 40 N

Büyük tip	Küçük tip	Oluklar Şekil	Bağlayıcı kodu			Metrik Ve Whitworth	Şaft tipi	Tutucu çap	Length	Coat
			Bağlayıcı	Metrik	Whitworth					
Yaprak matkabı	tutucu	Helisel flüt	Y0	9.50~11.49	0.374"~0.452"	Metrik I- Whitworth	L-yanalsabitleme tipi sap M-Mors konik sap	016-16mm	10 -ultra kısa dizi	Oksidasyon tedavisi
		Düz flüt	Z0	11.50~12.97	0.453"~0.511"			020-20mm	20-Kısa seri	
			00	12.98~15.49	0.511"~0.61"			032-32mm	30-ara seri	
			05	15.50~17.85	0.61"~0.703"			040-40mm	40-Standart seri	
			10	17.86~21.99	0.703"~0.866"			075-3/4"	50 -Uzat	
			15	22.00~24.60	0.866"~0.969"			063-5/8"	Uzunluk serisi	
			20	24.61~29.99	0.969"~1.181"			125-1-1/4"	60-uzatma serisi	
			25	30.00~35.50	1.181"~1.398"			150-1-1/2"	70-Ekstra	
			30	35.51~41.99	1.398"~1.653"			MT2-#2	uzunluk serisi	
			35	42.00~47.99	1.654"~1.889"			MT3-#3	90-Aşırı uzunluk serisi	
			40	48.00~55.99	1.89"~2.204"			MT4-#4		
			45	56.00~63.49	2.205"~2.5"			MT5-#5		
			50	63.50~76.99	2.5"~3.031"					
			55	77.00~89.09	3.031"~3.507"					
			70	89.10~101.60	3.508"~4"					
			80	101.61~114.30	4"~4.5"					

HSS-PM uç serisi

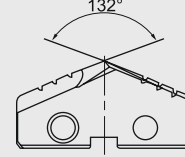
HSS
PM

HPC

HPM10 — Toz yüksek hız çeliği, sertliği hb275'e kadar olan karbon çeliğini işlemek için uygulayın;

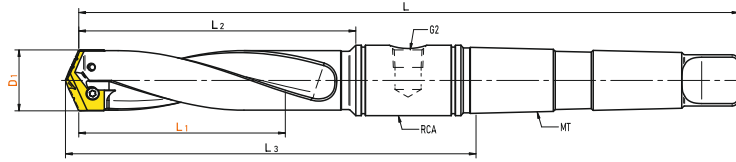
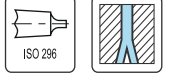
HPM15 — Toz kobalt yüksek hız çeliği, karbon çeliği, paslanmaz çelik, dökme demir ve sertliği hb350'ye kadar olan diğer malzemeleri işlemek için geçerlidir;

HPM25 — Toz kobalt bakımından zengin yüksek hız çeliği, alaşımlı çelik, paslanmaz çelik, dökme demir ve sertliği hb400'e kadar olan diğer malzemeleri işlemek için geçerlidir.



Bağlayıcı	Kalinlık mm/inç	Çap			Malzeme (Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	HPM10	HPM15	HPM25
Y	2.38 3/32"	9.50		0.374			CL-Y-G0001-10AR
		9.53	3/8"	0.375			CL-Y-G0002-10AR
		9.80		0.386			CL-Y-G0003-10AR
		10.00		0.394			CL-Y-G0004-10AR
		10.20		0.402			CL-Y-G0005-10AR
		10.50		0.413			CL-Y-G0006-10AR
		10.72	27/64"	0.422			CL-Y-G0007-10AR
		10.80		0.425			CL-Y-G0008-10AR
		11.00		0.433			CL-Y-G0009-10AR
		11.11	7/16"	0.437			CL-Y-G0010-10AR
Z	2.38 3/32"	11.50		0.453			CL-Z-G0011-10AR
		11.51	29/64"	0.453			CL-Z-G0012-10AR
		12.00		0.472			CL-Z-G0013-10AR
		12.30	31/64"	0.484			CL-Z-G0014-10AR
		12.50		0.492			CL-Z-G0015-10AR
		12.70	1/2"	0.500			CL-Z-G0016-10AR
0	3.18 1/8"	13.00		0.512	CL-0-G0043-10AR	CL-0-G0030-10AR	CL-0-G0017-10AR
		13.50		0.531	CL-0-G0044-10AR	CL-0-G0031-10AR	CL-0-G0018-10AR
		14.00		0.551	CL-0-G0045-10AR	CL-0-G0032-10AR	CL-0-G0019-10AR
		14.29	9/16"	0.563	CL-0-G0046-10AR	CL-0-G0033-10AR	CL-0-G0020-10AR
		14.50		0.571	CL-0-G0047-10AR	CL-0-G0034-10AR	CL-0-G0021-10AR
		15.00		0.591	CL-0-G0048-10AR	CL-0-G0035-10AR	CL-0-G0022-10AR
0	3.18 1/8"	15.50		0.610	CL-0-G0049-10AR	CL-0-G0036-10AR	CL-0-G0023-10AR
		15.88	5/8"	0.625	CL-0-G0050-10AR	CL-0-G0037-10AR	CL-0-G0024-10AR
		16.00		0.630	CL-0-G0051-10AR	CL-0-G0038-10AR	CL-0-G0025-10AR
		16.50		0.650	CL-0-G0052-10AR	CL-0-G0039-10AR	CL-0-G0026-10AR
		17.00		0.669	CL-0-G0053-10AR	CL-0-G0040-10AR	CL-0-G0027-10AR
		17.46	11/16"	0.687	CL-0-G0054-10AR	CL-0-G0041-10AR	CL-0-G0028-10AR
		17.50		0.689	CL-0-G0055-10AR	CL-0-G0042-10AR	CL-0-G0029-10AR

Konik şaft ve Helisel flüt tutucu



Tip (Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	MT	G2	RCA		
DFT-Y0-HHHY5-20N DFT-Y0-HHHY5-40N DFT-Y0-HHHY5-50N	Y0	9.50 ~ 11.49 0.374" ~ 0.452"	32 60 111	52 80 131	88 117 167	160 189 240	MT2	1/16"	SH-1905R	2102047	2502018
DFT-Z0-HHHY5-20N DFT-Z0-HHHY5-40N DFT-Z0-HHHY5-50N	Z0	11.50 ~ 12.97 0.453" ~ 0.511"	32 60 111	52 80 131	88 117 167	160 189 240	MT2	1/16"	SH-1905R	2102048	2502018
DFT-00-HHHY5-20N DFT-00-HHHY5-40N DFT-00-HHHY5-50N DFT-00-HHHY5-60N	00	12.98 ~ 15.49 0.511" ~ 0.61"	35 64 114 178	56 84 135 199	92 121 172 235	164 193 244 307	MT2	1/16"	SH-1905R	2102230	2502017
DFT-05-HHHY5-20N DFT-05-HHHY5-40N DFT-05-HHHY5-50N DFT-05-HHHY5-60N	05	15.50 ~ 17.85 0.61" ~ 0.703"	35 64 114 178	56 84 135 199	92 121 172 235	164 193 244 307	MT2	1/16"	SH-1905R	2102046	2502017

HSS-PM uç serisi

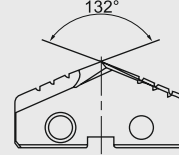
HSS
PM

HPC

HPM10 — Toz yüksek hız çeliği, sertliği hb275'e kadar olan karbon çeliğini işlemek için uygulayın;

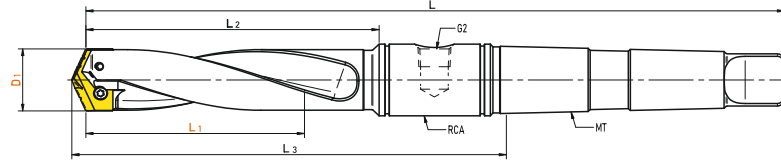
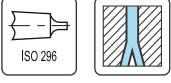
HPM15 — Toz kobalt yüksek hız çeliği, karbon çeliği, paslanmaz çelik, dökme demir ve sertliği hb350'ye kadar olan diğer malzemeleri işlemek için geçerlidir;

HPM25 — Toz kobalt bakımından zengin yüksek hız çeliği, alaşımlı çelik, paslanmaz çelik, dökme demir ve sertliği hb400'e kadar olan diğer malzemeleri işlemek için geçerlidir.



Bağlayıcı	Kalınlık mm/inç	Çap			Malzeme (Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	HPM10	HPM15	HPM25
1	3.97 5/32"	18.00		0.709	CL-1-G0056-10AR	CL-1-G0084-15AR	CL-1-G0113-25AR
		18.50		0.728	CL-1-G0056-10AR	CL-1-G0085-15AR	CL-1-G0114-25AR
		19.00		0.748	CL-1-G0057-10AR	CL-1-G0086-15AR	CL-1-G0112-25AR
		19.05	3/4"	0.750	CL-1-G0058-10AR	CL-1-G0087-15AR	CL-1-G0116-25AR
		19.50		0.768	CL-1-G0059-10AR	CL-1-G0088-15AR	CL-1-G0117-25AR
		20.00		0.787	CL-1-G0060-10AR	CL-1-G0089-15AR	CL-1-G0118-25AR
		20.50		0.807	CL-1-G0061-10AR	CL-1-G0090-15AR	CL-1-G0119-25AR
		20.64	13/16"	0.813	CL-1-G0062-10AR	CL-1-G0091-15AR	CL-1-G0120-25AR
		21.00		0.827	CL-1-G0063-10AR	CL-1-G0092-15AR	CL-1-G0121-25AR
		21.50		0.846	CL-1-G0064-10AR	CL-1-G0093-15AR	CL-1-G0122-25AR
1	3.97 5/32"	22.00		0.866	CL-1-G0065-10AR	CL-1-G0094-15AR	CL-1-G0123-25AR
		22.23	7/8"	0.875	CL-1-G0066-10AR	CL-1-G0095-15AR	CL-1-G0124-25AR
		23.00		0.906	CL-1-G0067-10AR	CL-1-G0096-15AR	CL-1-G0125-25AR
		23.81	15/16"	0.937	CL-1-G0068-10AR	CL-1-G0097-15AR	CL-1-G0126-25AR
		24.00		0.945	CL-1-G0069-10AR	CL-1-G0098-15AR	CL-1-G0127-25AR
2	4.76 3/16"	25.00		0.984	CL-2-G00070-10AR	CL-2-G0099-15AR	CL-2-G0128-25AR
		25.40	1"	1.000	CL-2-G00071-10AR	CL-2-G0100-15AR	CL-2-G0129-25AR
		26.00		1.024	CL-2-G00072-10AR	CL-2-G0101-15AR	CL-2-G0130-25AR
		26.99	1-1/16"	1.063	CL-2-G00073-10AR	CL-2-G0102-15AR	CL-2-G0131-25AR
		27.00		1.063	CL-2-G00074-10AR	CL-2-G0103-15AR	CL-2-G0132-25AR
		28.00		1.102	CL-2-G00075-10AR	CL-2-G0104-15AR	CL-2-G0133-25AR
		28.58	1-1/8"	1.125	CL-2-G00076-10AR	CL-2-G0105-15AR	CL-2-G0134-25AR
		29.00		1.142	CL-2-G00077-10AR	CL-2-G0106-15AR	CL-2-G0135-25AR
2	4.76 3/16"	30.00		1.181	CL-2-G00078-10AR	CL-2-G0107-15AR	CL-2-G0136-25AR
		30.16	1-3/16"	1.187	CL-2-G00079-10AR	CL-2-G0108-15AR	CL-2-G0137-25AR
		31.00		1.220	CL-2-G00080-10AR	CL-2-G0109-15AR	CL-2-G0138-25AR
		31.75	1-1/4"	1.250	CL-2-G00081-10AR	CL-2-G0110-15AR	CL-2-G0139-25AR
		32.00		1.260	CL-2-G00082-10AR	CL-2-G0111-15AR	CL-2-G0140-25AR
		33.00		1.299	CL-2-G00083-10AR	CL-2-G0112-15AR	CL-2-G0141-25AR

Konik şaft ve Helisel flüt tutucu



Tip (Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	MT	G2	RCA		
DFT-10-HHHY3-20N	10	17.86 ~ 21.99 0.703" ~ 0.866"	70	98	143	233	MT3	1/8"	SH-2540R	2102049	2502016
DFT-10-HHHY3-30N			121	149	193	283					
DFT-10-HHHY3-40N			172	200	244	334					
DFT-10-HHHY3-50N			273	302	346	436					
DFT-15-HHHY3-20N	15	22.00 ~ 24.60 0.866" ~ 0.969"	70	98	142	232	MT3	1/8"	SH-2540R	2102049	2502016
DFT-15-HHHY3-30N			121	149	193	283					
DFT-15-HHHY3-40N			172	200	244	334					
DFT-15-HHHY3-50N			273	302	346	436					
DFT-20-HHHY4-20N	20	24.61 ~ 29.99 0.969" ~ 1.181"	86	114	160	274	MT4	1/8"	SH-2540R	2102045	2502020
DFT-20-HHHY4-30N			137	165	211	325					
DFT-20-HHHY4-40N			187	216	262	375					
DFT-20-HHHY4-50N			289	318	364	477					
DFT-25-HHHY4-20N	25	30.00 ~ 35.50 1.181" ~ 1.398"	86	114	168	281	MT4	1/4"	SH-3175R	2102045	2502020
DFT-25-HHHY4-30N			137	165	218	332					
DFT-25-HHHY4-40N			187	216	269	383					
DFT-25-HHHY4-50N			289	318	371	484					

HSS-PM uç serisi

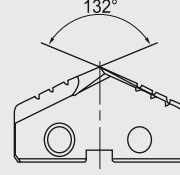
HSS
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HPM10 — Toz yüksek hız çeliği, sertliği hb275'e kadar olan karbon çeliğini işlemek için uygundur;

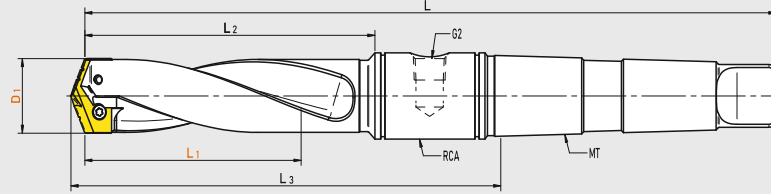
HPM15 — Toz kobalt yüksek hız çeliği, karbon çeliği, paslanmaz çelik, dökme demir ve sertliği hb350'ye kadar olan diğer malzemeleri işlemek için geçerlidir;

HPM25 — Toz kobalt bakımından zengin yüksek hız çeliği, alaşımlı çelik, paslanmaz çelik, dökme demir ve sertliği hb400'e kadar olan diğer malzemeleri işlemek için geçerlidir.



Bağlayıcı	Kalınlık mm/inç	Çap			Malzeme (Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	HPM10	HPM15	HPM25
2	4.76 3/16"	33.34	1-5/16"	1.313	CL-2-G00142-10AR	CL-2-G00167-15AR	CL-2-G00192-25AR
		34.00		1.339	CL-2-G00143-10AR	CL-2-G00168-15AR	CL-2-G00193-25AR
		34.13	1-11/32"	1.344	CL-2-G00144-10AR	CL-2-G00169-15AR	CL-2-G00194-25AR
		34.93	1-3/8"	1.375	CL-2-G00145-10AR	CL-2-G00170-15AR	CL-2-G00195-25AR
		35.00		1.378	CL-2-G00146-10AR	CL-2-G00171-15AR	CL-2-G00196-25AR
3	6.35 1/4"	36.00		1.417	CL-3-G00147-10AR	CL-3-G00172-15AR	CL-3-G00197-25AR
		36.51	1-7/16"	1.437	CL-3-G00148-10AR	CL-3-G00173-15AR	CL-3-G00198-25AR
		37.00		1.457	CL-3-G00149-10AR	CL-3-G00174-15AR	CL-3-G00199-25AR
		38.00		1.496	CL-3-G00150-10AR	CL-3-G00175-15AR	CL-3-G00200-25AR
		38.10	1-1/2"	1.500	CL-3-G00151-10AR	CL-3-G00176-15AR	CL-3-G00201-25AR
		39.00		1.535	CL-3-G00152-10AR	CL-3-G00177-15AR	CL-3-G00202-25AR
		39.69	1-9/16"	1.563	CL-3-G00153-10AR	CL-3-G00178-15AR	CL-3-G00202-25AR
		40.00		1.575	CL-3-G00154-10AR	CL-3-G00179-15AR	CL-3-G00203-25AR
		41.00		1.614	CL-3-G00155-10AR	CL-3-G00180-15AR	CL-3-G00204-25AR
		41.28	1-5/8"	1.625	CL-3-G00156-10AR	CL-3-G00181-15AR	CL-3-G00205-25AR
3	6.35 1/4"	42.00		1.654	CL-3-G00157-10AR	CL-3-G00182-15AR	CL-3-G00206-25AR
		42.86	1-11/16"	1.687	CL-3-G00158-10AR	CL-3-G00183-15AR	CL-3-G00207-25AR
		43.00		1.693	CL-3-G00159-10AR	CL-3-G00184-15AR	CL-3-G00208-25AR
		44.00		1.732	CL-3-G00160-10AR	CL-3-G00185-15AR	CL-3-G00209-25AR
		44.45	1-3/4"	1.750	CL-3-G00161-10AR	CL-3-G00186-15AR	CL-3-G00210-25AR
		45.00		1.772	CL-3-G00162-10AR	CL-3-G00187-15AR	CL-3-G00211-25AR
		46.00		1.811	CL-3-G00163-10AR	CL-3-G00188-15AR	CL-3-G00212-25AR
		46.04	1-13/16"	1.813	CL-3-G00164-10AR	CL-3-G00189-15AR	CL-3-G00213-25AR
		47.00		1.850	CL-3-G00165-10AR	CL-3-G00190-15AR	CL-3-G00214-25AR
		47.63	1-7/8"	1.875	CL-3-G00166-10AR	CL-3-G00191-15AR	CL-3-G00215-25AR

Konik şaft ve Helisel flüt tutucu



Tip (Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	MT	G2	RCA		
DFT-25-HHHY4-20N	25	30.00 ~ 35.50 1.181" ~ 1.398"	86	114	168	281	MT4	1/4"	SH-3175R	2102045	2502020
DFT-25-HHHY4-30N			137	165	218	332					
DFT-25-HHHY4-40N			187	216	269	383					
DFT-25-HHHY4-50N			289	318	371	484					
DFT-30-HHHY4-20N	30	35.51 ~ 41.99 1.398" ~ 1.653"	121	152	206	319	MT4	1/4"	SH-3175R	2102044	2502015
DFT-30-HHHY4-30N			165	197	251	364					
DFT-30-HHHY4-40N			210	241	295	408					
DFT-30-HHHY4-50N			349	381	435	548					
DFT-35-HHHY4-20N	35	42.00 ~ 47.99 1.654" ~ 1.899"	121	152	206	319	MT4	1/4"	SH-3175R	2102044	2502015
DFT-35-HHHY4-30N			165	197	251	364					
DFT-35-HHHY4-40N			210	241	295	408					
DFT-35-HHHY4-50N			349	381	435	548					

HSS-PM uç serisi

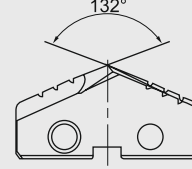
HSS
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HPM10 — Toz yüksek hız çeliği, sertliği hb275'e kadar olan karbon çeliğini işlemek için uygundur;

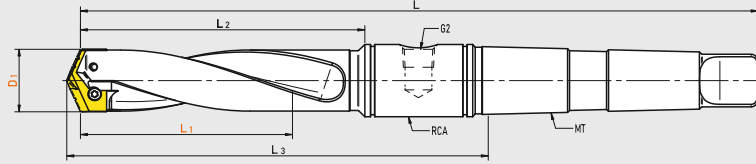
HPM15 — Toz kobalt yüksek hız çeliği, karbon çeliği, paslanmaz çelik, dökme demir ve sertliği hb350'ye kadar olan diğer malzemeleri işlemek için geçerlidir;

HPM25 — Toz kobalt bakımından zengin yüksek hız çeliği, alaşımlı çelik, paslanmaz çelik, dökme demir ve sertliği hb400'e kadar olan diğer malzemeleri işlemek için geçerlidir.



Bağlayıcı	Kalınlık mm/inç	Çap			Malzeme (Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	HPM10	HPM15	HPM25
4	7.94 5/16"	48.00		1.890	CL-4-G00216-10AR	CL-4-G00243-15AR	CL-4-G00271-25AR
		49.21	1-15/16"	1.937	CL-4-G00217-10AR	CL-4-G00244-15AR	CL-4-G00272-25AR
		50.00		1.969	CL-4-G00218-10AR	CL-4-G00245-15AR	CL-4-G00273-25AR
		50.80	2"	2.000	CL-4-G00218-10AR	CL-4-G00246-15AR	CL-4-G00274-25AR
		51.00		2.008	CL-4-G00219-10AR	CL-4-G00247-15AR	CL-4-G00275-25AR
		52.00		2.047	CL-4-G00220-10AR	CL-4-G00248-15AR	CL-4-G00276-25AR
		52.39	2-1/16"	2.063	CL-4-G00221-10AR	CL-4-G00249-15AR	CL-4-G00277-25AR
		53.00		2.087	CL-4-G00222-10AR	CL-4-G00250-15AR	CL-4-G00278-25AR
		53.98	2-1/8"	2.125	CL-4-G00223-10AR	CL-4-G00251-15AR	CL-4-G00279-25AR
		54.00		2.126	CL-4-G00224-10AR	CL-4-G00252-15AR	CL-4-G00280-25AR
		55.00		2.165	CL-4-G00225-10AR	CL-4-G00253-15AR	CL-4-G00281-25AR
		55.56	2-3/16"	2.187	CL-4-G00226-10AR	CL-4-G00254-15AR	CL-4-G00282-25AR
4	7.94 5/16"	56.00		2.205	CL-4-G00227-10AR	CL-4-G00255-15AR	CL-4-G00283-25AR
		57.00		2.244	CL-4-G00228-10AR	CL-4-G00256-15AR	CL-4-G00284-25AR
		57.15	2-1/4"	2.250	CL-4-G00229-10AR	CL-4-G00257-15AR	CL-4-G00285-25AR
		58.00		2.283	CL-4-G00230-10AR	CL-4-G00258-15AR	CL-4-G00286-25AR
		58.74	2-5/16"	2.313	CL-4-G00231-10AR	CL-4-G00259-15AR	CL-4-G00287-25AR
		59.00		2.323	CL-4-G00232-10AR	CL-4-G00260-15AR	CL-4-G00288-25AR
		60.00		2.362	CL-4-G00233-10AR	CL-4-G00261-15AR	CL-4-G00289-25AR
		60.33	2-3/8"	2.375	CL-4-G00234-10AR	CL-4-G00262-15AR	CL-4-G00290-25AR
		61.00		2.402	CL-4-G00235-10AR	CL-4-G00263-15AR	CL-4-G00291-25AR
		61.91	2-7/16"	2.437	CL-4-G00236-10AR	CL-4-G00264-15AR	CL-4-G00292-25AR
		62.00		2.441	CL-4-G00237-10AR	CL-4-G00265-15AR	CL-4-G00293-25AR
		63.00		2.480	CL-4-G00238-10AR	CL-4-G00266-15AR	CL-4-G00294-25AR
		63.50	2-1/2"	2.500	CL-4-G00239-10AR	CL-4-G00267-15AR	CL-4-G00295-25AR
		64.00		2.520	CL-4-G00240-10AR	CL-4-G00268-15AR	CL-4-G00296-25AR
		65.00		2.559	CL-4-G00241-10AR	CL-4-G00269-15AR	CL-4-G00297-25AR
		65.09	2-9/16"	2.563	CL-4-G00242-10AR	CL-4-G00270-15AR	CL-4-G00298-25AR

Konik şaft ve Helisel flüt tutucu



Tip(Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	MT	G2	RCA		
DFT-40-HHHZ5-20N DFT-40-HHHZ5-40N DFT-40-HHHZ5-50N	40	48.00 ~ 55.99 1.89"~ 2.204"	130 232 422	165 267 457	219 321 511	364 465 656	MT5	1/4"	SH-4445R	2102044	2502015
DFT-45-HHHZ5-20N DFT-45-HHHZ5-40N DFT-45-HHHZ5-50N	45	56.00 ~ 65.09 2.205"~ 2.563"	130 232 422	165 267 457	219 321 511	364 465 656	MT5	1/4"	SH-4445R	2102044	2502015

HSS-PM uç serisi

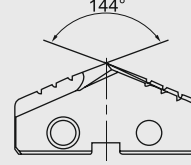
HSS
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HPM10 — Toz yüksek hız çeliği, sertliği hb275'e kadar olan karbon çeliğini işlemek için uygulayın;

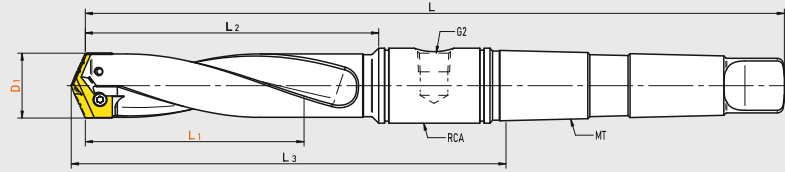
HPM15 — Toz kobalt yüksek hız çeliği, karbon çeliği, paslanmaz çelik, dökme demir ve sertliği hb350'ye kadar olan diğer malzemeleri işlemek için geçerlidir;

HPM25 — Toz kobalt bakımından zengin yüksek hız çeliği, alaşımlı çelik, paslanmaz çelik, dökme demir ve sertliği hb400'e kadar olan diğer malzemeleri işlemek için geçerlidir.



Bağlayıcı	Kalınlık mm/inç	Çap			Malzeme(Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	HPM10	HPM15	HPM25
5	11.11 7/16"	63.50	2-1/2"	2.500	CL-5-G00299-10AR	CL-5-G00327-15AR	
		64.00		2.520	CL-5-G00300-10AR	CL-5-G00328-15AR	
		65.00		2.559	CL-5-G00301-10AR	CL-5-G00329-15AR	
		65.09	2-9/16"	2.563	CL-5-G00302-10AR	CL-5-G00330-15AR	
		66.00		2.598	CL-5-G00303-10AR	CL-5-G00331-15AR	
		66.68	2-5/8"	2.625	CL-5-G00304-10AR	CL-5-G00332-15AR	
		68.00		2.677	CL-5-G00305-10AR	CL-5-G00333-15AR	
		70.00		2.756	CL-5-G00306-10AR	CL-5-G00334-15AR	
		71.44	2-13/16"	2.813	CL-5-G00307-10AR	CL-5-G00335-15AR	
		72.00		2.835	CL-5-G00308-10AR	CL-5-G00336-15AR	
		73.03	2-7/8"	2.875	CL-5-G00309-10AR	CL-5-G00337-15AR	
		74.00		2.913	CL-5-G00310-10AR	CL-5-G00338-15AR	
		74.61	2-15/16"	2.937	CL-5-G00311-10AR	CL-5-G00339-15AR	
		76.00		2.992	CL-5-G00312-10AR	CL-5-G00340-15AR	
		76.20	3"	3.000	CL-5-G00313-10AR	CL-5-G00341-15AR	
		76.99	3-1/32"	3.031	CL-5-G00314-10AR	CL-5-G00342-15AR	
6	11.11 7/16"	77.00		3.031	CL-6-G00315-10AR	CL-6-G00343-15AR	
		77.79	3-1/16"	3.063	CL-6-G00316-10AR	CL-6-G00344-15AR	
		78.00		3.071	CL-6-G00317-10AR	CL-6-G00345-15AR	
		79.38	3-1/8"	3.125	CL-6-G00318-10AR	CL-6-G00346-15AR	
		80.00		3.150	CL-6-G00319-10AR	CL-6-G00347-15AR	
		80.96	3-3/16"	3.187	CL-6-G00320-10AR	CL-6-G00348-15AR	
		82.00		3.228	CL-6-G00321-10AR	CL-6-G00349-15AR	
		82.55	3-1/4"	3.250	CL-6-G00322-10AR	CL-6-G00350-15AR	
		84.00		3.307	CL-6-G00323-10AR	CL-6-G00351-15AR	
		84.14	3-5/16"	3.313	CL-6-G00323-10AR	CL-6-G00352-15AR	
		85.73	3-3/8"	3.375	CL-6-G00324-10AR	CL-6-G00353-15AR	
		86.00		3.386	CL-6-G00325-10AR	CL-6-G00354-15AR	
		87.31	3-7/16"	3.437	CL-6-G00326-10AR	CL-6-G00355-15AR	

Konik şaft ve Helisel flüt tutucu



Tip(Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	MT	G2	RCA		
DFT-50-HMKZ5-20N DFT-50-HMKZ5-40N DFT-50-HMKZ5-50N	50	63.50 ~ 76.99 2.5" ~ 3.031"	172 273 464	216 318 508	287 389 579	430 532 722	MT5	1/2"	SH-5715R	2102043	2502019
DFT-55-HMKZ5-20N DFT-55-HMKZ5-40N DFT-55-HMKZ5-50N	55	77.00 ~ 89.09 3.031" ~ 3.507"	172 273 464	216 318 508	287 389 579	430 532 722	MT5	1/2"	SH-5715R	2102043	2502019

HSS-PM uç serisi

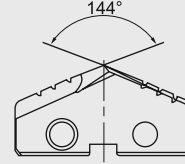
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HPM10 — Toz yüksek hız çeliği, sertliği hb275'e kadar olan karbon çeliğini işlemek için uygulayın;

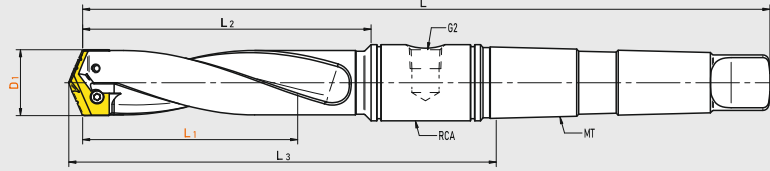
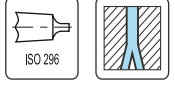
HPM15 — Toz kobalt yüksek hız çeliği, karbon çeliği, paslanmaz çelik, dökme demir ve sertliği hb350'ye kadar olan diğer malzemeleri işlemek için geçerlidir;

HPM25 — Toz kobalt bakımından zengin yüksek hız çeliği, alaşımlı çelik, paslanmaz çelik, dökme demir ve sertliği hb400'e kadar olan diğer malzemeleri işlemek için geçerlidir.



Bağlayıcı	Kalınlık mm/inç	Çap			Malzeme(Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	HPM10	HPM15	HPM25
6	11.11 7/16"	88.00		3.465	CL-6-G00356-10AR	CL-6-G00388-15AR	
		88.90	3-1/2"	3.500	CL-6-G00357-10AR	CL-6-G00389-15AR	
		89.00		3.504	CL-6-G00358-10AR	CL-6-G00390-15AR	
7	11.11 7/16"	89.96	3-17/32"	3.542	CL-7-G00359-10AR	CL-7-G00391-15AR	
		90.00		3.543	CL-7-G00360-10AR	CL-7-G00392-15AR	
		90.49	3-9/16"	3.563	CL-7-G00361-10AR	CL-7-G00393-15AR	
		92.00		3.622	CL-7-G00362-10AR	CL-7-G00394-15AR	
		92.08	3-5/8"	3.625	CL-7-G00363-10AR	CL-7-G00395-15AR	
		93.66	3-11/16"	3.687	CL-7-G00364-10AR	CL-7-G00396-15AR	
		94.00		3.701	CL-7-G00365-10AR	CL-7-G00397-15AR	
		95.25	3-3/4"	3.750	CL-7-G00366-10AR	CL-7-G00398-15AR	
		96.00		3.780	CL-7-G00370-10AR	CL-7-G00399-15AR	
		96.84	3-13/16"	3.813	CL-7-G00371-10AR	CL-7-G00400-15AR	
		98.00		3.858	CL-7-G00372-10AR	CL-7-G00401-15AR	
		98.43	3-7/8"	3.875	CL-7-G00373-10AR	CL-7-G00402-15AR	
		100.00		3.937	CL-7-G00374-10AR	CL-7-G00403-15AR	
		100.01	3-15/16"	3.937	CL-7-G00375-10AR	CL-7-G00404-15AR	
8	11.11 7/16"	101.60	4"	4.000	CL-7-G00376-10AR	CL-7-G00405-15AR	
		102.00		4.016	CL-8-G00378-10AR	CL-8-G00406-15AR	
		104.00		4.094	CL-8-G00379-10AR	CL-8-G00407-15AR	
		104.78	4-1/8"	4.125	CL-8-G00380-10AR	CL-8-G00408-15AR	
		106.00		4.173	CL-8-G00381-10AR	CL-8-G00409-15AR	
		107.95	4-1/4"	4.250	CL-8-G00382-10AR	CL-8-G00410-15AR	
		108.00		4.252	CL-8-G00383-10AR	CL-8-G00411-15AR	
		110.00		4.331	CL-8-G00384-10AR	CL-8-G00412-15AR	
		112.00		4.409	CL-8-G00385-10AR	CL-8-G00413-15AR	
		114.00		4.488	CL-8-G00386-10AR	CL-8-G00414-015AR	
		114.30	4-1/2"	4.500	CL-8-G00387-10AR	CL-8-G00415-15AR	

Konik şaft ve Helisel flüt tutucu



Tip(Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	MT	G2	RCA		
DKT-55-HMKZ5-20N	55	77.00 ~ 89.09	172	216	287	430	MT5	1/2"	SH-5715R	2102043	2502019
DKT-55-HMKZ5-40N		3.031"~ 3.507"	273	318	389	532					
DKT-55-HMKZ5-50N			464	508	579	722					
DFT-70-HMKZ5-20N	70	89.10 ~ 101.60	172	225	297	440	MT5	1/2"	SH-5715R	2102043	2502019
DFT-70-HMKZ5-40N		3.508"~ 4"	273	327	399	541					
DFT-70-HMKZ5-50N			556	610	681	824					
DFT-80-HMKZ5-20N	80	101.61 ~ 114.30	172	225	297	440	MT5	1/2"	SH-5715R	2102043	2502019
DFT-80-HMKZ5-40N		4"~ 4.5"	273	327	399	541					
DFT-80-HMKZ5-50N			556	610	681	824					

HSS-PM uç serisi

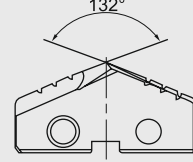
HSS
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HPM10 — Toz yüksek hız çeliği, sertliği hb275'e kadar olan karbon çeliğini işlemek için uygulayın;

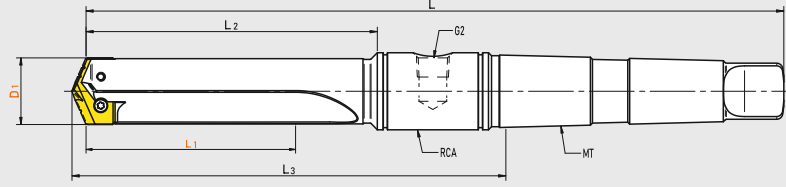
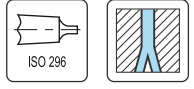
HPM15 — Toz kobalt yüksek hız çeliği, karbon çeliği, paslanmaz çelik, dökme demir ve sertliği hb350'ye kadar olan diğer malzemeleri işlemek için geçerlidir;

HPM25 — Toz kobalt bakımından zengin yüksek hız çeliği, alaşımlı çelik, paslanmaz çelik, dökme demir ve sertliği hb400'e kadar olan diğer malzemeleri işlemek için geçerlidir.



Bağlayıcı	Kalınlık mm/inç	Çap			Malzeme(Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	HPM10	HPM15	HPM25
Y	2.38 3/32"	9.50		0.374			CL-Y-G00442-25AR
		9.53	3/8"	0.375			CL-Y-G00443-25AR
		9.80		0.386			CL-Y-G00444-25AR
		10.00		0.394			CL-Y-G00445-25AR
		10.20		0.402			CL-Y-G00446-25AR
		10.50		0.413			CL-Y-G00447-25AR
		10.72	27/64"	0.422			CL-Y-G00448-25AR
		10.80		0.425			CL-Y-G00449-25AR
		11.00		0.433			CL-Y-G00450-25AR
		11.11	7/16"	0.437			CL-Y-G00451-25AR
Z	2.38 3/32"	11.50		0.453			CL-Z-G00452-25AR
		11.51	29/64"	0.453			CL-Z-G00453-25AR
		12.00		0.472			CL-Z-G00454-25AR
		12.30	31/64"	0.484			CL-Z-G00455-25AR
		12.50		0.492			CL-Z-G00456-25AR
		12.70	1/2"	0.500			CL-Z-G00457-25AR
0	3.18 1/8"	13.00		0.512	CL-0-G00416-10AR	CL-0-G00430-15AR	CL-0-G00458-25AR
		13.50		0.531	CL-0-G00417-10AR	CL-0-G00431-15AR	CL-0-G00459-25AR
		14.00		0.551	CL-0-G00418-10AR	CL-0-G00432-15AR	CL-0-G00460-25AR
		14.29	9/16"	0.563	CL-0-G00419-10AR	CL-0-G00432-15AR	CL-0-G00461-25AR
		14.50		0.571	CL-0-G00420-10AR	CL-0-G00433-15AR	CL-0-G00462-25AR
		15.00		0.591	CL-0-G00421-10AR	CL-0-G00434-15AR	CL-0-G00463-25AR
0	3.18 1/8"	15.50		0.610	CL-0-G00422-10AR	CL-0-G00435-15AR	CL-0-G00464-25AR
		15.88	5/8"	0.625	CL-0-G00423-10AR	CL-0-G00436-15AR	CL-0-G00465-25AR
		16.00		0.630	CL-0-G00424-10AR	CL-0-G00437-15AR	CL-0-G00466-25AR
		16.50		0.650	CL-0-G00425-10AR	CL-0-G00438-15AR	CL-0-G00467-25AR
		17.00		0.669	CL-0-G00426-10AR	CL-0-G00439-15AR	CL-0-G00468-25AR
		17.46	11/16"	0.687	CL-0-G00428-10AR	CL-0-G00440-15AR	CL-0-G00469-25AR
		17.50		0.689	CL-A-G00429-10AR	CL-0-G00441-15AR	CL-0-G00470-25AR

Konik şaft ve Helisel flüt tutucu



Tip(Şipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	MT	G2	RCA		
DFT-YO-HMKZ2-20N	Y0	9.50 ~ 11.49 0.374" ~ 0.452"	32	52	88	160	MT2	1/16"	SH-1905R	2102047	2502018
DFT-ZO-HMKZ2-20N	Z0	11.50 ~ 12.97 0.453" ~ 0.511"	32	52	88	160	MT2	1/16"	SH-1905R	2102048	2502018
DFT-OO-HMKZ2-20N	00	12.98 ~ 15.49 0.511" ~ 0.61"	35	56	92	164	MT2	1/16"	SH-1905R	2102230	2502017
DFT-O5-HMKZ2-20N	05	15.50 ~ 17.85 0.61" ~ 0.703"	35	56	92	164	MT2	1/16"	SH-1905R	2102046	2502017

HSS-PM uç serisi

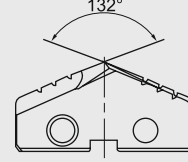
HSS
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HPC

HPM10 — Toz yüksek hız çeliği, sertliği hb275'e kadar olan karbon çeliğini işlemek için uygulayın;

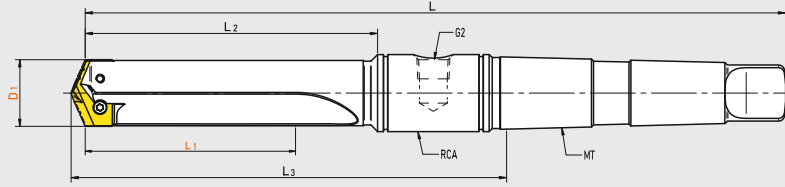
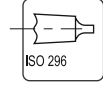
HPM15 — Toz kobalt yüksek hız çeliği, karbon çeliği, paslanmaz çelik, dökme demir ve sertliği hb350'ye kadar olan diğer malzemeleri işlemek için geçerlidir;

HPM25 — Toz kobalt bakımından zengin yüksek hız çeliği, alaşımlı çelik, paslanmaz çelik, dökme demir ve sertliği hb400'e kadar olan diğer malzemeleri işlemek için geçerlidir.



Bağlayıcı	Kalınlık mm/inç	Çap			Malzeme(Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	HPM10	HPM15	HPM25
1	3.97 5/32"	18.00		0.709	CL-1-G00471-10AR	CL-1-G00500-15AR	CL-1-G00529-25AR
		18.50		0.728	CL-1-G00472-10AR	CL-1-G00501-15AR	CL-1-G00530-25AR
		19.00		0.748	CL-1-G00473-10AR	CL-1-G00502-15AR	CL-1-G00531-25AR
		19.05	3/4"	0.750	CL-1-G00474-10AR	CL-1-G00503-15AR	CL-1-G00532-25AR
		19.50		0.768	CL-1-G00475-10AR	CL-1-G00504-15AR	CL-1-G00533-25AR
		20.00		0.787	CL-1-G00476-10AR	CL-1-G00505-15AR	CL-1-G00534-25AR
		20.50		0.807	CL-1-G00477-10AR	CL-1-G00506-15AR	CL-1-G00535-25AR
		20.64	13/16"	0.813	CL-1-G00478-10AR	CL-1-G00507-15AR	CL-1-G00536-25AR
		21.00		0.827	CL-1-G00479-10AR	CL-1-G00508-15AR	CL-1-G00537-25AR
		21.50		0.846	CL-1-G00480-10AR	CL-1-G00509-15AR	CL-1-G00538-25AR
1	3.97 5/32"	22.00		0.866	CL-1-G00481-10AR	CL-1-G00510-15AR	CL-1-G00539-25AR
		22.23	7/8"	0.875	CL-1-G00482-10AR	CL-1-G00511-15AR	CL-1-G00540-25AR
		23.00		0.906	CL-1-G00483-10AR	CL-1-G00512-15AR	CL-1-G00541-25AR
		23.81	15/16"	0.937	CL-1-G00484-10AR	CL-1-G00513-15AR	CL-1-G00542-25AR
		24.00		0.945	CL-1-G00485-10AR	CL-1-G00514-15AR	CL-1-G00543-25AR
2	4.76 3/16"	25.00		0.984	CL-2-G00486-10AR	CL-2-G00515-15AR	CL-2-G00544-25AR
		25.40	1"	1.000	CL-2-G00487-10AR	CL-2-G00516-15AR	CL-2-G00545-25AR
		26.00		1.024	CL-2-G00488-10AR	CL-2-G00517-15AR	CL-2-G00546-25AR
		26.99	1-1/16"	1.063	CL-2-G00489-10AR	CL-2-G00518-15AR	CL-2-G00547-25AR
		27.00		1.063	CL-2-G00490-10AR	CL-2-G00519-15AR	CL-2-G00548-25AR
		28.00		1.102	CL-2-G00491-10AR	CL-2-G00520-15AR	CL-2-G00549-25AR
		28.58	1-1/8"	1.125	CL-2-G00492-10AR	CL-2-G00521-15AR	CL-2-G00550-25AR
		29.00		1.142	CL-2-G00493-10AR	CL-2-G00522-15AR	CL-2-G00551-25AR
2	4.76 3/16"	30.00		1.181	CL-2-G00494-10AR	CL-2-G00523-15AR	CL-2-G00552-25AR
		30.16	1-3/16"	1.187	CL-2-G00495-10AR	CL-2-G00524-15AR	CL-2-G00553-25AR
		31.00		1.220	CL-2-G00496-10AR	CL-2-G00525-15AR	CL-2-G00553-25AR
		31.75	1-1/4"	1.250	CL-2-G00497-10AR	CL-2-G00526-15AR	CL-2-G00554-25AR
		32.00		1.260	CL-2-G00498-10AR	CL-2-G00527-15AR	CL-2-G00555-25AR
		33.00		1.299	CL-A-G00499-10AR	CL-2-G00528-15AR	CL-2-G00556-25AR

Konik şaft ve Helisel flüt tutucu



Tip(Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	MT	G2	RCA		
DFT-10-HMKZ3-20N	10	17.86 ~ 21.99 0.703" ~ 0.866"	70	98	143	233	MT3	1/8"	SH-2540R	2102049	2502016
DFT-15-HMKZ3-20N	15	22.00 ~ 24.60 0.866" ~ 0.969"	70	98	143	233	MT3	1/8"	SH-2540R	2102049	2502016
DFT-20-HMKZ4-20N	20	24.61 ~ 29.99 0.969" ~ 1.181"	86	114	160	274	MT4	1/8"	SH-2540R	2102045	2502020
DFT-25-HMKZ4-20N	25	30.00 ~ 35.50 1.181" ~ 1.398"	86	114	168	281	MT4	1/4"	SH-3175R	2102045	2502020

HSS-PM uç serisi

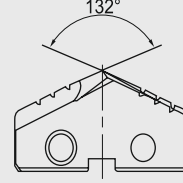
HSS
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HPC

HPM10 — Toz yüksek hız çeliği, sertliği hb275'e kadar olan karbon çeliğini işlemek için uygundur;

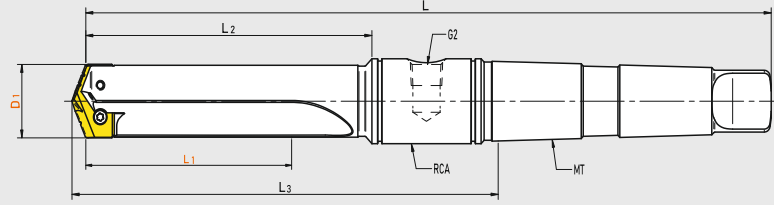
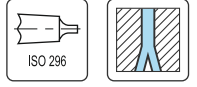
HPM15 — Toz kobalt yüksek hız çeliği, karbon çeliği, paslanmaz çelik, dökme demir ve sertliği hb350'ye kadar olan diğer malzemeleri işlemek için geçerlidir;

HPM25 — Toz kobalt bakımından zengin yüksek hız çeliği, alaşımlı çelik, paslanmaz çelik, dökme demir ve sertliği hb400'e kadar olan diğer malzemeleri işlemek için geçerlidir.



Bağlayıcı	Kalınlık mm/inç	Çap			Malzeme(Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	HPM10	HPM15	HPM25
2	4.76 3/16"	33.34	1-5/16"	1.313	CL-2-G00A471-10AR	CL-2-G00578-15AR	CL-2-G00604-25AR
		34.00		1.339	CL-2-G00B471-10AR	CL-2-G00579-15AR	CL-2-G00605-25AR
		34.13	1-11/32"	1.344	CL-2-G00C471-10AR	CL-2-G00580-15AR	CL-2-G00606-25AR
		34.93	1-3/8"	1.375	CL-2-G00D471-10AR	CL-2-G00581-15AR	CL-2-G00607-25AR
		35.00		1.378	CL-2-G00557-10AR	CL-2-G00582-15AR	CL-2-G00608-25AR
3	6.35 1/4"	36.00		1.417	CL-3-G00558-10AR	CL-3-G00583-15AR	CL-A-G00609-25AR
		36.51	1-7/16"	1.437	CL-3-G00559-10AR	CL-3-G00584-15AR	CL-A-G00610-25AR
		37.00		1.457	CL-3-G00560-10AR	CL-3-G00585-15AR	CL-A-G00611-25AR
		38.00		1.496	CL-3-G00561-10AR	CL-3-G00586-15AR	CL-A-G00612-25AR
		38.10	1-1/2"	1.500	CL-3-G00562-10AR	CL-3-G00587-15AR	CL-A-G00613-25AR
		39.00		1.535	CL-3-G00563-10AR	CL-3-G00588-15AR	CL-A-G00614-25AR
		39.69	1-9/16"	1.563	CL-3-G00564-10AR	CL-3-G00589-15AR	CL-A-G00615-25AR
		40.00		1.575	CL-3-G00565-10AR	CL-3-G00590-15AR	CL-3-G00616-25AR
		41.00		1.614	CL-3-G00566-10AR	CL-3-G00591-15AR	CL-3-G00617-25AR
		41.28	1-5/8"	1.625	CL-3-G00567-10AR	CL-3-G00592-15AR	CL-3-G00618-25AR
3	6.35 1/4"	42.00		1.654	CL-3-G00568-10AR	CL-3-G00593-15AR	CL-3-G00619-25AR
		42.86	1-11/16"	1.687	CL-3-G00569-10AR	CL-3-G00594-15AR	CL-3-G00620-25AR
		43.00		1.693	CL-3-G00570-10AR	CL-3-G00596-15AR	CL-3-G00621-25AR
		44.00		1.732	CL-3-G00571-10AR	CL-3-G00597-15AR	CL-3-G00622-25AR
		44.45	1-3/4"	1.750	CL-3-G00572-10AR	CL-3-G00598-15AR	CL-3-G00623-25AR
		45.00		1.772	CL-3-G00573-10AR	CL-3-G00599-15AR	CL-3-G00624-25AR
		46.00		1.811	CL-3-G00574-10AR	CL-3-G00600-15AR	CL-3-G00625-25AR
		46.04	1-13/16"	1.813	CL-3-G00575-10AR	CL-3-G00601-15AR	CL-3-G00626-25AR
		47.00		1.850	CL-3-G00576-10AR	CL-3-G00602-15AR	CL-3-G00627-25AR
		47.63	1-7/8"	1.875	CL-3-G00577-10AR	CL-3-G00603-15AR	CL-3-G00628-25AR

Konik şaft ve Helisel flüt tutucu



Tip(Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	MT	G2	RCA		
DFT-25-MMKZ4-20N	25	30.00 ~ 35.50 1.181" ~ 1.398"	86	114	168	281	MT4	1/4"	SH-3175R	2102045	2502020
DFT-30-MMKZ4-20N	30	35.51 ~ 41.99 1.398" ~ 1.653"	121	152	206	319	MT4	1/4"	SH-3175R	2102044	2502015
DFT-30-MMKZ4-50N			349	381	435	548					
DFT-30-MMKZ4-70N			559	591	645	757					
DFT-30-MMKZ4-90N			787	819	873	986					
DFT-35-MMKZ4-20N	35	42.00 ~ 47.99 1.654" ~ 1.899"	121	152	206	319	MT4	1/4"	SH-3175R	2102044	2502015
DFT-35-MMKZ4-50N			349	381	435	548					
BŞK-35-MMKZ4-70N			559	591	645	757					
DFT-35-MMKZ4-90N			787	819	873	986					

HSS-PM uç serisi

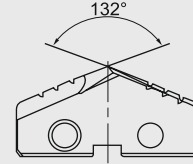
HSS
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HPC

HPM10 — Toz yüksek hız çeliği, sertliği hb275'e kadar olan karbon çeliğini işlemek için uygulayın;

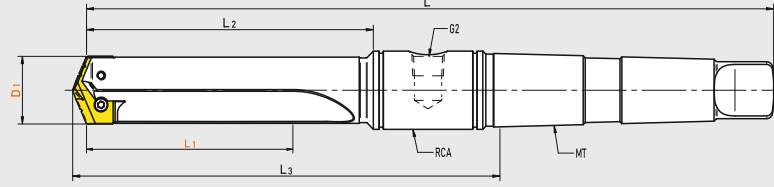
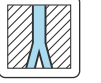
HPM15 — Toz kobalt yüksek hız çeliği, karbon çeliği, paslanmaz çelik, dökme demir ve sertliği hb350'ye kadar olan diğer malzemeleri işlemek için geçerlidir;

HPM25 — Toz kobalt bakımından zengin yüksek hız çeliği, alaşımlı çelik, paslanmaz çelik, dökme demir ve sertliği hb400'e kadar olan diğer malzemeleri işlemek için geçerlidir.



Bağlayıcı	Kalınlık mm/inç	Çap			Malzeme (Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	HPM10	HPM15	HPM25
4	7.94 5/16"	48.00		1.890	CL-4-G00629-10AR	CL-4-G00657-15AR	CL-4-G00685-25AR
		49.21	1-15/16"	1.937	CL-4-G00630-10AR	CL-4-G00658-15AR	CL-4-G00686-25AR
		50.00		1.969	CL-4-G00631-10AR	CL-4-G00659-15AR	CL-4-G00687-25AR
		50.80	2"	2.000	CL-4-G00632-10AR	CL-4-G00660-15AR	CL-4-G00688-25AR
		51.00		2.008	CL-4-G00633-10AR	CL-4-G00661-15AR	CL-4-G00689-25AR
		52.00		2.047	CL-4-G00634-10AR	CL-4-G00662-15AR	CL-4-G00690-25AR
		52.39	2-1/16"	2.063	CL-4-G00635-10AR	CL-4-G00663-15AR	CL-4-G00691-25AR
		53.00		2.087	CL-4-G00636-10AR	CL-4-G00664-15AR	CL-4-G00692-25AR
		53.98	2-1/8"	2.125	CL-4-G00637-10AR	CL-4-G00665-15AR	CL-4-G00693-25AR
		54.00		2.126	CL-4-G00638-10AR	CL-4-G00666-15AR	CL-4-G00694-25AR
		55.00		2.165	CL-4-G00639-10AR	CL-4-G00667-15AR	CL-4-G00695-25AR
		55.56	2-3/16"	2.187	CL-4-G00640-10AR	CL-4-G00668-15AR	CL-4-G00696-25AR
4	7.94 5/16"	56.00		2.205	CL-4-G00641-10AR	CL-4-G00669-15AR	CL-4-G00697-25AR
		57.00		2.244	CL-4-G00642-10AR	CL-4-G00670-15AR	CL-4-G00698-25AR
		57.15	2-1/4"	2.250	CL-4-G00643-10AR	CL-4-G00671-15AR	CL-4-G00699-25AR
		58.00		2.283	CL-4-G00644-10AR	CL-4-G00672-15AR	CL-4-G00700-25AR
		58.74	2-5/16"	2.313	CL-4-G00645-10AR	CL-4-G00673-15AR	CL-4-G00701-25AR
		59.00		2.323	CL-4-G00646-10AR	CL-4-G00674-15AR	CL-4-G00702-25AR
		60.00		2.362	CL-4-G00647-10AR	CL-4-G00675-15AR	CL-4-G00703-25AR
		60.33	2-3/8"	2.375	CL-4-G00648-10AR	CL-4-G00676-15AR	CL-4-G00704-25AR
		61.00		2.402	CL-4-G00649-10AR	CL-4-G00677-15AR	CL-4-G00705-25AR
		61.91	2-7/16"	2.437	CL-4-G00650-10AR	CL-4-G00678-15AR	CL-4-G00706-25AR
		62.00		2.441	CL-4-G00651-10AR	CL-4-G00679-15AR	CL-4-G00707-25AR
		63.00		2.480	CL-4-G00652-10AR	CL-4-G00680-15AR	CL-4-G00708-25AR
		63.50	2-1/2"	2.500	CL-4-G00653-10AR	CL-4-G00681-15AR	CL-4-G00709-25AR
		64.00		2.520	CL-4-G00654-10AR	CL-4-G00682-15AR	CL-4-G00710-25AR
		65.00		2.559	CL-4-G00655-10AR	CL-4-G00683-15AR	CL-4-G00711-25AR
		65.09	2-9/16"	2.563	CL-4-G00656-10AR	CL-4-G00684-15AR	CL-4-G00712-25AR

Konik şaft ve Helisel flüt tutucu



Tip(Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	MT	G2	RCA		
DFT-40-MMKZ5-20N DFT-40-MMKZ5-50N DFT-40-MMKZ5-70N DFT-40-MMKZ5-90N	40	48.00 ~ 55.99 1.89" ~ 2.204"	130 422 625 879	165 457 660 914	219 511 714 968	364 656 859 1113	MT5	1/4"	SH-4445R	2102044	2502015
DFT-45-MMKZ5-20N DFT-45-MMKZ5-50N DFT-42-MMKZ5-70N DFT-45-MMKZ5-90N	45	56.00 ~ 65.09 2.05" ~ 2.563"	130 422 625 879	165 457 660 914	219 511 714 968	364 656 859 1113	MT5	1/4"	SH-4445R	2102044	2502015

HSS-PM uç serisi

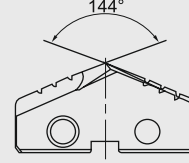
HSS
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HPM10 — Toz yüksek hız çeliği, sertliği hb275'e kadar olan karbon çeliğini işlemek için uygulayın;

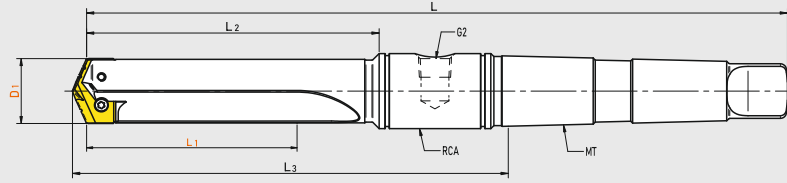
HPM15 — Toz kobalt yüksek hız çeliği, karbon çeliği, paslanmaz çelik, dökme demir ve sertliği hb350'ye kadar olan diğer malzemeleri işlemek için geçerlidir;

HPM25 — Toz kobalt bakımından zengin yüksek hız çeliği, alaşımlı çelik, paslanmaz çelik, dökme demir ve sertliği hb400'e kadar olan diğer malzemeleri işlemek için geçerlidir.



Bağlayıcı	Kalınlık mm/inç	Çap			Malzeme (Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	HPM10	HPM15	HPM25
5	11.11 7/16"	63.50	2-1/2"	2.500	CL-5-G00713-10AR	CL-5-G00742-15AR	
		64.00		2.520	CL-5-G00714-10AR	CL-5-G00743-15AR	
		65.00		2.559	CL-5-G00715-10AR	CL-5-G00744-15AR	
		65.09	2-9/16"	2.563	CL-5-G00716-10AR	CL-5-G00745-15AR	
		66.00		2.598	CL-5-G00717-10AR	CL-5-G00746-15AR	
		66.68	2-5/8"	2.625	CL-5-G00718-10AR	CL-5-G00747-15AR	
		68.00		2.677	CL-5-G00719-10AR	CL-5-G00748-15AR	
		70.00		2.756	CL-5-G00720-10AR	CL-5-G00749-15AR	
		71.44	2-13/16"	2.813	CL-5-G00721-10AR	CL-5-G00750-15AR	
		72.00		2.835	CL-5-G00722-10AR	CL-5-G00751-15AR	
		73.03	2-7/8"	2.875	CL-5-G00723-10AR	CL-5-G00752-15AR	
		74.00		2.913	CL-5-G00724-10AR	CL-5-G00753-15AR	
		74.61	2-15/16"	2.937	CL-5-G00725-10AR	CL-5-G00754-15AR	
		76.00		2.992	CL-5-G00726-10AR	CL-5-G00755-15AR	
		76.20	3"	3.000	CL-5-G00727-10AR	CL-5-G00756-15AR	
		76.99	3-1/32"	3.031	CL-5-G00728-10AR	CL-5-G00757-15AR	
6	11.11 7/16"	77.00		3.031	CL-6-G00729-10AR	CL-6-G00758-15AR	
		77.79	3-1/16"	3.063	CL-6-G00730-10AR	CL-6-G00759-15AR	
		78.00		3.071	CL-6-G00731-10AR	CL-6-G00760-15AR	
		79.38	3-1/8"	3.125	CL-6-G00732-10AR	CL-6-G00761-15AR	
		80.00		3.150	CL-6-G00733-10AR	CL-6-G00762-15AR	
		80.96	3-3/16"	3.187	CL-6-G00734-10AR	CL-6-G00763-15AR	
		82.00		3.228	CL-6-G00735-10AR	CL-6-G00762-15AR	
		82.55	3-1/4"	3.250	CL-6-G00736-10AR	CL-6-G00763-15AR	
		84.00		3.307	CL-6-G00737-10AR	CL-6-G00762-15AR	
		84.14	3-5/16"	3.313	CL-6-G00738-10AR	CL-6-G00763-15AR	
		85.73	3-3/8"	3.375	CL-6-G00739-10AR	CL-6-G00764-15AR	
		86.00		3.386	CL-6-G00740-10AR	CL-6-G00765-15AR	
		87.31	3-7/16"	3.437	CL-6-G00741-10AR	CL-6-G00766-15AR	

Konik şaft ve Helisel flüt tutucu



Tip(Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	MT	G2	RCA		
DFT-40-MMKA5-20N DFT-40-MMKA5-50N DFT-40-MMKA5-70N DFT-40-MMKA5-90N	50	63.50 ~ 76.99 2.5" ~ 3.031"	172 464 660 889	216 508 705 933	287 579 776 1005	430 722 919 1148	MT5	1/2"	SH-5715R	2102043	2502019
DFT-55-MMKA5-20N DFT-55-MMKA5-50N DFT-55-MMKA5-70N DFT-55-MMKA5-90N	55	77.00 ~ 89.09 3.031" ~ 3.507"	172 464 660 889	216 508 705 933	287 579 776 1005	430 722 919 1148	MT5	1/2"	SH-5715R	2102043	2502019

HSS-PM uç serisi

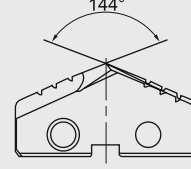
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HPM10 — Toz yüksek hız çeliği, sertliği hb275'e kadar olan karbon çeliğini işlemek için uygulayın;

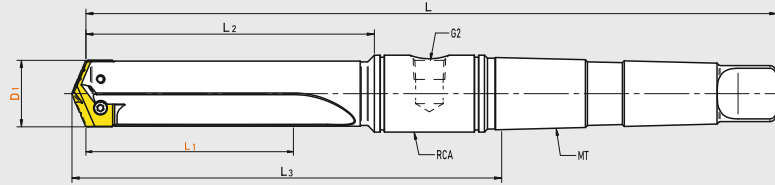
HPM15 — Toz kobalt yüksek hız çeliği, karbon çeliği, paslanmaz çelik, dökme demir ve sertliği hb350'ye kadar olan diğer malzemeleri işlemek için geçerlidir;

HPM25 — Toz kobalt bakımından zengin yüksek hız çeliği, alaşımlı çelik, paslanmaz çelik, dökme demir ve sertliği hb400'e kadar olan diğer malzemeleri işlemek için geçerlidir



Bağlayıcı	Kalınlık mm/inç	Çap			Malzeme (Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	HPM10	HPM15	HPM25
6	11.11 7/16"	88.00		3.465	CL-6-G00767-10AR	CL-6-G00805-15AR	
		88.90	3-1/2"	3.500	CL-6-G00768-10AR	CL-6-G00806-15AR	
		89.00		3.504	CL-6-G00769-10AR	CL-6-G00807-15AR	
7	11.11 7/16"	89.96	3-17/32"	3.542	CL-7-G00780-10AR	CL-7-G00808-15AR	
		90.00		3.543	CL-7-G00781-10AR	CL-7-G00809-15AR	
		90.49	3-9/16"	3.563	CL-7-G00782-10AR	CL-7-G00810-15AR	
		92.00		3.622	CL-7-G00783-10AR	CL-7-G00811-15AR	
		92.08	3-5/8"	3.625	CL-7-G00784-10AR	CL-7-G00812-15AR	
		93.66	3-11/16"	3.687	CL-7-G00785-10AR	CL-7-G00813-15AR	
		94.00		3.701	CL-7-G00786-10AR	CL-7-G00814-15AR	
		95.25	3-3/4"	3.750	CL-7-G00787-10AR	CL-7-G00815-15AR	
		96.00		3.780	CL-7-G00788-10AR	CL-7-G00816-15AR	
		96.84	3-13/16"	3.813	CL-7-G00789-10AR	CL-7-G00817-15AR	
		98.00		3.858	CL-7-G00790-10AR	CL-7-G00818-15AR	
		98.43	3-7/8"	3.875	CL-7-G00791-10AR	CL-7-G00819-15AR	
		100.00		3.937	CL-7-G00792-10AR	CL-7-G00820-15AR	
		100.01	3-15/16"	3.937	CL-7-G00793-10AR	CL-7-G00821-15AR	
		101.60	4"	4.000	CL-7-G00794-10AR	CL-7-G00822-15AR	
8	11.11 7/16"	102.00		4.016	CL-8-G00795-10AR	CL-8-G00823-15AR	
		104.00		4.094	CL-8-G00796-10AR	CL-8-G00824-15AR	
		104.78	4-1/8"	4.125	CL-8-G00797-10AR	CL-8-G00825-15AR	
		106.00		4.173	CL-8-G00798-10AR	CL-8-G00826-15AR	
		107.95	4-1/4"	4.250	CL-8-G00799-10AR	CL-8-G00827-15AR	
		108.00		4.252	CL-8-G00800-10AR	CL-8-G00828-15AR	
		110.00		4.331	CL-8-G00801-10AR	CL-8-G00829-15AR	
		112.00		4.409	CL-8-G00802-10AR	CL-8-G00830-15AR	
		114.00		4.488	CL-8-G00803-10AR	CL-8-G00831-15AR	
		114.30	4-1/2"	4.500	CL-8-G00804-10AR	CL-8-G00832-15AR	

Konik şaft ve Helisel flüt tutucu



Tip(Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	MT	G2	RCA		
VGH-55-MMKP5-20N VGH-55-MMKP5-50N VGH-55-MMKP5-70N VGH-55-MMKP5-90N	55	77.00 ~ 89.09 3.031" ~ 3.507"	172 464 660 889	216 508 705 933	287 579 776 1005	430 722 919 1148	MT5	1/2"	SH-5715R	2102043	2502019
DFT-70-MMKP5-20N DFT-70-MMKP5-50N DFT-70-MMKP5-70N DFT-70-MMKP5-90N	70	89.10 ~ 101.60 3.508" ~ 4"	172 556 685 939	225 610 740 994	297 681 811 1065	440 824 954 1208	MT5	1/2"	SH-5715R	2102043	2502019
DFT-80-MMKP5-20N DFT-80-MMKP5-50N DFT-80-MMKP5-70N DFT-80-MMKP5-90N	80	101.61 ~ 114.30 4" ~ 4.5"	172 556 685 939	225 610 740 994	297 681 811 1065	440 824 954 1208	MT5	1/2"	SH-5715R	2102043	2502019

HSS-PM uç serisi

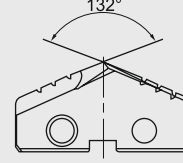
HSS
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HPM10 — Toz yüksek hız çeliği, sertliği hb275'e kadar olan karbon çeliğini işlemek için uygulayın;

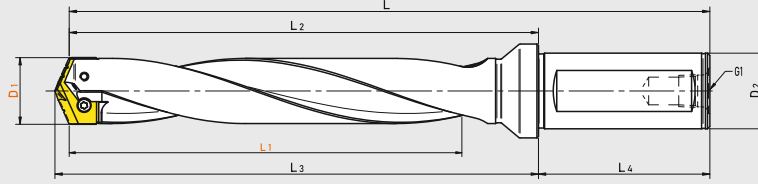
HPM15 — Toz kobalt yüksek hız çeliği, karbon çeliği, paslanmaz çelik, dökme demir ve sertliği hb350'ye kadar olan diğer malzemeleri işlemek için geçerlidir;

HPM25 — Toz kobalt bakımından zengin yüksek hız çeliği, alaşımlı çelik, paslanmaz çelik, dökme demir ve sertliği hb400'e kadar olan diğer malzemeleri işlemek için geçerlidir.



Bağlayıcı	Kalınlık mm/inç	Çap			Malzeme (Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	HPM10	HPM15	HPM25
Y	2.38 3/32"	9.50		0.374			CL-Y-G00859-25AR
		9.53	3/8"	0.375			CL-Y-G00860-25AR
		9.80		0.386			CL-Y-G00861-25AR
		10.00		0.394			CL-Y-G00862-25AR
		10.20		0.402			CL-Y-G00863-25AR
		10.50		0.413			CL-Y-G00864-25AR
		10.72	27/64"	0.422			CL-Y-G00865-25AR
		10.80		0.425			CL-Y-G00866-25AR
		11.00		0.433			CL-Y-G00867-25AR
		11.11	7/16"	0.437			CL-Y-G00868-25AR
Z	2.38 3/32"	11.50		0.453			CL-Z-G00869-25AR
		11.51	29/64"	0.453			CL-Z-G00870-25AR
		12.00		0.472			CL-Z-G00871-25AR
		12.30	31/64"	0.484			CL-Z-G00872-25AR
		12.50		0.492			CL-Z-G00873-25AR
		12.70	1/2"	0.500			CL-Z-G00874-25AR
0	3.18 1/8"	13.00		0.512	CL-0-G00833-10AR	CL-0-G00846-15AR	CL-0-G00875-25AR
		13.50		0.531	CL-0-G00834-10AR	CL-0-G00847-15AR	CL-0-G00876-25AR
		14.00		0.551	CL-0-G00835-10AR	CL-0-G00848-15AR	CL-0-G00877-25AR
		14.29	9/16"	0.563	CL-0-G00836-10AR	CL-0-G00849-15AR	CL-0-G00878-25AR
		14.50		0.571	CL-0-G00837-10AR	CL-0-G00850-15AR	CL-0-G00880-25AR
		15.00		0.591	CL-0-G00838-10AR	CL-0-G00851-15AR	CL-0-G00881-25AR
0	3.18 1/8"	15.50		0.610	CL-0-G00839-10AR	CL-0-G00852-15AR	CL-0-G00882-25AR
		15.88	5/8"	0.625	CL-0-G00840-10AR	CL-0-G00853-15AR	CL-0-G00883-25AR
		16.00		0.630	CL-0-G00841-10AR	CL-0-G00854-15AR	CL-0-G00884-25AR
		16.50		0.650	CL-0-G00842-10AR	CL-0-G00855-15AR	CL-0-G00885-25AR
		17.00		0.669	CL-0-G00843-10AR	CL-0-G00856-15AR	CL-0-G00886-25AR
		17.46	11/16"	0.687	CL-0-G00844-10AR	CL-0-G00857-15AR	CL-0-G00887-25AR
		17.50		0.689	CL-0-G00845-10AR	CL-0-G00858-15AR	CL-0-G00888-25AR

Yanal sabitleme tipi sap ve Düz oluk tutucu



Tip(Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	D2	L4	G1		
DFT-Y0-MMK020-40N DFT-Y0-MMK020-50N	Y0	9.50 ~ 11.49 0.374" ~ 0.452"	60 111	90 141	92 143	140 191	20	50	1/8"	2102047	2502018
DFT-Z0-MMK020-40N DFT-Z0-MMK020-50N	Z0	11.50 ~ 12.97 0.453" ~ 0.511"	60 111	90 141	92 143	140 191	20	50	1/8"	2102048	2502018
DFT-00-MMK020-40N DFT-00-MMK020-50N DFT-00-MMK020-60N	00	12.98 ~ 15.49 0.511" ~ 0.61"	64 114 178	92 143 206	95 146 209	142 193 256	20	50	1/8"	2102230	2502017
DFT-05-MMK020-40N DFT-05-MMK020-50N DFT-05-MMK020-60N	05	15.50 ~ 17.85 0.61" ~ 0.703"	64 114 178	92 143 206	95 146 209	142 193 256	20	50	1/8"	2102046	2502017



HSS-PM uç serisi

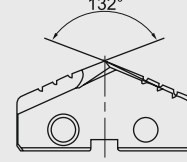
HSS
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HPC

HPM10 — Toz yüksek hız çeliği, sertliği hb275'e kadar olan karbon çeliğini işlemek için uygulayın;

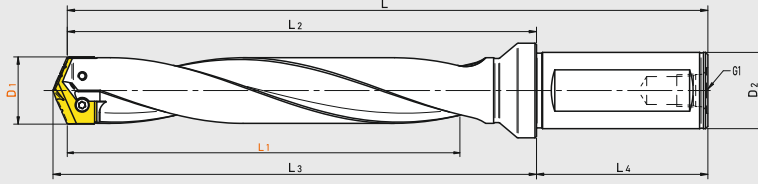
HPM15 — Toz kobalt yüksek hız çeliği, karbon çeliği, paslanmaz çelik, dökme demir ve sertliği hb350'ye kadar olan diğer malzemeleri işlemek için geçerlidir;

HPM25 — Toz kobalt bakımından zengin yüksek hız çeliği, alaşımlı çelik, paslanmaz çelik, dökme demir ve sertliği hb400'e kadar olan diğer malzemeleri işlemek için geçerlidir.



Bağlayıcı	Kalınlık mm/inç	Çap			Malzeme (Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	HPM10	HPM15	HPM25
1	3.97 5/32"	18.00		0.709	CL-1-G00889-10AR	CL-1-G00918-15AR	CL-1-G00947-25AR
		18.50		0.728	CL-1-G00890-10AR	CL-1-G00919-15AR	CL-1-G00948-25AR
		19.00		0.748	CL-1-G00891-10AR	CL-1-G00920-15AR	CL-1-G00949-25AR
		19.05	3/4"	0.750	CL-1-G00892-10AR	CL-1-G00921-15AR	CL-1-G00950-25AR
		19.50		0.768	CL-1-G00893-10AR	CL-1-G00922-15AR	CL-1-G00951-25AR
		20.00		0.787	CL-1-G00894-10AR	CL-1-G00923-15AR	CL-1-G00952-25AR
		20.50		0.807	CL-1-G00895-10AR	CL-1-G00924-15AR	CL-1-G00953-25AR
		20.64	13/16"	0.813	CL-1-G00896-10AR	CL-1-G00925-15AR	CL-1-G00954-25AR
		21.00		0.827	CL-1-G00897-10AR	CL-1-G00926-15AR	CL-1-G00955-25AR
		21.50		0.846	CL-1-G00898-10AR	CL-1-G00927-15AR	CL-1-G00956-25AR
1	3.97 5/32"	22.00		0.866	CL-1-G00899-10AR	CL-1-G00928-15AR	CL-1-G00957-25AR
		22.23	7/8"	0.875	CL-1-G00900-10AR	CL-1-G00929-15AR	CL-1-G00958-25AR
		23.00		0.906	CL-1-G00901-10AR	CL-1-G00930-15AR	CL-1-G00959-25AR
		23.81	15/16"	0.937	CL-1-G00902-10AR	CL-1-G00931-15AR	CL-1-G00960-25AR
		24.00		0.945	CL-1-G00903-10AR	CL-1-G00932-15AR	CL-1-G00961-25AR
2	4.76 3/16"	25.00		0.984	CL-2-G00904-10AR	CL-2-G00933-15AR	CL-2-G00962-25AR
		25.40	1"	1.000	CL-2-G00905-10AR	CL-2-G00934-15AR	CL-2-G00963-25AR
		26.00		1.024	CL-2-G00906-10AR	CL-2-G00935-15AR	CL-2-G00964-25AR
		26.99	1-1/16"	1.063	CL-2-G00907-10AR	CL-2-G00936-15AR	CL-2-G00965-25AR
		27.00		1.063	CL-2-G00908-10AR	CL-2-G00937-15AR	CL-2-G00966-25AR
		28.00		1.102	CL-2-G00909-10AR	CL-2-G00938-15AR	CL-2-G00967-25AR
		28.58	1-1/8"	1.125	CL-2-G00910-10AR	CL-2-G00939-15AR	CL-2-G00968-25AR
		29.00		1.142	CL-2-G00911-10AR	CL-2-G00940-15AR	CL-2-G00969-25AR
2	4.76 3/16"	30.00		1.181	CL-2-G00912-10AR	CL-2-G00941-15AR	CL-2-G00970-25AR
		30.16	1-3/16"	1.187	CL-2-G00913-10AR	CL-2-G00942-15AR	CL-2-G00971-25AR
		31.00		1.220	CL-2-G00914-10AR	CL-2-G00943-15AR	CL-2-G00972-25AR
		31.75	1-1/4"	1.250	CL-2-G00915-10AR	CL-2-G00944-15AR	CL-2-G00973-25AR
		32.00		1.260	CL-2-G00916-10AR	CL-2-G00945-15AR	CL-2-G00974-25AR
		33.00		1.299	CL-2-G00917-10AR	CL-2-G00946-15AR	CL-2-G00975-25AR

Yanal sabitleme tipi sap ve Düz oluk tutucu



Tip(Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	D2	L4	G1		
DFT-10-MMK025-30N DFT-10-MMK025-40N DFT-10-MMK025-50N	10	17.86 ~ 21.99 0.703" ~ 0.866"	118 168 270	155 206 307	158 209 311	211 262 363	25	56	1/8"	2102049	2502016
DFT-15-MMK025-30N DFT-15-MMK025-40N DFT-15-MMK025-50N	15	22.00 ~ 24.60 0.866" ~ 0.969"	118 168 270	155 206 307	158 209 311	211 262 363	25	56	1/8"	2102049	2502016
DFT-20-MMK032-30N DFT-20-MMK032-40N DFT-20-MMK032-50N	20	24.61 ~ 29.99 0.969" ~ 1.181"	137 187 289	179 230 332	183 234 335	239 290 392	32	60	1/4"	2102045	2502020
DFT-25-MMK032-30N DFT-25-MMK032-40N DFT-25-MMK032-50N	25	30.00 ~ 35.50 1.181" ~ 1.398"	137 187 289	179 230 332	183 234 335	239 290 392	32	60	1/4"	2102045	2502020

HSS-PM uç serisi

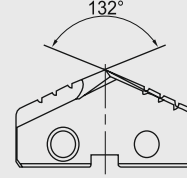
HSS
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HPM10 — Toz yüksek hız çeliği, sertliği hb275'e kadar olan karbon çeliğini işlemek için uygulayın;

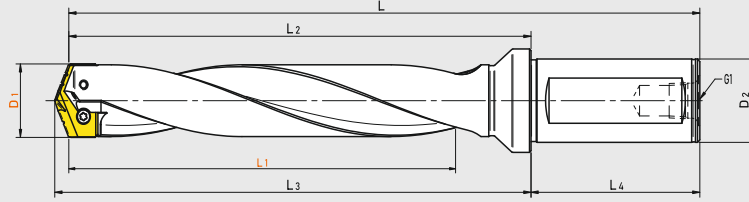
HPM15 — Toz kobalt yüksek hız çeliği, karbon çeliği, paslanmaz çelik, dökme demir ve sertliği hb350'ye kadar olan diğer malzemeleri işlemek için geçerlidir;

HPM25 — Toz kobalt bakımından zengin yüksek hız çeliği, alaşımlı çelik, paslanmaz çelik, dökme demir ve sertliği hb400'e kadar olan diğer malzemeleri işlemek için geçerlidir.



Bağlayıcı	Kalınlık mm/inç	Çap			Malzeme(Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	HPM10	HPM15	HPM25
2	4.76 3/16"	33.34	1-5/16"	1.313	CL-2-G00976-10AR	CL-2-G01001-15AR	CL-2-G01026-25AR
		34.00		1.339	CL-2-G00977-10AR	CL-2-G01002-15AR	CL-2-G01027-25AR
		34.13	1-11/32"	1.344	CL-2-G00978-10AR	CL-2-G01003-15AR	CL-2-G01028-25AR
		34.93	1-3/8"	1.375	CL-2-G00979-10AR	CL-2-G01004-15AR	CL-2-G01029-25AR
		35.00		1.378	CL-2-G00980-10AR	CL-2-G01005-15AR	CL-2-G01030-25AR
3	6.35 1/4"	36.00		1.417	CL-3-G00981-10AR	CL-3-G01006-15AR	CL-3-G01031-25AR
		36.51	1-7/16"	1.437	CL-3-G00982-10AR	CL-3-G01007-15AR	CL-3-G01032-25AR
		37.00		1.457	CL-3-G00983-10AR	CL-3-G01008-15AR	CL-3-G01033-25AR
		38.00		1.496	CL-3-G00984-10AR	CL-3-G01009-15AR	CL-3-G01034-25AR
		38.10	1-1/2"	1.500	CL-3-G00985-10AR	CL-3-G0101015AR	CL-3-G01035-25AR
		39.00		1.535	CL-3-G00986-10AR	CL-3-G01011-15AR	CL-3-G01036-25AR
		39.69	1-9/16"	1.563	CL-3-G00987-10AR	CL-3-G01012-15AR	CL-3-G01037-25AR
		40.00		1.575	CL-3-G00988-10AR	CL-3-G01013-15AR	CL-3-G01038-25AR
		41.00		1.614	CL-3-G00989-10AR	CL-3-G01014-15AR	CL-3-G01039-25AR
		41.28	1-5/8"	1.625	CL-3-G00990-10AR	CL-3-G01015-15AR	CL-3-G01040-25AR
3	6.35 1/4"	42.00		1.654	CL-3-G00991-10AR	CL-3-G01016-15AR	CL-3-G01041-25AR
		42.86	1-11/16"	1.687	CL-3-G00992-10AR	CL-3-G01017-15AR	CL-3-G01042-25AR
		43.00		1.693	CL-3-G00993-10AR	CL-3-G01018-15AR	CL-3-G01043-25AR
		44.00		1.732	CL-3-G00994-10AR	CL-3-G01019-15AR	CL-3-G01044-25AR
		44.45	1-3/4"	1.750	CL-3-G00995-10AR	CL-3-G01020-15AR	CL-3-G01045-25AR
		45.00		1.772	CL-3-G00996-10AR	CL-3-G01021-15AR	CL-3-G01045-25AR
		46.00		1.811	CL-3-G00997-10AR	CL-3-G01022-15AR	CL-3-G01047-25AR
		46.04	1-13/16"	1.813	CL-3-G00998-10AR	CL-3-G01023-15AR	CL-3-G01048-25AR
		47.00		1.850	CL-3-G00999-10AR	CL-3-G01024-15AR	CL-3-G01049-25AR
		47.63	1-7/8"	1.875	CL-3-G01000-10AR	CL-3-G01025-15AR	CL-3-G01050-25AR

Yanal sabitleme tipi sap ve Düz oluk tutucu



Tip(Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	D2	L4	G1		
DFT-25-MMK032-30N	25	30.00 ~ 35.50 1.181" ~ 1.398"	137	179	183	239	32	60	1/4"	2102045	2502020
DFT-25-MMK032-40N			187	230	234	290					
DFT-25-MMK032-50N			289	332	335	392					
DFT-30-MMK040-30N	30	35.51 ~ 41.99	165	218	222	288	40	70	1/4"	2102044	2502015
DFT-30-MMK040-40N		1.398" ~ 1.653"	210	262	267	332					
DFT-35-MMK040-30N	35	42.00 ~ 47.99	165	218	222	288	40	70	1/4"	2102044	2502015
DFT-35-MMK040-40N		1.654" ~ 1.899"	210	262	267	332					



HSS-PM uç serisi

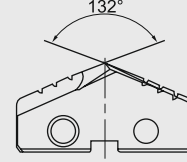
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HPM10 — Toz yüksek hız çeliği, sertliği hb275'e kadar olan karbon çeliğini işlemek için uygulayın;

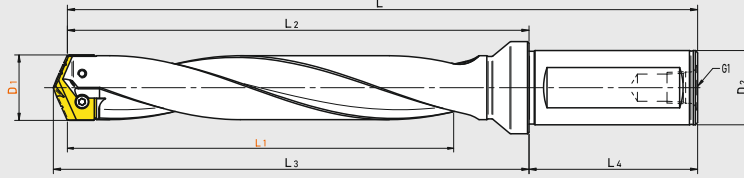
HPM15 — Toz kobalt yüksek hız çeliği, karbon çeliği, paslanmaz çelik, dökme demir ve sertliği hb350'ye kadar olan diğer malzemeleri işlemek için geçerlidir;

HPM25 — Toz kobalt bakımından zengin yüksek hız çeliği, alaşımlı çelik, paslanmaz çelik, dökme demir ve sertliği hb400'e kadar olan diğer malzemeleri işlemek için geçerlidir.



Bağlayıcı	Kalınlık mm/inç	Çap			Malzeme (Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	HPM 10	HPM15	HPM2 5
4	7.94 5/16"	48.00		1.890	CL-4-G01051-10AR	CL-4-G01079-15AR	CL-4-G01108-25AR
		49.21	1-15/16"	1.937	CL-4-G01052-10AR	CL-4-G01080-15AR	CL-4-G01109-25AR
		50.00		1.969	CL-4-G01053-10AR	CL-4-G01081-15AR	CL-4-G01110-25AR
		50.80	2"	2.000	CL-4-G01054-10AR	CL-4-G01082-15AR	CL-4-G01111-25AR
		51.00		2.008	CL-4-G01055-10AR	CL-4-G01083-15AR	CL-4-G01112-25AR
		52.00		2.047	CL-4-G01056-10AR	CL-4-G01084-15AR	CL-4-G01113-25AR
		52.39	2-1/16"	2.063	CL-4-G01057-10AR	CL-4-G01086-15AR	CL-4-G01114-25AR
		53.00		2.087	CL-4-G01058-10AR	CL-4-G01087-15AR	CL-4-G01115-25AR
		53.98	2-1/8"	2.125	CL-4-G01059-10AR	CL-4-G01088-15AR	CL-4-G01116-25AR
		54.00		2.126	CL-4-G01060-10AR	CL-4-G01089-15AR	CL-4-G01117-25AR
		55.00		2.165	CL-4-G01061-10AR	CL-4-G01090-15AR	CL-4-G01118-25AR
		55.56	2-3/16"	2.187	CL-4-G01062-10AR	CL-4-G01091-15AR	CL-4-G01119-25AR
4	7.94 5/16"	56.00		2.205	CL-4-G01063-10AR	CL-4-G01092-15AR	CL-4-G01120-25AR
		57.00		2.244	CL-4-G01064-10AR	CL-4-G01093-15AR	CL-4-G01121-25AR
		57.15	2-1/4"	2.250	CL-4-G01065-10AR	CL-4-G01094-15AR	CL-4-G01122-25AR
		58.00		2.283	CL-4-G01066-10AR	CL-4-G01095-15AR	CL-4-G01123-25AR
		58.74	2-5/16"	2.313	CL-4-G01067-10AR	CL-4-G01096-15AR	CL-4-G01124-25AR
		59.00		2.323	CL-4-G01068-10AR	CL-4-G01097-15AR	CL-4-G01125-25AR
		60.00		2.362	CL-4-G01069-10AR	CL-4-G01098-15AR	CL-4-G01126-25AR
		60.33	2-3/8"	2.375	CL-4-G01070-10AR	CL-4-G01099-15AR	CL-4-G01127-25AR
		61.00		2.402	CL-4-G01071-10AR	CL-4-G01100-15AR	CL-4-G01128-25AR
		61.91	2-7/16"	2.437	CL-4-G01072-10AR	CL-4-G01101-15AR	CL-4-G01129-25AR
		62.00		2.441	CL-4-G01073-10AR	CL-4-G01102-15AR	CL-4-G01130-25AR
		63.00		2.480	CL-4-G01074-10AR	CL-4-G01103-15AR	CL-4-G01131-25AR
		63.50	2-1/2"	2.500	CL-4-G01075-10AR	CL-4-G01104-15AR	CL-4-G01132-25AR
		64.00		2.520	CL-4-G01076-10AR	CL-4-G01105-15AR	CL-4-G01133-25AR
		65.00		2.559	CL-4-G01077-10AR	CL-4-G01106-15AR	CL-4-G01134-25AR
		65.09	2-9/16"	2.563	CL-4-G01078-10AR	CL-4-G01107-15AR	CL-4-G01135-25AR

Yanal sabitleme tipi sap ve Düz oluk tutucu



Tip(Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	D2	L4	G1		
DFT-40-AD40-40N	40	48.00 ~ 55.99 1.89" ~ 2.204"	232	281	286	351	40	70	1/4"	2102044	2502015
DFT-45-AD40-40N	45	56.00 ~ 65.09 2.05" ~ 2.563"	232	281	286	351	40	70	1/4"	2102044	2502015

HSS-PM uç serisi

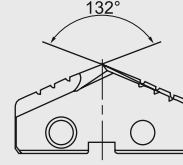
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HPM10 — Toz yüksek hız çeliği, sertliği hb275'e kadar olan karbon çeliğini işlemek için uygulayın;

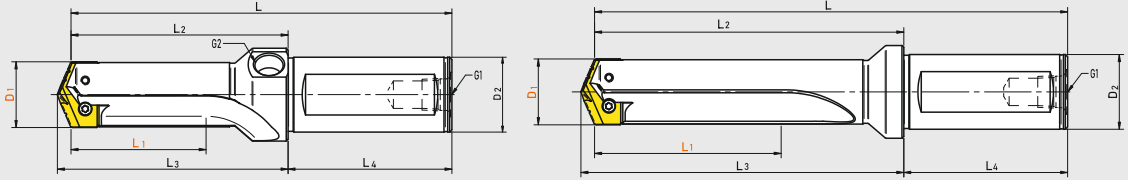
HPM15 — Toz kobalt yüksek hız çeliği, karbon çeliği, paslanmaz çelik, dökme demir ve sertliği hb350'ye kadar olan diğer malzemeleri işlemek için geçerlidir;

HPM25 — Toz kobalt bakımından zengin yüksek hız çeliği, alaşımlı çelik, paslanmaz çelik, dökme demir ve sertliği hb400'e kadar olan diğer malzemeleri işlemek için geçerlidir



Bağlayıcı	Kalınlık mm/inç	Çap			Malzeme (Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	HPM10	HPM15	HPM25
Y	2.38 3/32"	9.50		0.374			CL-Y-G01161-25AR
		9.53	3/8"	0.375			CL-Y-G01162-25AR
		9.80		0.386			CL-Y-G01163-25AR
		10.00		0.394			CL-Y-G01164-25AR
		10.20		0.402			CL-Y-G01165-25AR
		10.50		0.413			CL-Y-G01166-25AR
		10.72	27/64"	0.422			CL-Y-G01167-25AR
		10.80		0.425			CL-Y-G01168-25AR
		11.00		0.433			CL-Y-G01169-25AR
		11.11	7/16"	0.437			CL-Y-G01170-25AR
Z	2.38 3/32"	11.50		0.453			CL-Z-G01171-25AR
		11.51	29/64"	0.453			CL-Z-G01172-25AR
		12.00		0.472			CL-Z-G01173-25AR
		12.30	31/64"	0.484			CL-Z-G01174-25AR
		12.50		0.492			CL-Z-G01175-25AR
		12.70	1/2"	0.500			CL-Z-G01176-25AR
0	3.18 1/8"	13.00		0.512	CL-A-G01135-10AR	CL-A-G01148-15AR	CL-0-G01177-25AR
		13.50		0.531	CL-A-G01136-10AR	CL-A-G01149-15AR	CL-0-G01178-25AR
		14.00		0.551	CL-A-G01137-10AR	CL-A-G01150-15AR	CL-0-G01179-25AR
		14.29	9/16"	0.563	CL-A-G01138-10AR	CL-A-G01151-15AR	CL-0-G01180-25AR
		14.50		0.571	CL-A-G01139-10AR	CL-A-G01152-15AR	CL-0-G01181-25AR
		15.00		0.591	CL-A-G01140-10AR	CL-A-G01153-15AR	CL-0-G01182-25AR
0	3.18 1/8"	15.50		0.610	CL-A-G01141-10AR	CL-A-G01154-15AR	CL-0-G01183-25AR
		15.88	5/8"	0.625	CL-A-G01142-10AR	CL-A-G01155-15AR	CL-0-G01184-25AR
		16.00		0.630	CL-A-G01143-10AR	CL-A-G01156-15AR	CL-0-G01185-25AR
		16.50		0.650	CL-A-G01144-10AR	CL-A-G01157-15AR	CL-0-G01186-25AR
		17.00		0.669	CL-A-G01145-10AR	CL-A-G01158-15AR	CL-0-G01187-25AR
		17.46	11/16"	0.687	CL-A-G01146-10AR	CL-A-G01159-15AR	CL-0-G01188-25AR
		17.50		0.689	CL-A-G01147-10AR	CL-A-G01160-15AR	CL-0-G01189-25AR

Yanal sabitleme tipi sap ve Düz oluk tutucu



Tip (Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	D2	L4	G1	G2		
DFT-YO-MK016-10N	YO	9.50 ~ 11.49 0.374" ~ 0.452"	19	48	50	96	16	48	1/16"	1/8"	2102047	2502018
DFT-YO-MK020-20N			32	61	64	111	20	50	1/8"	—		
DFT-YO-MK020-70N			222	252	254	302	20	50	1/8"	—		
DFT-YO-MK020-90N			290	320	322	370	20	50	1/8"	—		
DFT-ZO-MK016-10N	ZO	11.50 ~ 12.97 0.453" ~ 0.511"	19	48	50	96	16	48	1/16"	1/8"	2102048	2502018
DFT-ZO-MK020-20N			32	61	64	111	20	50	1/8"	—		
DFT-ZO-MK020-70N			222	252	254	310	20	50	1/8"	—		
DFT-ZO-MK020-90N			290	320	322	370	20	50	1/8"	—		
DFT-00-MK020-10N	00	12.98 ~ 15.49 0.511" ~ 0.61"	22	48	50	98	20	50	1/8"	1/8"	2102230	2502017
DFT-00-MK020-20N			35	64	66	114				—		
DFT-00-MK020-70N			295	324	327	374				—		
DFT-00-MK020-90N			387	416	419	466				—		
DFT-05-MK020-10N	05	15.50 ~ 17.85 0.61" ~ 0.703"	22	48	50	98	20	50	1/8"	1/8"	2102046	2502017
DFT-05-MK020-20N			35	64	66	114				—		
DFT-05-MK020-70N			295	324	327	374				—		
DFT-05-MK020-90N			387	416	419	466				—		

HSS-PM uç serisi

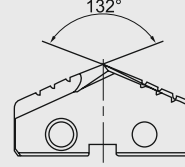
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HPC

HPM10 — Toz yüksek hız çeliği, sertliği hb275'e kadar olan karbon çeliğini işlemek için uygulayın;

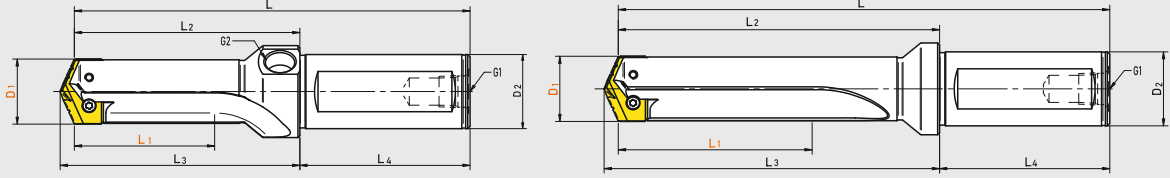
HPM15 — Toz kobalt yüksek hız çeliği, karbon çeliği, paslanmaz çelik, dökme demir ve sertliği hb350'ye kadar olan diğer malzemeleri işlemek için geçerlidir;

HPM25 — Toz kobalt bakımından zengin yüksek hız çeliği, alaşımlı çelik, paslanmaz çelik, dökme demir ve sertliği hb400'e kadar olan diğer malzemeleri işlemek için geçerlidir



Bağlayıcı	Kalınlık mm/inç	Çap			Malzeme (Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	HPM10	HPM15	HPM25
1	3.97 5/32"	18.00		0.709	CL-1-G01189-10AR	CL-1-G01218-15AR	CL-1-G01247-25AR
		18.50		0.728	CL-1-G01190-10AR	CL-1-G01219-15AR	CL-1-G01248-25AR
		19.00		0.748	CL-1-G01191-10AR	CL-1-G01220-15AR	CL-1-G01249-25AR
		19.05	3/4"	0.750	CL-1-G01192-10AR	CL-1-G01221-15AR	CL-1-G01250-25AR
		19.50		0.768	CL-1-G01193-10AR	CL-1-G01222-15AR	CL-1-G01251-25AR
		20.00		0.787	CL-1-G01194-10AR	CL-1-G01223-15AR	CL-1-G01252-25AR
		20.50		0.807	CL-1-G01195-10AR	CL-1-G01224-15AR	CL-1-G01253-25AR
		20.64	13/16"	0.813	CL-1-G01196-10AR	CL-1-G01225-15AR	CL-1-G01254-25AR
		21.00		0.827	CL-1-G01197-10AR	CL-1-G01226-15AR	CL-1-G01255-25AR
		21.50		0.846	CL-1-G01198-10AR	CL-1-G01227-15AR	CL-1-G01256-25AR
1	3.97 5/32"	22.00		0.866	CL-1-G01199-10AR	CL-1-G01228-15AR	CL-1-G01257-25AR
		22.23	7/8"	0.875	CL-1-G01200-10AR	CL-1-G01229-15AR	CL-1-G01258-25AR
		23.00		0.906	CL-1-G01201-10AR	CL-1-G01230-15AR	CL-1-G01259-25AR
		23.81	15/16"	0.937	CL-1-G01202-10AR	CL-1-G01231-15AR	CL-1-G01260-25AR
		24.00		0.945	CL-1-G01203-10AR	CL-1-G01232-15AR	CL-1-G01261-25AR
2	4.76 3/16"	25.00		0.984	CL-2-G01204-10AR	CL-2-G01233-15AR	CL-2-G01262-25AR
		25.40	1"	1.000	CL-2-G01205-10AR	CL-2-G01234-15AR	CL-2-G01263-25AR
		26.00		1.024	CL-2-G01206-10AR	CL-2-G01235-15AR	CL-2-G01264-25AR
		26.99	1-1/16"	1.063	CL-2-G01207-10AR	CL-2-G01236-15AR	CL-2-G01265-25AR
		27.00		1.063	CL-2-G01208-10AR	CL-2-G01237-15AR	CL-2-G01266-25AR
		28.00		1.102	CL-2-G01209-10AR	CL-A2-G01238-15AR	CL-2-G01267-25AR
		28.58	1-1/8"	1.125	CL-2-G01210-10AR	CL-2-G01239-15AR	CL-2-G01268-25AR
		29.00		1.142	CL-2-G01211-10AR	CL-2-G01240-15AR	CL-2-G01269-25AR
2	4.76 3/16"	30.00		1.181	CL-2-G01212-10AR	CL-2-G01241-15AR	CL-2-G01270-25AR
		30.16	1-3/16"	1.187	CL-2-G01213-10AR	CL-2-G01242-15AR	CL-2-G01271-25AR
		31.00		1.220	CL-2-G01214-10AR	CL-2-G01243-15AR	CL-2-G01272-25AR
		31.75	1-1/4"	1.250	CL-2-G01215-10AR	CL-2-G01244-15AR	CL-2-G01273-25AR
		32.00		1.260	CL-2-G01216-10AR	CL-2-G01245-15AR	CL-2-G01274-25AR
		33.00		1.299	CL-2-G01217-10AR	CL-2-G01246-15AR	CL-2-G01275-25AR

Yanal sabitleme tipi sap ve Düz oluk tutucu



Tip (Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	D2	L4	G1	G2		
DFT-10-MK025-10N DFT-10-MK025-20N DFT-10-MK025-70N DFT-10-MK025-90N	10	17.86 ~ 21.99 0.703" ~ 0.866"	48 67 457 569	76 107 495 603	79 111 498 606	132 163 551 659	25	56	1/8" 1/8"	1/8" — — —	2102049	2502016
DFT-15-MK025-10N DFT-15-MK025-20N DFT-15-MK025-70N DFT-15-MK025-90N	15	22.00 ~ 24.60 0.866" ~ 0.969"	48 67 457 569	76 107 495 603	79 111 498 606	132 163 551 659	25	56	1/8" 1/8"	1/8" — — —	2102049	2502016
DFT-20-MK032-10N DFT-20-MK032-20N DFT-20-MK032-70N DFT-20-MK032-90N	20	24.61 ~ 29.99 0.969" ~ 1.181"	57 86 511 692	89 129 554 735	92 132 558 739	149 189 614 795	32	60	1/4" 1/4"	1/8" — — —	2102045	2502020
DFT-25-MK032-10N DFT-25-MK032-20N DFT-25-MK032-70N PLK-25-MK032-90N	25	30.00 ~ 35.50 1.181" ~ 1.398"	57 86 511 692	89 129 554 735	92 132 558 739	149 189 614 795	32	60	1/4" 1/4"	1/8" — — —	2102045	2502020

HSS-PM uç serisi

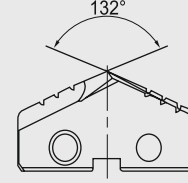
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HPM10 — Toz yüksek hız çeliği, sertliği hb275'e kadar olan karbon çeliğini işlemek için uygulayın;

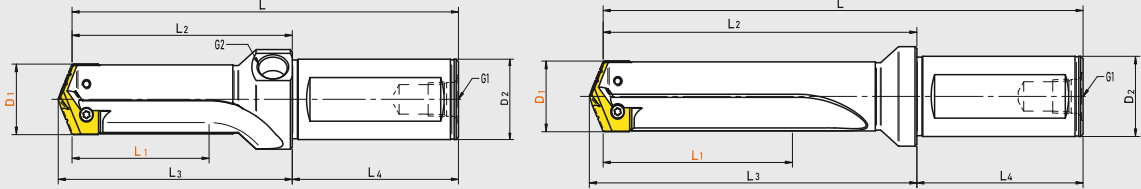
HPM15 — Toz kobalt yüksek hız çeliği, karbon çeliği, paslanmaz çelik, dökme demir ve sertliği hb350'ye kadar olan diğer malzemeleri işlemek için geçerlidir;

HPM25 — Toz kobalt bakımından zengin yüksek hız çeliği, alaşımlı çelik, paslanmaz çelik, dökme demir ve sertliği hb400'e kadar olan diğer malzemeleri işlemek için geçerlidir.



Bağlayıcı	Kalınlık mm/inç	Çap			Malzeme (Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	HPM10	HPM15	HPM25
2	4.76 3/16"	33.34	1-5/16"	1.313	CL-2-G01276-10AR	CL-2-G01301-15AR	CL-2-G01326-25AR
		34.00		1.339	CL-2-G01277-10AR	CL-2-G01302-15AR	CL-2-G01327-25AR
		34.13	1-11/32"	1.344	CL-2-G01278-10AR	CL-2-G01303-15AR	CL-2-G01328-25AR
		34.93	1-3/8"	1.375	CL-2-G01279-10AR	CL-2-G01304-15AR	CL-2-G01329-25AR
		35.00		1.378	CL-2-G01280-10AR	CL-2-G01305-15AR	CL-2-G01330-25AR
3	6.35 1/4"	36.00		1.417	CL-3-G01281-10AR	CL-3-G01306-15AR	CL-3-G01331-25AR
		36.51	1-7/16"	1.437	CL-3-G01282-10AR	CL-3-G01307-15AR	CL-3-G01332-25AR
		37.00		1.457	CL-3-G01283-10AR	CL-3-G01308-15AR	CL-3-G01333-25AR
		38.00		1.496	CL-3-G01284-10AR	CL-3-G01309-15AR	CL-3-G01334-25AR
		38.10	1-1/2"	1.500	CL-3-G01285-10AR	CL-3-G01310-15AR	CL-3-G01335-25AR
		39.00		1.535	CL-3-G01286-10AR	CL-3-G01311-15AR	CL-3-G01336-25AR
		39.69	1-9/16"	1.563	CL-3-G01287-10AR	CL-3-G01312-15AR	CL-3-G01337-25AR
		40.00		1.575	CL-3-G01288-10AR	CL-3-G01313-15AR	CL-3-G01338-25AR
		41.00		1.614	CL-3-G01289-10AR	CL-3-G01314-15AR	CL-3-G01339-25AR
		41.28	1-5/8"	1.625	CL-3-G01290-10AR	CL-3-G01315-15AR	CL-3-G01340-25AR
3	6.35 1/4"	42.00		1.654	CL-3-G01291-10AR	CL-3-G01316-15AR	CL-3-G01341-25AR
		42.86	1-11/16"	1.687	CL-3-G01292-10AR	CL-3-G01317-15AR	CL-3-G01342-25AR
		43.00		1.693	CL-3-G01293-10AR	CL-3-G01318-15AR	CL-3-G01343-25AR
		44.00		1.732	CL-3-G01294-10AR	CL-3-G01319-15AR	CL-3-G01344-25AR
		44.45	1-3/4"	1.750	CL-3-G01295-10AR	CL-3-G01320-15AR	CL-3-G01345-25AR
		45.00		1.772	CL-3-G01296-10AR	CL-3-G01321-15AR	CL-3-G01346-25AR
		46.00		1.811	CL-3-G01297-10AR	CL-3-G01322-15AR	CL-3-G01347-25AR
		46.04	1-13/16"	1.813	CL-3-G01298-10AR	CL-3-G01323-15AR	CL-3-G01348-25AR
		47.00		1.850	CL-3-G01299-10AR	CL-3-G01324-15AR	CL-3-G01349-25AR
		47.63	1-7/8"	1.875	CL-3-G01300-10AR	CL-3-G01325-15AR	CL-3-G01350-25AR

Yanal sabitleme tipi sap ve Düz oluk tutucu



Tip (Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	D2	L4	G1	G2		
DFT-25-MK032-10N	25	30.00 ~ 35.50 1.181" ~ 1.398"	57	89	92	149	32	60	1/4"	1/8"	2102045	2502020
DFT-25-MK032-20N			86	129	132	189				—		
DFT-25-MK032-70N			511	554	558	614				—		
DFT-25-MK032-90N			692	735	739	795				—		
DFT-30-MK040-10N	30	35.51 ~ 41.99 1.398" ~ 1.653"	76	125	130	195	40	70	1/4"	1/4"	2102044	2502015
DFT-30-MK040-20N			121	173	178	243				—		
DFT-30-MK040-30N			349	402	406	472				—		
DFT-30-MK040-70N			559	611	616	681				—		
DFT-30-MK040-90N			787	840	845	910				—		
DFT-35-MK040-10N	35	42.00 ~ 47.99 1.654" ~ 1.899"	76	125	130	195	40	70	1/4"	1/4"	2102044	2502015
DFT-35-MK040-20N			121	173	178	243				—		
DFT-35-MK040-30N			349	402	406	472				—		
DFT-35-MK040-70N			559	611	616	681				—		
DFT-35-MK040-90N			787	840	845	910				—		

HSS-PM uç serisi

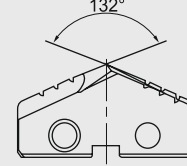
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HPM10 — Toz yüksek hız çeliği, sertliği hb275'e kadar olan karbon çeliğini işlemek için uygulayın;

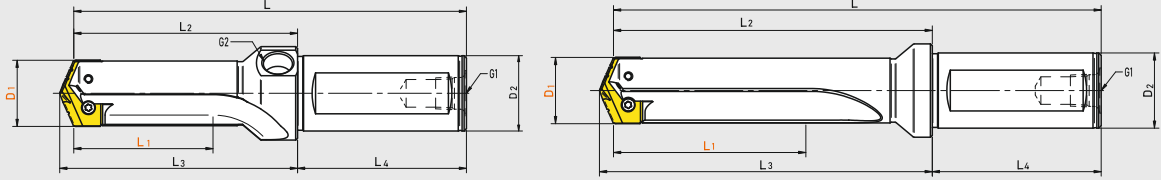
HPM15 — Toz kobalt yüksek hız çeliği, karbon çeliği, paslanmaz çelik, dökme demir ve sertliği hb350'ye kadar olan diğer malzemeleri işlemek için geçerlidir;

HPM25 — Toz kobalt bakımından zengin yüksek hız çeliği, alaşımlı çelik, paslanmaz çelik, dökme demir ve sertliği hb400'e kadar olan diğer malzemeleri işlemek için geçerlidir.



Bağlayıcı	Kalınlık mm/inç	Çap			Malzeme (Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	HPM10	HPM15	HPM25
4	7.94 5/16"	48.00		1.890	CL-4-G01351-10AR	CL-4-G01379-15AR	CL-4-G01405-25AR
		49.21	1-15/16"	1.937	CL-4-G01352-10AR	CL-4-G01380-15AR	CL-4-G01406-25AR
		50.00		1.969	CL-4-G01353-10AR	CL-4-G01381-15AR	CL-4-G01407-25AR
		50.80	2"	2.000	CL-4-G01354-10AR	CL-4-G01382-15AR	CL-4-G01408-25AR
		51.00		2.008	CL-4-G01355-10AR	CL-4-G01383-15AR	CL-4-G01409-25AR
		52.00		2.047	CL-4-G01356-10AR	CL-4-G01384-15AR	CL-4-G01410-25AR
		52.39	2-1/16"	2.063	CL-4-G01357-10AR	CL-4-G01385-15AR	CL-4-G01411-25AR
		53.00		2.087	CL-4-G01358-10AR	CL-4-G01386-15AR	CL-4-G01412-25AR
		53.98	2-1/8"	2.125	CL-4-G01359-10AR	CL-4-G01387-15AR	CL-4-G01413-25AR
		54.00		2.126	CL-4-G01360-10AR	CL-4-G01388-15AR	CL-4-G01414-25AR
		55.00		2.165	CL-4-G01361-10AR	CL-4-G01389-15AR	CL-4-G01415-25AR
		55.56	2-3/16"	2.187	CL-4-G01362-10AR	CL-4-G01390-15AR	CL-4-G01416-25AR
4	7.94 5/16"	56.00		2.205	CL-4-G01363-10AR	CL-4-G01391-15AR	CL-4-G01417-25AR
		57.00		2.244	CL-4-G01364-10AR	CL-4-G01392-15AR	CL-4-G01418-25AR
		57.15	2-1/4"	2.250	CL-4-G01365-10AR	CL-4-G01393-15AR	CL-4-G01419-25AR
		58.00		2.283	CL-4-G01366-10AR	CL-4-G01392-15AR	CL-4-G01420-25AR
		58.74	2-5/16"	2.313	CL-4-G01367-10AR	CL-4-G01393-15AR	CL-4-G01421-25AR
		59.00		2.323	CL-4-G01368-10AR	CL-4-G01394-15AR	CL-4-G01422-25AR
		60.00		2.362	CL-4-G01369-10AR	CL-4-G01395-15AR	CL-4-G01423-25AR
		60.33	2-3/8"	2.375	CL-4-G01370-10AR	CL-4-G01396-15AR	CL-4-G01424-25AR
		61.00		2.402	CL-4-G01371-10AR	CL-4-G01397-15AR	CL-4-G01425-25AR
		61.91	2-7/16"	2.437	CL-4-G01372-10AR	CL-4-G01398-15AR	CL-4-G01426-25AR
		62.00		2.441	CL-4-G01373-10AR	CL-4-G01399-15AR	CL-4-G01427-25AR
		63.00		2.480	CL-4-G01374-10AR	CL-4-G01400-15AR	CL-4-G01428-25AR
		63.50	2-1/2"	2.500	CL-4-G01375-10AR	CL-4-G01401-15AR	CL-4-G01429-25AR
		64.00		2.520	CL-4-G01376-10AR	CL-4-G01402-15AR	CL-4-G01430-25AR
		65.00		2.559	CL-4-G01377-10AR	CL-4-G01403-15AR	CL-4-G01431-25AR
		65.09	2-9/16"	2.563	CL-4-G01378-10AR	CL-4-G01404-15AR	CL-4-G01432-25AR

Yanal sabitleme tipi sap ve Düz oluk tutucu



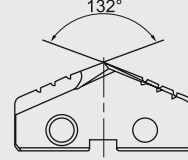
Tip (Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	D2	L4	G1	G2		
DFT-40-MK040-20N	40	48.00 ~ 55.99 1.89" ~ 2.204"	130	179	184	249	40	70	1/4"	—	2102044	2502015
DFT-40-MK040-50N			422	472	476	542						
DFT-40-MK040-70N			625	675	680	745						
DFT-40-MK040-90N			879	929	934	999						
DFT-45-MK040-20N	45	56.00 ~ 65.09 2.05" ~ 2.563"	130	179	184	249	40	70	1/4"	—	2102044	2502015
DFT-45-MK040-50N			422	472	476	542						
DFT-45-MK040-70N			625	675	680	745						
DFT-45-MK040-90N			879	929	934	999						

Karbür Serileri

Karbür

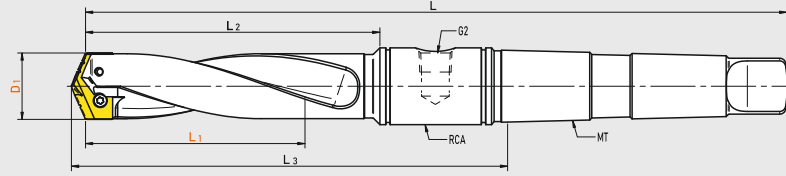
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Bağlayıcı	Kalınlık (mm/inç)	Çap			Uygulama(Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	P	K	N
Y	2.38 3/32"	9.50		0.374	CL-Y-G01433-50AR	CL-Y-G01465-50AR	CL-Y-G01497-50AR
		9.53	3/8"	0.375	CL-Y-G01434-50AR	CL-Y-G01466-50AR	CL-Y-G01498-50AR
		9.80		0.386	CL-Y-G01435-50AR	CL-Y-G01467-50AR	CL-Y-G01499-50AR
		10.00		0.394	CL-Y-G01436-50AR	CL-Y-G01468-50AR	CL-Y-G01500-50AR
		10.20		0.402	CL-Y-G01437-50AR	CL-Y-G01469-50AR	CL-Y-G01501-50AR
		10.50		0.413	CL-Y-G01438-50AR	CL-Y-G01470-50AR	CL-Y-G01502-50AR
		10.72	27/64"	0.422	CL-Y-G01439-50AR	CL-Y-G01471-50AR	CL-Y-G01506-50AR
		10.80		0.425	CL-Y-G01440-50AR	CL-Y-G01472-50AR	CL-Y-G01504-50AR
		11.00		0.433	CL-Y-G01441-50AR	CL-Y-G01473-50AR	CL-Y-G01505-50AR
		11.11	7/16"	0.437	CL-Y-G01442-50AR	CL-Y-G01474-50AR	CL-Z-G01506-50AR
Z	2.38 3/32"	11.50		0.453	CL-Z-G01443-50AR	CL-Z-G01475-50AR	CL-Z-G01507-50AR
		11.51	29/64"	0.453	CL-Z-G01444-50AR	CL-Z-G01476-50AR	CL-Z-G01508-50AR
		12.00		0.472	CL-Z-G01445-50AR	CL-Z-G01477-50AR	CL-Z-G01509-50AR
		12.30	31/64"	0.484	CL-Z-G01446-50AR	CL-Z-G01478-50AR	CL-Z-G01510-50AR
		12.50		0.492	CL-Z-G01447-50AR	CL-Z-G01479-50AR	CL-Z-G01511-50AR
		12.70	1/2"	0.500	CL-Z-G01448-50AR	CL-Z-G01480-50AR	CL-Z-G01512-50AR
0	3.18 1/8"	13.00		0.512	CL-0-G01449-50AR	CL-0-G01481-50AR	CL-0-G01513-50AR
		13.50		0.531	CL-0-G01450-50AR	CL-0-G01482-50AR	CL-0-G01514-50AR
		14.00		0.551	CL-0-G01451-50AR	CL-0-G01483-50AR	CL-0-G01515-50AR
		14.29	9/16"	0.563	CL-0-G01452-50AR	CL-0-G01484-50AR	CL-0-G01516-50AR
		14.50		0.571	CL-0-G01453-50AR	CL-0-G01485-50AR	CL-0-G01517-50AR
		15.00		0.591	CL-0-G01454-50AR	CL-0-G01486-50AR	CL-0-G01518-50AR
0	3.18 1/8"	15.50		0.610	CL-0-G01455-50AR	CL-0-G01487-50AR	CL-0-G01519-50AR
		15.88	5/8"	0.625	CL-0-G01456-50AR	CL-0-G01488-50AR	CL-0-G01520-50AR
		16.00		0.630	CL-0-G01457-50AR	CL-0-G01489-50AR	CL-0-G01521-50AR
		16.50		0.650	CL-0-G01458-50AR	CL-0-G01490-50AR	CL-0-G01522-50AR
		17.00		0.669	CL-0-G01459-50AR	CL-0-G01491-50AR	CL-0-G01523-50AR
		17.46	11/16"	0.687	CL-0-G01460-50AR	CL-0-G01492-50AR	CL-0-G01524-50AR
		17.50		0.689	CL-0-G01461-50AR	CL-0-G01493-50AR	CL-0-G01525-50AR
1	3.97 5/32"	18.00		0.709	CL-1-G01462-50AR	CL-1-G01494-50AR	CL-1-G01526-50AR
		18.50		0.728	CL-1-G01463-50AR	CL-1-G01495-50AR	CL-1-G01527-50AR
		19.00		0.748	CL-1-G01464-50AR	CL-1-G01496-50AR	CL-1-G01528-50AR

Konik şaft ve Helisel flüt tutucu



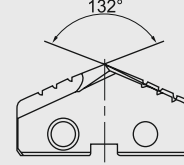
Tip (Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	MT	G2	RCA		
DFT-YO-MKKT2-20N DFT-YO-MKKT2-40N DFT-YO-MKKT2-50N	YO	9.50 ~ 11.49 0.374" ~ 0.452"	32 60 111	52 80 131	88 117 167	160 189 240	MT2	1/16"	SH-1905R	2102047	2502018
DFT-ZO-MKKT2-20N DFT-ZO-MKKT2-40N DFT-ZO-MKKT2-50N	ZO	11.50 ~ 12.97 0.453" ~ 0.511"	32 60 111	52 80 131	88 117 167	160 189 240	MT2	1/16"	SH-1905R	2102048	2502018
DFT-00-MKKT2-20N DFT-00-MKKT2-40N DFT-00-MKKT2-50N DFT-00-MKKT2-60N	00	12.98 ~ 15.49 0.511" ~ 0.61"	35 64 114 178	56 84 135 199	92 121 172 235	164 193 244 307	MT2	1/16"	SH-1905R	2102230	2502017
DFT-05-MKKT2-20N DFT-05-MKKT2-40N DFT-05-MKKT2-50N DFT-05-MKKT2-60N	05	15.50 ~ 17.85 0.61" ~ 0.703"	35 64 114 178	56 84 135 199	92 121 172 235	164 193 244 307	MT2	1/16"	SH-1905R	2102046	2502017
DFT-10-MKKT3-20N DFT-10-MKKT3-30N DFT-10-MKKT3-40N DFT-10-MKKT3-50N	10	17.86 ~ 21.99 0.703" ~ 0.866"	70 121 172 273	98 149 200 302	143 193 244 346	233 283 334 436	MT3	1/8"	SH-2540R	2102049	2502016

Karbür Serileri

Karbür

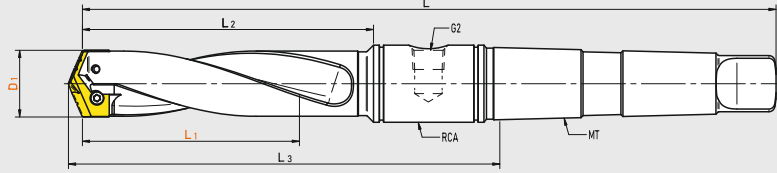
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Bağlayıcı	Kalınlık (mm/inç)	Çap			Uygulama(Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	P	K	N
1	3.97 5/32"	19.05	3/4"	0.750	CL-1-G01529-50AR	CL-1-G01560-50AR	CL-1-G01591-50AR
		19.50		0.768	CL-1-G01530-50AR	CL-1-G01561-50AR	CL-1-G01592-50AR
		20.00		0.787	CL-1-G01531-50AR	CL-1-G01562-50AR	CL-1-G01593-50AR
		20.50		0.807	CL-1-G01532-50AR	CL-1-G01563-50AR	CL-1-G01594-50AR
		20.64	13/16"	0.813	CL-1-G01533-50AR	CL-1-G01564-50AR	CL-1-G01595-50AR
		21.00		0.827	CL-1-G01534-50AR	CL-1-G01565-50AR	CL-1-G01596-50AR
		21.50		0.846	CL-1-G01535-50AR	CL-1-G01566-50AR	CL-1-G01597-50AR
1	3.97 5/32"	22.00		0.866	CL-1-G01536-50AR	CL-1-G01567-50AR	CL-1-G01598-50AR
		22.23	7/8"	0.875	CL-1-G01537-50AR	CL-1-G01568-50AR	CL-1-G01599-50AR
		23.00		0.906	CL-1-G01538-50AR	CL-1-G01569-50AR	CL-1-G01600-50AR
		23.81	15/16"	0.937	CL-1-G01539-50AR	CL-1-G01570-50AR	CL-1-G01601-50AR
		24.00		0.945	CL-1-G01540-50AR	CL-1-G01571-50AR	CL-1-G01602-50AR
2	4.76 3/16"	25.00		0.984	CL-2-G01541-50AR	CL-2-G01572-50AR	CL-2-G01603-50AR
		25.40	1"	1.000	CL-2-G01542-50AR	CL-2-G01573-50AR	CL-2-G01604-50AR
		26.00		1.024	CL-2-G01543-50AR	CL-2-G01574-50AR	CL-2-G01605-50AR
		26.99	1-1/16"	1.063	CL-2-G01544-50AR	CL-2-G01575-50AR	CL-2-G01606-50AR
		27.00		1.063	CL-2-G01545-50AR	CL-2-G01576-50AR	CL-2-G01607-50AR
		28.00		1.102	CL-2-G01546-50AR	CL-2-G01577-50AR	CL-2-G01608-50AR
		28.58	1-1/8"	1.125	CL-2-G01547-50AR	CL-2-G01578-50AR	CL-2-G01609-50AR
		29.00		1.142	CL-2-G01548-50AR	CL-2-G01579-50AR	CL-2-G01610-50AR
2	4.76 3/16"	30.00		1.181	CL-2-G01549-50AR	CL-2-G01580-50AR	CL-2-G01611-50AR
		30.16	1-3/16"	1.187	CL-2-G01550-50AR	CL-2-G01581-50AR	CL-2-G01612-50AR
		31.00		1.220	CL-2-G01551-50AR	CL-2-G01582-50AR	CL-2-G01613-50AR
		31.75	1-1/4"	1.250	CL-2-G01552-50AR	CL-2-G01583-50AR	CL-2-G01614-50AR
		32.00		1.260	CL-2-G01553-50AR	CL-2-G01584-50AR	CL-2-G01615-50AR
		33.00		1.299	CL-2-G01554-50AR	CL-2-G01585-50AR	CL-2-G01616-50AR
		33.34	1-5/16"	1.313	CL-2-G01555-50AR	CL-2-G01586-50AR	CL-2-G01617-50AR
		34.00		1.339	CL-2-G01556-50AR	CL-2-G01587-50AR	CL-2-G01618-50AR
		34.13	1-11/32"	1.344	CL-2-G01557-50AR	CL-2-G01588-50AR	CL-2-G01619-50AR
		34.93	1-3/8"	1.375	CL-2-G01558-50AR	CL-2-G01589-50AR	CL-2-G01620-50AR
		35.00		1.378	CL-2-G01559-50AR	CL-2-G01590-50AR	CL-2-G01621-50AR

Konik şaft ve Helisel flüt tutucu



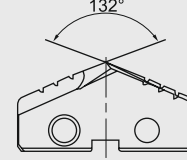
Tip (Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	MT	G2	RCA		
DFT-10-MKKT3-20N	10	17.86 ~ 21.99 0.703" ~ 0.866"	70	98	143	233	MT3	1/8"	SH-2540R	2102049	2502016
DFT-10-MKKT3-30N			121	149	193	283					
DFT-10-MKKT3-40N			172	200	244	334					
DFT-10-MKKT3-50N			273	302	346	436					
DFT-15-MKKT3-20N	15	22.00 ~ 24.60 0.866" ~ 0.969"	70	98	142	232	MT3	1/8"	SH-2540R	2102049	2502016
DFT-15-MKKT3-30N			121	149	193	283					
DFT-15-MKKT3-40N			172	200	244	334					
DFT-15-MKKT3-50N			273	302	346	436					
DFT-20-MKKT4-20N	20	24.61 ~ 29.99 0.969" ~ 1.181"	86	114	160	274	MT4	1/8"	SH-2540R	2102045	2502020
DFT-20-MKKT4-30N			137	165	211	325					
DFT-20-MKKT4-40N			187	216	262	375					
DFT-20-MKKT4-50N			289	318	364	477					
DFT-25-MKKT4-20N	25	30.00 ~ 35.50 1.181" ~ 1.398"	86	114	168	281	MT4	1/4"	SH-3175R	2102045	2502020
DFT-25-MKKT4-30N			137	165	218	332					
DFT-25-MKKT4-40N			187	216	269	383					
DFT-25-MKKT4-50N			289	318	371	484					

Karbür Serileri

Karbür

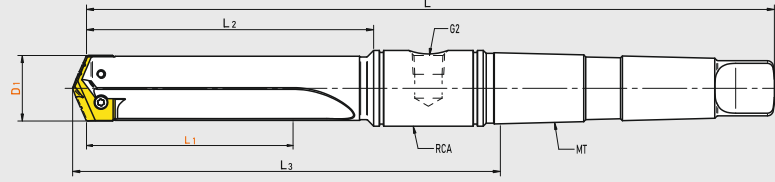
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Bağlayıcı	Kalınlık (mm/inç)	Çap			Uygulama(Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	P	K	N
Y	2.38 3/32"	9.50		0.374	CL-Y-G01622-50AR	CL-Y-G01654-50AR	CL-Y-G01685-50AR
		9.53	3/8"	0.375	CL-Y-G01623-50AR	CL-Y-G01655-50AR	CL-Y-G01686-50AR
		9.80		0.386	CL-Y-G01624-50AR	CL-Y-G01656-50AR	CL-Y-G01687-50AR
		10.00		0.394	CL-Y-G01625-50AR	CL-Y-G01657-50AR	CL-Y-G01688-50AR
		10.20		0.402	CL-Y-G01626-50AR	CL-Y-G01658-50AR	CL-Y-G01689-50AR
		10.50		0.413	CL-Y-G01627-50AR	CL-Y-G01659-50AR	CL-Y-G01690-50AR
		10.72	27/64"	0.422	CL-Y-G01628-50AR	CL-Y-G01660-50AR	CL-Y-G01691-50AR
		10.80		0.425	CL-Y-G01629-50AR	CL-Y-G01661-50AR	CL-Y-G01692-50AR
		11.00		0.433	CL-Y-G01630-50AR	CL-Y-G01662-50AR	CL-Y-G01693-50AR
		11.11	7/16"	0.437	CL-Y-G01631-50AR	CL-Y-G01663-50AR	CL-Y-G01694-50AR
Z	2.38 3/32"	11.50		0.453	CL-Z-G01632-50AR	CL-Z-G01664-50AR	CL-Z-G01695-50AR
		11.51	29/64"	0.453	CL-Z-G01633-50AR	CL-Z-G01665-50AR	CL-Z-G01696-50AR
		12.00		0.472	CL-Z-G01634-50AR	CL-Z-G01666-50AR	CL-Z-G01697-50AR
		12.30	31/64"	0.484	CL-Z-G01635-50AR	CL-Z-G01667-50AR	CL-Z-G01698-50AR
		12.50		0.492	CL-Z-G01636-50AR	CL-Z-G01668-50AR	CL-Z-G01699-50AR
		12.70	1/2"	0.500	CL-Z-G01637-50AR	CL-Z-G01668-50AR	CL-Z-G01700-50AR
0	3.18 1/8"	13.00		0.512	CL-0-G01638-50AR	CL-0-G01669-50AR	CL-0-G01701-50AR
		13.50		0.531	CL-0-G01639-50AR	CL-0-G01670-50AR	CL-0-G01702-50AR
		14.00		0.551	CL-0-G01640-50AR	CL-0-G01671-50AR	CL-0-G01703-50AR
		14.29	9/16"	0.563	CL-0-G01641-50AR	CL-0-G01672-50AR	CL-0-G01704-50AR
		14.50		0.571	CL-0-G01642-50AR	CL-0-G01673-50AR	CL-0-G01705-50AR
		15.00		0.591	CL-0-G01643-50AR	CL-0-G01674-50AR	CL-0-G01706-50AR
0	3.18 1/8"	15.50		0.610	CL-0-G01644-50AR	CL-0-G01675-50AR	CL-0-G01707-50AR
		15.88	5/8"	0.625	CL-0-G01645-50AR	CL-0-G01676-50AR	CL-0-G01708-50AR
		16.00		0.630	CL-0-G01646-50AR	CL-0-G01677-50AR	CL-0-G01709-50AR
		16.50		0.650	CL-0-G01647-50AR	CL-0-G01678-50AR	CL-0-G01710-50AR
		17.00		0.669	CL-0-G01648-50AR	CL-0-G01679-50AR	CL-0-G01711-50AR
		17.46	11/16"	0.687	CL-0-G01649-50AR	CL-0-G01680-50AR	CL-0-G01712-50AR
		17.50		0.689	CL-0-G01650-50AR	CL-0-G01681-50AR	CL-0-G01713-50AR
1	3.97 5/32"	18.00		0.709	CL-1-G01651-50AR	CL-1-G01682-50AR	CL-1-G01714-50AR
		18.50		0.728	CL-1-G01652-50AR	CL-1-G01683-50AR	CL-1-G01715-50AR
		19.00		0.748	CL-1-G01653-50AR	CL-1-G01684-50AR	CL-1-G01716-50AR

Konik şaft ve Helisel flüt tutucu



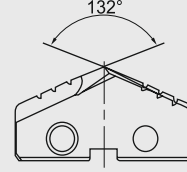
Tip (Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	MT	G2	RCA		
DFT-Y0-MKKT2-20N	Y0	9.50 ~ 11.49 0.374" ~ 0.452"	32	52	88	160	MT2	1/16"	SH-1905R	2102047	2502018
DFT-Z0-MKKT2-20N	Z0	11.50 ~ 12.97 0.453" ~ 0.511"	32	52	88	160	MT2	1/16"	SH-1905R	2102048	2502018
DFT-00-MKKT2-20N	00	12.98 ~ 15.49 0.511" ~ 0.61"	35	56	92	164	MT2	1/16"	SH-1905R	2102230	2502017
DFT-05-MKKT2-20N	05	15.50 ~ 17.85 0.61" ~ 0.703"	35	56	92	164	MT2	1/16"	SH-1905R	2102046	2502017
DFT-10-MKKT3-20N	10	17.86 ~ 21.99 0.703" ~ 0.866"	70	98	143	233	MT3	1/8"	SH-2540R	2102049	2502016

Karbür Serileri

Karbür

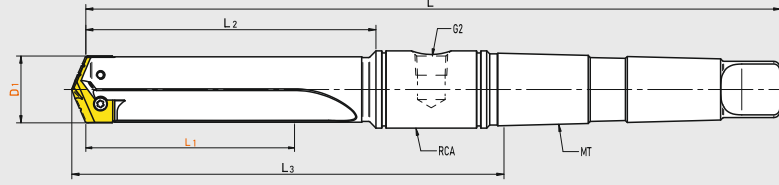
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Bağlayıcı	Kalınlık (mm/inç)	Çap			Uygulama(Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	P	K	N
1	3.97 5/32"	19.05	3/4"	0.750	CL-1-G01717-50AR	CL-1-G01748-50AR	CL-1-G01779-50AR
		19.50		0.768	CL-1-G01718-50AR	CL-1-G01749-50AR	CL-1-G01780-50AR
		20.00		0.787	CL-1-G01719-50AR	CL-1-G01750-50AR	CL-1-G01781-50AR
		20.50		0.807	CL-1-G01720-50AR	CL-1-G01751-50AR	CL-1-G01782-50AR
		20.64	13/16"	0.813	CL-1-G01721-50AR	CL-1-G01752-50AR	CL-1-G01783-50AR
		21.00		0.827	CL-1-G01722-50AR	CL-1-G01753-50AR	CL-1-G01784-50AR
		21.50		0.846	CL-1-G01723-50AR	CL-1-G01754-50AR	CL-1-G01785-50AR
1	3.97 5/32"	22.00		0.866	CL-1-G01724-50AR	CL-1-G01755-50AR	CL-1-G01786-50AR
		22.23	7/8"	0.875	CL-1-G01725-50AR	CL-1-G01756-50AR	CL-1-G01787-50AR
		23.00		0.906	CL-1-G01726-50AR	CL-1-G01757-50AR	CL-1-G01788-50AR
		23.81	15/16"	0.937	CL-1-G01727-50AR	CL-1-G01758-50AR	CL-1-G01789-50AR
		24.00		0.945	CL-1-G01728-50AR	CL-1-G01759-50AR	CL-1-G01790-50AR
2	4.76 3/16"	25.00		0.984	CL-2-G01729-50AR	CL-2-G01760-50AR	CL-2-G01791-50AR
		25.40	1"	1.000	CL-2-G01730-50AR	CL-2-G01761-50AR	CL-2-G01792-50AR
		26.00		1.024	CL-2-G01731-50AR	CL-2-G01762-50AR	CL-2-G01793-50AR
		26.99	1-1/16"	1.063	CL-2-G01732-50AR	CL-2-G01763-50AR	CL-2-G01794-50AR
		27.00		1.063	CL-2-G01733-50AR	CL-2-G01764-50AR	CL-2-G01795-50AR
		28.00		1.102	CL-2-G01734-50AR	CL-2-G01765-50AR	CL-2-G01796-50AR
		28.58	1-1/8"	1.125	CL-2-G01735-50AR	CL-2-G01766-50AR	CL-2-G01797-50AR
		29.00		1.142	CL-2-G01736-50AR	CL-2-G01767-50AR	CL-2-G01798-50AR
2	4.76 3/16"	30.00		1.181	CL-2-G01737-50AR	CL-2-G01768-50AR	CL-2-G01799-50AR
		30.16	1-3/16"	1.187	CL-2-G01738-50AR	CL-2-G01769-50AR	CL-2-G01800-50AR
		31.00		1.220	CL-2-G01739-50AR	CL-2-G01770-50AR	CL-2-G01801-50AR
		31.75	1-1/4"	1.250	CL-2-G01740-50AR	CL-2-G01771-50AR	CL-2-G01802-50AR
		32.00		1.260	CL-2-G01741-50AR	CL-2-G01772-50AR	CL-2-G01803-50AR
		33.00		1.299	CL-2-G01742-50AR	CL-2-G01773-50AR	CL-2-G01804-50AR
		33.34	1-5/16"	1.313	CL-2-G01743-50AR	CL-2-G01774-50AR	CL-2-G01805-50AR
		34.00		1.339	CL-2-G01744-50AR	CL-2-G01775-50AR	CL-2-G01806-50AR
		34.13	1-11/32"	1.344	CL-2-G01745-50AR	CL-2-G01776-50AR	CL-2-G01807-50AR
		34.93	1-3/8"	1.375	CL-2-G01746-50AR	CL-2-G01777-50AR	CL-2-G01809-50AR
		35.00		1.378	CL-2-G01747-50AR	CL-2-G01778-50AR	CL-2-G01810-50AR

Konik şaft ve Helisel flüt tutucu



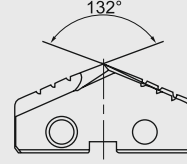
Tip (Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	MT	G2	RCA		
DFT-10-MKKT3-20N	10	17.86 ~ 21.99 0.703" ~ 0.866"	70	98	143	233	MT3	1/8"	SH-2540R	2102049	2502016
DFT-15-MKKT3-20N	15	22.00 ~ 24.60 0.866" ~ 0.969"	70	98	143	233	MT3	1/8"	SH-2540R	2102049	2502016
DFT-20-MKKT4-20N	20	24.61 ~ 29.99 0.969" ~ 1.181"	86	114	160	274	MT4	1/8"	SH-2540R	2102045	2502020
DFT-25-MKKT4-20N	25	30.00 ~ 35.50 1.181" ~ 1.398"	86	114	168	281	MT4	1/4"	SH-3175R	2102045	2502020

Karbür Serileri

Karbür

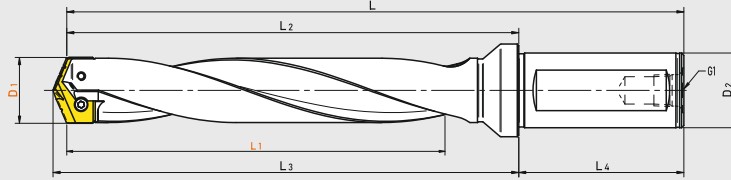
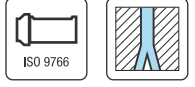
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Bağlayıcı	Kalınlık (mm/inç)	Çap			Uygulama(Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	P	K	N
Y	2.38 3/32"	9.50		0.374	CL-Y-G01811-50AR	CL-Y-G01843-50AR	CL-Y-G01875-50AR
		9.53	3/8"	0.375	CL-Y-G01812-50AR	CL-Y-G01844-50AR	CL-Y-G01876-50AR
		9.80		0.386	CL-Y-G01813-50AR	CL-Y-G01845-50AR	CL-Y-G01877-50AR
		10.00		0.394	CL-Y-G01814-50AR	CL-Y-G01846-50AR	CL-Y-G01878-50AR
		10.20		0.402	CL-Y-G01815-50AR	CL-Y-G01847-50AR	CL-Y-G01879-50AR
		10.50		0.413	CL-Y-G01816-50AR	CL-Y-G01848-50AR	CL-Y-G01880-50AR
		10.72	27/64"	0.422	CL-Y-G01817-50AR	CL-Y-G01849-50AR	CL-Y-G01881-50AR
		10.80		0.425	CL-Y-G01818-50AR	CL-Y-G01850-50AR	CL-Y-G01882-50AR
		11.00		0.433	CL-Y-G01819-50AR	CL-Y-G01851-50AR	CL-Y-G01883-50AR
		11.11	7/16"	0.437	CL-Y-G01820-50AR	CL-Y-G01852-50AR	CL-Y-G01884-50AR
Z	2.38 3/32"	11.50		0.453	CL-Z-G01821-50AR	CL-Z-G01853-50AR	CL-Z-G01885-50AR
		11.51	29/64"	0.453	CL-Z-G01822-50AR	CL-Z-G01854-50AR	CL-Z-G01886-50AR
		12.00		0.472	CL-Z-G01823-50AR	CL-Z-G01855-50AR	CL-Z-G01887-50AR
		12.30	31/64"	0.484	CL-Z-G01824-50AR	CL-Z-G01856-50AR	CL-Z-G01888-50AR
		12.50		0.492	CL-Z-G01825-50AR	CL-Z-G01857-50AR	CL-Z-G01889-50AR
		12.70	1/2"	0.500	CL-Z-G01826-50AR	CL-Z-G01858-50AR	CL-Z-G01890-50AR
0	3.18 1/8"	13.00		0.512	CL-0-G01827-50AR	CL-0-G01859-50AR	CL-0-G01891-50AR
		13.50		0.531	CL-0-G01828-50AR	CL-0-G01860-50AR	CL-0-G01892-50AR
		14.00		0.551	CL-0-G01829-50AR	CL-0-G01861-50AR	CL-0-G01893-50AR
		14.29	9/16"	0.563	CL-0-G01830-50AR	CL-0-G01862-50AR	CL-0-G01894-50AR
		14.50		0.571	CL-0-G01831-50AR	CL-0-G01863-50AR	CL-0-G01895-50AR
		15.00		0.591	CL-0-G01832-50AR	CL-0-G01864-50AR	CL-0-G01896-50AR
0	3.18 1/8"	15.50		0.610	CL-0-G01833-50AR	CL-0-G01865-50AR	CL-0-G01897-50AR
		15.88	5/8"	0.625	CL-0-G01834-50AR	CL-0-G01866-50AR	CL-0-G01898-50AR
		16.00		0.630	CL-0-G01835-50AR	CL-0-G01867-50AR	CL-0-G01899-50AR
		16.50		0.650	CL-0-G01836-50AR	CL-0-G01868-50AR	CL-0-G01900-50AR
		17.00		0.669	CL-0-G01837-50AR	CL-0-G01869-50AR	CL-0-G01901-50AR
		17.46	11/16"	0.687	CL-0-G01838-50AR	CL-0-G01870-50AR	CL-0-G01902-50AR
		17.50		0.689	CL-0-G01839-50AR	CL-0-G01871-50AR	CL-0-G01903-50AR
1	3.97 5/32"	18.00		0.709	CL-1-G01840-50AR	CL-1-G01872-50AR	CL-1-G01904-50AR
		18.50		0.728	CL-1-G01841-50AR	CL-1-G01873-50AR	CL-1-G01905-50AR
		19.00		0.748	CL-1-G01842-50AR	CL-1-G01874-50AR	CL-1-G01906-50AR

Yanal sabitleme tipi sap ve Helisel oluk tutucu



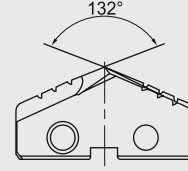
Tip (Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	D2	L4	G1		
DFTY0-MK020-40N DFT-Y0-MK020-50N	Y0	9.50 ~ 11.49 0.374" ~ 0.452"	60 111	90 141	92 143	140 191	20	50	1/8"	2102047	2502018
DFT-Z0-MK020-40N DFT-Z0-MK020-50N	Z0	11.50 ~ 12.97 0.453" ~ 0.511"	60 111	90 141	92 143	140 191	20	50	1/8"	2102048	2502018
DFT-00-MK020-40N DFT-00-MK020-50N DFT-00-MK020-60N	00	12.98 ~ 15.49 0.511" ~ 0.61"	64 114 178	92 143 206	95 146 209	142 193 256	20	50	1/8"	2102230	2502017
DFT-05-MK020-40N DFT-05-MK020-50N DFT-05-MK020-60N	05	15.50 ~ 17.85 0.61" ~ 0.703"	64 114 178	92 143 206	95 146 209	142 193 256	20	50	1/8"	2102046	2502017
DFT-10-MK025-40N DFT-10-MK025-50N DFT-10-MK025-60N	10	17.86 ~ 21.99 0.703" ~ 0.866"	118 168 270	155 206 307	158 209 311	211 262 363	25	56	1/8"	2102049	2502016

Karbür Serileri

Karbür

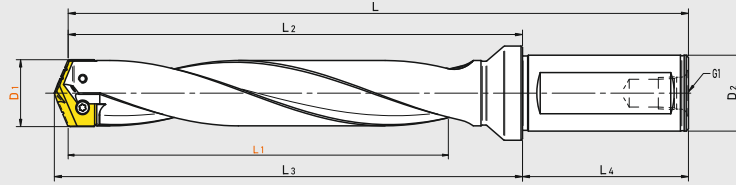
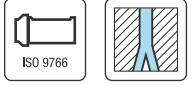
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Bağlayıcı	Kalınlık (mm/inç)	Çap			Uygulama(Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	P	K	N
1	3.97 5/32"	19.05	3/4"	0.750	CL-1-G01907-50AR	CL-1-G01938-50AR	CL-1-G01969-50AR
		19.50		0.768	CL-1-G01908-50AR	CL-1-G01939-50AR	CL-1-G01970-50AR
		20.00		0.787	CL-1-G01909-50AR	CL-1-G01940-50AR	CL-1-G01971-50AR
		20.50		0.807	CL-1-G01910-50AR	CL-1-G01941-50AR	CL-1-G01972-50AR
		20.64	13/16"	0.813	CL-1-G01911-50AR	CL-1-G01942-50AR	CL-1-G01973-50AR
		21.00		0.827	CL-1-G01912-50AR	CL-1-G01943-50AR	CL-1-G01974-50AR
		21.50		0.846	CL-1-G01913-50AR	CL-1-G01944-50AR	CL-1-G01975-50AR
1	3.97 5/32"	22.00		0.866	CL-1-G01914-50AR	CL-1-G01945-50AR	CL-1-G01976-50AR
		22.23	7/8"	0.875	CL-1-G01915-50AR	CL-1-G01946-50AR	CL-1-G01977-50AR
		23.00		0.906	CL-1-G01916-50AR	CL-1-G01947-50AR	CL-1-G01978-50AR
		23.81	15/16"	0.937	CL-1-G01917-50AR	CL-1-G01948-50AR	CL-1-G01979-50AR
		24.00		0.945	CL-1-G01918-50AR	CL-1-G01949-50AR	CL-1-G01980-50AR
2	4.76 3/16"	25.00		0.984	CL-2-G01919-50AR	CL-2-G01950-50AR	CL-2-G01981-50AR
		25.40	1"	1.000	CL-2-G01920-50AR	CL-2-G01951-50AR	CL-2-G01982-50AR
		26.00		1.024	CL-2-G01921-50AR	CL-2-G01952-50AR	CL-2-G01983-50AR
		26.99	1-1/16"	1.063	CL-2-G01922-50AR	CL-2-G01953-50AR	CL-2-G01984-50AR
		27.00		1.063	CL-2-G01923-50AR	CL-2-G01954-50AR	CL-2-G01985-50AR
		28.00		1.102	CL-2-G01924-50AR	CL-2-G01955-50AR	CL-2-G01986-50AR
		28.58	1-1/8"	1.125	CL-2-G01925-50AR	CL-2-G01956-50AR	CL-2-G01987-50AR
		29.00		1.142	CL-2-G01926-50AR	CL-2-G01957-50AR	CL-2-G01988-50AR
2	4.76 3/16"	30.00		1.181	CL-2-G01927-50AR	CL-2-G01958-50AR	CL-2-G01989-50AR
		30.16	1-3/16"	1.187	CL-2-G01928-50AR	CL-2-G01959-50AR	CL-2-G01990-50AR
		31.00		1.220	CL-2-G01929-50AR	CL-2-G01960-50AR	CL-2-G01991-50AR
		31.75	1-1/4"	1.250	CL-2-G01930-50AR	CL-2-G01961-50AR	CL-2-G01992-50AR
		32.00		1.260	CL-2-G01931-50AR	CL-2-G01962-50AR	CL-2-G01993-50AR
		33.00		1.299	CL-2-G01932-50AR	CL-2-G01963-50AR	CL-2-G01994-50AR
		33.34	1-5/16"	1.313	CL-2-G01933-50AR	CL-2-G01964-50AR	CL-2-G01995-50AR
		34.00		1.339	CL-2-G01934-50AR	CL-2-G01965-50AR	CL-2-G01996-50AR
		34.13	1-11/32"	1.344	CL-2-G01935-50AR	CL-2-G01966-50AR	CL-2-G01997-50AR
		34.93	1-3/8"	1.375	CL-2-G01936-50AR	CL-2-G01967-50AR	CL-2-G01998-50AR
		35.00		1.378	CL-2-G01937-50AR	CL-2-G01968-50AR	CL-2-G01999-50AR

Yanal sabitleme tipi sap ve Helisel oluk tutucu



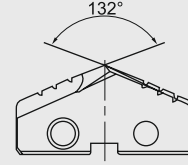
Tip (Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	D2	L4	G1		
DFT-10-MK025-30N DFT-10-MK025-40N DFT-10-MK025-50N	10	17.86 ~ 21.99 0.703" ~ 0.866"	118 168 270	155 206 307	158 209 311	211 262 363	25	56	1/8"	2102049	2502016
DFT-15-MK025-30N DFT-15-MK025-40N DFT-15-MK025-50N	15	22.00 ~ 24.60 0.866" ~ 0.969"	118 168 270	155 206 307	158 209 311	211 262 363	25	56	1/8"	2102049	2502016
DFT-20-MK025-30N DFT-20-MK025-40N DFT-20-MK025-50N	20	24.61 ~ 29.99 0.969" ~ 1.181"	137 187 289	179 230 332	183 234 335	239 290 392	32	60	1/4"	2102045	2502020
DFT-25-MK025-30N DFT-25-MK025-40N DFT-25-MK025-50N	25	30.00 ~ 35.50 1.181" ~ 1.398"	137 187 289	179 230 332	183 234 335	239 290 392	32	60	1/4"	2102045	2502020

Karbür Serileri

Karbür

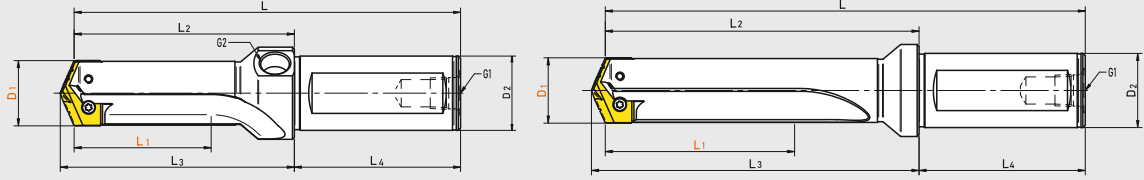
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Bağlayıcı	Kalınlık (mm/inç)	Çap			Uygulama(Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	P	K	N
Y	2.38 3/32"	9.50		0.374	CL-Y-G02000-50AR	CL-Y-G02032-50AR	CL-Y-G02064-50AR
		9.53	3/8"	0.375	CL-Y-G02001-50AR	CL-Y-G02033-50AR	CL-Y-G02065-50AR
		9.80		0.386	CL-Y-G02002-50AR	CL-Y-G02034-50AR	CL-Y-G02066-50AR
		10.00		0.394	CL-Y-G02003-50AR	CL-Y-G02035-50AR	CL-Y-G02067-50AR
		10.20		0.402	CL-Y-G02004-50AR	CL-Y-G02036-50AR	CL-Y-G02068-50AR
		10.50		0.413	CL-Y-G02005-50AR	CL-Y-G02037-50AR	CL-Y-G02069-50AR
		10.72	27/64"	0.422	CL-Y-G02006-50AR	CL-Y-G02038-50AR	CL-Y-G02070-50AR
		10.80		0.425	CL-Y-G02007-50AR	CL-Y-G02039-50AR	CL-Y-G02071-50AR
		11.00		0.433	CL-Y-G02008-50AR	CL-Y-G02040-50AR	CL-Y-G02072-50AR
		11.11	7/16"	0.437	CL-Y-G02009-50AR	CL-Y-G02041-50AR	CL-Y-G02073-50AR
Z	2.38 3/32"	11.50		0.453	CL-Z-G02010-50AR	CL-Z-G02042-50AR	CL-Z-G02074-50AR
		11.51	29/64"	0.453	CL-Z-G02011-50AR	CL-Z-G02043-50AR	CL-Z-G02075-50AR
		12.00		0.472	CL-Z-G02012-50AR	CL-Z-G02044-50AR	CL-Z-G02076-50AR
		12.30	31/64"	0.484	CL-Z-G02013-50AR	CL-Z-G02045-50AR	CL-Z-G02077-50AR
		12.50		0.492	CL-Z-G02014-50AR	CL-Z-G02046-50AR	CL-Z-G02078-50AR
		12.70	1/2"	0.500	CL-Z-G02015-50AR	CL-Z-G02047-50AR	CL-Z-G02079-50AR
0	3.18 1/8"	13.00		0.512	CL-0-G02016-50AR	CL-0-G02048-50AR	CL-0-G02080-50AR
		13.50		0.531	CL-0-G02017-50AR	CL-0-G02049-50AR	CL-0-G02081-50AR
		14.00		0.551	CL-0-G02018-50AR	CL-0-G02050-50AR	CL-0-G02082-50AR
		14.29	9/16"	0.563	CL-0-G02019-50AR	CL-0-G02051-50AR	CL-0-G02083-50AR
		14.50		0.571	CL-0-G02020-50AR	CL-0-G02052-50AR	CL-0-G02084-50AR
		15.00		0.591	CL-0-G02021-50AR	CL-0-G02053-50AR	CL-A-G02085-50AR
0	3.18 1/8"	15.50		0.610	CL-0-G02022-50AR	CL-0-G02054-50AR	CL-0-G02086-50AR
		15.88	5/8"	0.625	CL-0-G02023-50AR	CL-0-G02055-50AR	CL-0-G02087-50AR
		16.00		0.630	CL-0-G02024-50AR	CL-0-G02056-50AR	CL-0-G02088-50AR
		16.50		0.650	CL-0-G02025-50AR	CL-0-G02057-50AR	CL-0-G02089-50AR
		17.00		0.669	CL-0-G02026-50AR	CL-0-G02058-50AR	CL-0-G02090-50AR
		17.46	11/16"	0.687	CL-0-G02027-50AR	CL-0-G02059-50AR	CL-0-G02091-50AR
		17.50		0.689	CL-0-G02028-50AR0	CL-0-G02060-50AR	CL-0-G02092-50AR
1	3.97 5/32"	18.00		0.709	CL-1-G02029-50AR	CL-0-G02061-50AR	CL-0-G02093-50AR
		18.50		0.728	CL-1-G02030-50AR	CL-0-G02062-50AR	CL-0-G02094-50AR
		19.00		0.748	CL-0-G02031-50AR	CL-0-G02063-50AR	CL-0-G02095-50AR

Yanal sabitleme tipi sap ve Helisel oluk tutucu



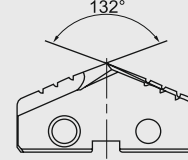
Tip (Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	D2	L4	G1	G2		
DFT-Y0-MK016-10N DFT-Y0-MK020-20N DFT-Y0-MK020-70N DFT-Y0-MK020-90N	Y0	9.50 ~ 11.49 0.374" ~ 0.452"	19 32 222 290	48 61 252 320	50 64 254 322	96 111 302 370	16 20 20 20	48 50 50 50	1/16" 1/8" 1/8" 1/8"	1/8" — — —	2102047	2502018
DFT-Z0-MK016-10N DFT-Z0-MK020-20N DFT-Z0-MK020-70N DFT-Z0-MK020-90N	Z0	11.50 ~ 12.97 0.453" ~ 0.511"	19 32 222 290	48 61 252 320	50 64 254 322	96 111 310 370	16 20 20 20	48 50 50 50	1/16" 1/8" 1/8" 1/8"	1/8" — — —	2102048	2502018
DFT-00-MK020-10N DFT-00-MK020-20N DFT-00-MK020-70N DFT-00-MK020-90N	00	12.98 ~ 15.49 0.511" ~ 0.61"	22 35 295 387	48 64 324 416	50 66 327 419	98 114 374 466	20	50	1/8"	1/8" — — —	2102230	2502017
DFT-05-MK020-10N DFT-05-MK020-20N DFT-05-MK020-70N DFT-05-MK020-90N	05	15.50 ~ 17.85 0.61" ~ 0.703"	22 35 295 387	48 64 324 416	50 66 327 419	98 114 374 466	20	50	1/8"	1/8" — — —	2102046	2502017
DFT-10-MK025-10N DFT-10-MK025-20N DFT-10-MK025-70N DFT-10-MK025-90N	10	17.86 ~ 21.99 0.703" ~ 0.866"	48 67 457 569	76 107 495 603	79 111 498 606	132 163 551 659	25	56	1/8"	1/8" — — —	2102049	2502016

Karbür Serileri

Karbür

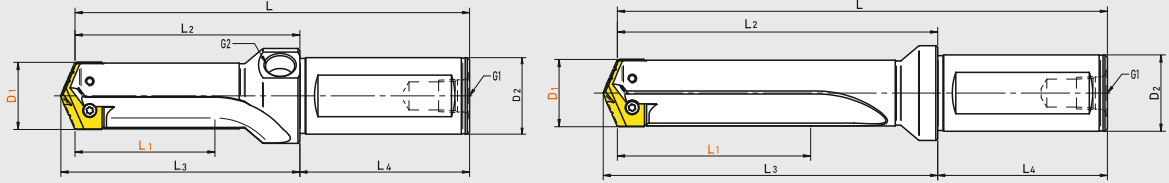
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Bağlayıcı	Kalınlık (mm/inç)	Çap			Uygulama(Sipariş Kodu)		
		mm	Kesirli Eşdeğer	inç	P	K	N
1	3.97 5/32"	19.05	3/4"	0.750	CL-1-G02096-50AR	CL-1-G02127-50AR	CL-1-G02158-50AR
		19.50		0.768	CL-1-G02097-50AR	CL-1-G02128-50AR	CL-1-G02159-50AR
		20.00		0.787	CL-1-G02098-50AR	CL-1-G02129-50AR	CL-1-G02160-50AR
		20.50		0.807	CL-1-G02099-50AR	CL-1-G02130-50AR	CL-1-G02161-50AR
		20.64	13/16"	0.813	CL-1-G02100-50AR	CL-1-G02131-50AR	CL-1-G02162-50AR
		21.00		0.827	CL-1-G02101-50AR	CL-1-G02132-50AR	CL-1-G02163-50AR
		21.50		0.846	CL-1-G02102-50AR	CL-1-G02133-50AR	CL-1-G02164-50AR
1	3.97 5/32"	22.00		0.866	CL-1-G02103-50AR	CL-1-G02134-50AR	CL-1-G02165-50AR
		22.23	7/8"	0.875	CL-1-G02104-50AR	CL-1-G02135-50AR	CL-1-G02166-50AR
		23.00		0.906	CL-1-G02105-50AR	CL-1-G02136-50AR	CL-1-G02167-50AR
		23.81	15/16"	0.937	CL-1-G02106-50AR	CL-1-G02137-50AR	CL-1-G02168-50AR
		24.00		0.945	CL-1-G02107-50AR	CL-1-G02138-50AR	CL-1-G02169-50AR
2	4.76 3/16"	25.00		0.984	CL-2-G02108-50AR	CL-2-G02139-50AR	CL-2-G02170-50AR
		25.40	1"	1.000	CL-2-G02109-50AR	CL-2-G02140-50AR	CL-2-G02171-50AR
		26.00		1.024	CL-2-G02110-50AR	CL-2-G02141-50AR	CL-2-G02172-50AR
		26.99	1-1/16"	1.063	CL-2-G02111-50AR	CL-2-G02142-50AR	CL-2-G02173-50AR
		27.00		1.063	CL-2-G02112-50AR	CL-2-G02143-50AR	CL-2-G02174-50AR
		28.00		1.102	CL-2-G02113-50AR	CL-2-G02144-50AR	CL-2-G02175-50AR
		28.58	1-1/8"	1.125	CL-2-G02114-50AR	CL-2-G02145-50AR	CL-2-G02176-50AR
		29.00		1.142	CL-2-G02115-50AR	CL-2-G02146-50AR	CL-2-G02177-50AR
2	4.76 3/16"	30.00		1.181	CL-2-G02116-50AR	CL-2-G02147-50AR	CL-2-G02178-50AR
		30.16	1-3/16"	1.187	CL-2-G02117-50AR	CL-2-G02148-50AR	CL-2-G02179-50AR
		31.00		1.220	CL-2-G02118-50AR	CL-2-G02149-50AR	CL-2-G02180-50AR
		31.75	1-1/4"	1.250	CL-2-G02119-50AR	CL-2-G02150-50AR	CL-2-G02181-50AR
		32.00		1.260	CL-2-G02120-50AR	CL-2-G02151-50AR	CL-2-G02182-50AR
		33.00		1.299	CL-2-G02121-50AR	CL-2-G02152-50AR	CL-2-G02183-50AR
		33.34	1-5/16"	1.313	CL-2-G02122-50AR	CL-2-G02153-50AR	CL-2-G02184-50AR
		34.00		1.339	CL-2-G02123-50AR	CL-2-G02154-50AR	CL-2-G02185-50AR
		34.13	1-11/32"	1.344	CL-2-G02124-50AR	CL-2-G02155-50AR	CL-2-G02186-50AR
		34.93	1-3/8"	1.375	CL-2-G02125-50AR	CL-2-G02156-50AR	CL-2-G02187-50AR
		35.00		1.378	CL-2-G02126-50AR	CL-2-G02157-50AR	CL-2-G02188-50AR

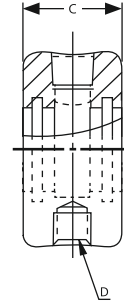
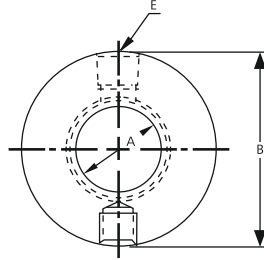
Yanal sabitleme tipi sap ve Helisel oluk tutucu



Tip (Sipariş Kodu)	Bağlayıcı	D1	L1	L2	L3	L	D2	L4	G1	G2		
DFT-10-MK025-10N	10	17.86 ~ 21.99 0.703" ~ 0.866"	48	76	79	132	25	56	1/8"	1/8"	2102049	2502016
DFT-10-MK025-20N			67	107	111	163				—		
DFT-10-MK025-70N			457	495	498	551				—		
DFT-10-MK025-90N			569	603	606	659				—		
DFT-15-MK025-10N	15	22.00 ~ 24.60 0.866" ~ 0.969"	48	76	79	132	25	56	1/8"	1/8"	2102049	2502016
DFT-15-MK025-20N			67	107	111	163				—		
DFT-15-MK025-70N			457	495	498	551				—		
DFT-15-MK025-90N			569	603	606	659				—		
DFT-20-MK032-10N	20	24.61 ~ 29.99 0.969" ~ 1.181"	57	89	92	149	32	60	1/4"	1/8"	2102045	2502020
DFT-20-MK032-20N			86	129	132	189				—		
DFT-20-MK032-70N			511	554	558	614				—		
DFT-20-MK032-90N			692	735	739	795				—		
DFT-25-MK032-10N	25	30.00 ~ 35.50 1.181" ~ 1.398"	57	89	92	149	32	60	1/4"	1/8"	2102045	2502020
DFT-25-MK032-20N			86	129	132	189				—		
DFT-25-MK032-70N			511	554	558	614				—		
DFT-25-MK032-90N			692	735	739	795				—		

Aksesuarlar

Döner Soğutucu Adaptörü



Tip (Sipariş Kodu)	A	B	C	D	E
	İç çap	Dış çap	Kalınlık	Tahrik çubuğu dişi	Kodlama nozulu dişi
BS-1905A	19.05	44.45	22.23	M8x1.25	1/8"
BS-2540A	25.40	53.97	28.57	M8x1.25	1/8"
BS-3175A	31.75	63.50	34.92	M10x1.5	1/4"
BS-445A	44.45	76.20	34.92	M10x1.5	1/4"
BS-5715A	57.15	95.27	44.45	M12x1.75	1/2"

Tahrik çubuğu



Tip (Sipariş Kodu)	Konu	Toplam uzunluk	Eşleşen yağ halkası
BS-M8-250	M8x1.25	250	SH-1905R
BS-M8-250	M8x1.25	250	SH-2540R
BS-M10-250	M10x1.5	250	SH-3175R
BS-M10-250	M10x1.5	250	SH-4445R
BS-M12-250	M12x1.75	250	SH-5715R

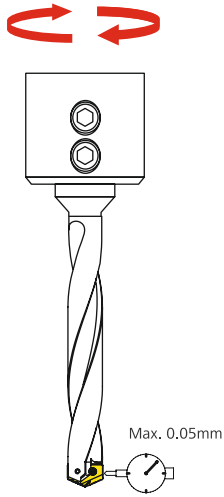
Kullanım şartları ve önlemler

Kurul

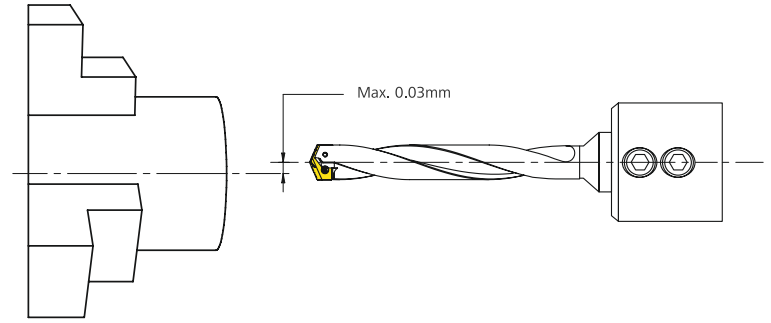
Optimum takım ömrü ve delik doğruluğu için uygulamaların kararlılığı esastır. Takım tezgahı milinin, armatürlerin ve iş parçasının tutuşunu kontrol ederek maksimum stabilite ve sağlamlığı garanti edin. Kararsız çalışma koşulları matkap uçlarının kırılmasına neden olur.

Maks. Salgı ve Yanlış Hizalama

Salgı

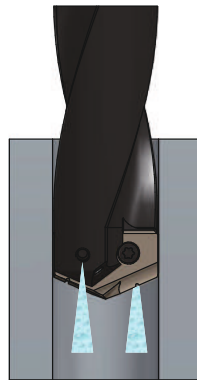


Yanlış hizalama



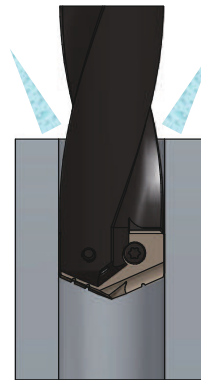
Soğutma Basıncı

İç soğutma



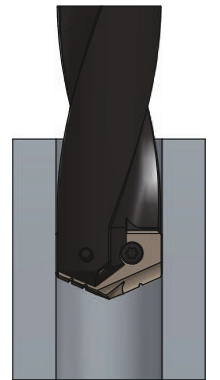
<30 (Seri): 5bar ✓
40 (Seri): 10bar ✓
50 (Seri): 15bar ✓
>60 (Seri): 20bar ✓

Dış soğutma



<20 (Seri): 5bar ✓
40 (Seri): 10bar ✗
50 (Seri): 15bar ✗
>60 (Seri): 20bar ✗

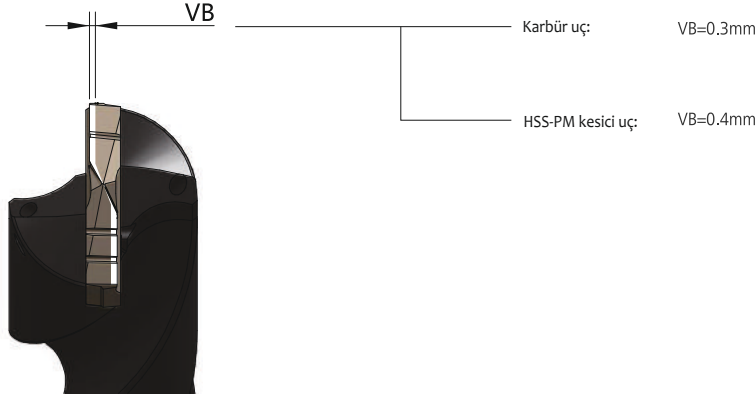
Yarı kuru kesim



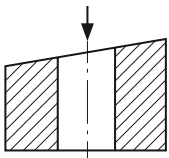
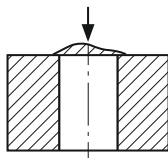
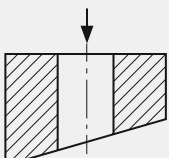
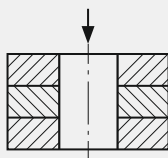
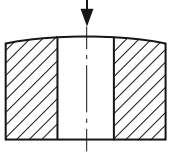
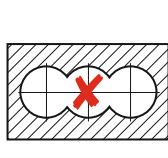
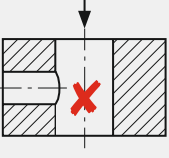
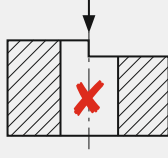
<20 (Seri): MQL ✓
(Sadece karbür)

Yaprak ucu değişimi için standart

Aşınma sınırı

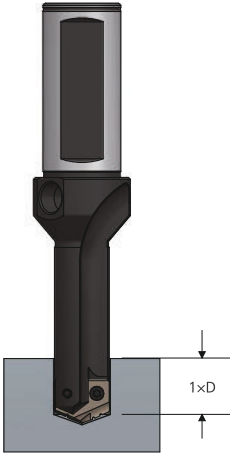
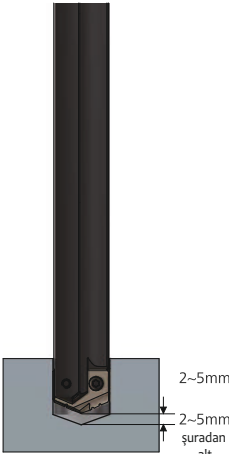
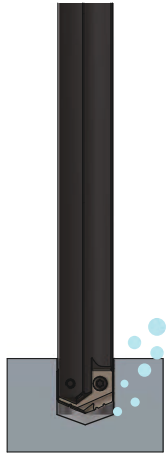
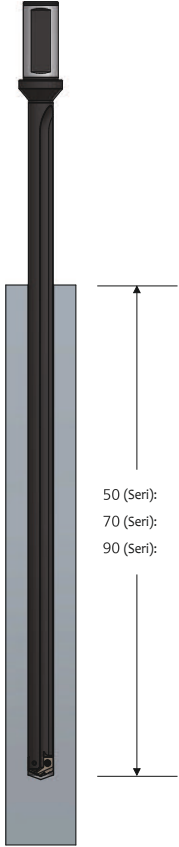


Uygulama

Çalışma Koşulları	Talimatlar	Çalışma Koşulları	Talimatlar
	Giriş yüzeyi eğimlidir Eğim Besleme Hızı <3° 50%		Giriş yüzeyi kaynaklıdır İşlemeden önce noktaya bakacak şekilde düzleştirin
	Çıkış eğimli Eğim Besleme Hızı <3° 50%		Yığılmış plakalar Prensip olarak izin verilir iş parçası uygun şekilde kelepçelenmelidir burada plakalar arasında boşluk olmamalıdır
	- Merkezde daha düşük ilerleme hızında sondaja izin verilir. -Giriş noktası arkın merkezinde değilse, noktaya bakılması gerekir		Boşluklar İzin verilmiyor
	Delikten İzin verilmiyor		Giriş yüzeyine adım atın İzin verilmiyor (giriş noktası yatay düzlemde olmalıdır)

Tedbirler

Uzun delme derinliğine sahip tutucular için delme işlemi (50170/90)

			
Kısa bir matkap ucu ile 1 D ila 1,5D arasında bir pilot delik açın	Pilot deliğe düşük hızda ve düşük ilerleme hızında girin	Soğutucuyu 2 ila 3 saniye tutun	Önerilen parametrelere göre sürekli hızlı delme yapın Çıkıştaki hızı ve besleme hızını azaltın

Yaprak Matkap kesme parametresi öneri listesi - Karbür uç serisi

ISO	Malzeme			Isıl işlem		HB	N/mm ²
P	Alaşımsız çelik Y13 1215 1.0736 Y15 1213 1.0715 Düşük karbonlu çelik 45 1045 1.0503 Q345B 1140 1.7026			<0.25%C	Tavlanmış	100-150	370-500
				≥0.25%C	Tavlanmış	175-225	600-775
				<0.55%C	Söndürülmüş ve temperlenmiş	225-275	775-940
				≥0.55%C	Tavlanmış	275-325	940-1090
					Söndürülmüş ve temperlenmiş	300	1000
	Düşük alaşımlı çelik 40Cr 5140 1.7035 42CrMo 4140 1.7225			Tavlanmış		175-225	600-775
				Tavlanmış		225-275	775-940
				Tavlanmış		275-325	940-1090
				Asabi		325-375	1090-1265
	Yüksek alaşımlı çelik, takım çeliği, Dökme çelik Cr12, D3, 1.2080; 4Cr5MoSiV, H13, 1.2344 Paslanmaz çelik Ferritik martensitik 0Cr13 403 1.400 2Cr13 410 1.4021			Tavlanmış		225-300	600-1020
				Asabi		300-350	1020-1180
				Ferritik		185-275	640-940
				Martensitik		275-350	940-1180
M	Paslanmaz çelik Östenitik 0Cr18Ni9 304 1.4301 0Cr17Ni11Mo2 316 1.4401			Tavlanmış / Sertleştirilmiş		135-185	480-640
				Oyuncular + İşlenmemiş		185-275	640-940
	Süper Dupleks Paslanmaz Çelik		N <0.1%	Ferritik	135-185	480-640	
			N ≥0.1%	Ferritik	185-275	640-940	
K	Gri dökme demir HT200 NO.30 GG20 HT250 NO.35 GG25			Ferritik		120-150	430-500
				Perlitik		150-200	500-700
	Dökme demir nodüler QT400-18 60-40-18 GGG40 QT600-3 80-60-03 GGG60			Ferritik		200-220	700-755
				Perlitik		220-260	755-890
	Dövülebilir dökme demir			Ferritik		120-150	430-500
				Perlitik		260-320	890-1020
N	Dövme Alüminyum			Tedavi edilemez		30	100
				Tedavi edilmiş		180	600
	Alüminyum Döküm		≤12% Si	Tedavi edilemez	30	100	
			Tedavi edilmiş	180	600		
			>12% Si	Yüksek sıcaklık	—	—	
	Bakır Alaşımları		>1% Pb	Serbest kesim	100-200	370-670	
			Pirinç	200-250	670-855		
			Elektrolitik bakır	100	370		
Metalik olmayan			Duroplastikler elyaf plastikler			—	
			Sert kauçuk		60	200	
S	Yüksek Sıcaklık.		Fe tabanı	Tavlanmış	140-220	480-755	
				Tedavi edilmiş	223-310	755-990	
	Alaşım Hastelloy B, Inconel 600,		Ni veya co tabanı	Tavlanmış	250	—	
				Tedavi edilmiş	350	—	
				Oyuncular	320	—	
	Titanyum Alaşımı				320	Rm 400	
Kürlenmiş alaşımlar					Rm 1050		
H	Aşınma Plakası Hardox, AR400, T-1,			Sertleşmek	400	1365	
				Sertleşmek	500	1600	
	Sertleştirilmiş Çelik			Sertleşmek	300-400	1020-1365	
				Sertleşmek	400-500	1365+	

Vc(m/min)			(fn)mm/r											
			Ø 9.5-12.5mm			Ø 13.0-17.5mm			Ø 18.0-24.00mm			Ø 25.0-35.0mm		
Dk.	Tavsiye etmek	Maks.	Dk.	Tavsiye etmek	Maks.	Dk.	Tavsiye etmek	Maks.	Dk.	Tavsiye etmek	Maks.	Dk.	Tavsiye etmek	Maks.
75	94	117	0.09	0.12	0.17	0.13	0.17	0.23	0.17	0.22	0.31	0.21	0.28	0.39
55	69	86	0.07	0.09	0.12	0.1	0.14	0.19	0.13	0.17	0.23	0.19	0.25	0.34
49	61	76	0.07	0.09	0.12	0.1	0.14	0.19	0.13	0.17	0.23	0.19	0.25	0.34
41	51	64	0.05	0.07	0.10	0.09	0.12	0.17	0.12	0.16	0.22	0.16	0.21	0.29
41	51	64	0.04	0.06	0.08	0.08	0.10	0.14	0.12	0.16	0.22	0.16	0.21	0.29
54	67	84	0.07	0.09	0.12	0.1	0.14	0.19	0.13	0.17	0.23	0.19	0.25	0.34
49	61	76	0.07	0.09	0.12	0.09	0.12	0.17	0.13	0.17	0.23	0.19	0.25	0.34
45	56	70	0.05	0.07	0.1	0.08	0.1	0.14	0.12	0.16	0.22	0.16	0.21	0.29
40	50	62	0.04	0.06	0.08	0.08	0.1	0.14	0.12	0.16	0.22	0.16	0.21	0.29
40	50	62	0.07	0.09	0.12	0.09	0.12	0.17	0.12	0.16	0.22	0.13	0.17	0.23
30	38	47	0.05	0.07	0.1	0.09	0.12	0.17	0.12	0.16	0.22	0.13	0.17	0.23
37	46	58	0.08	0.10	0.14	0.10	0.14	0.19	0.12	0.16	0.22	0.13	0.17	0.23
29	36	45	0.07	0.09	0.12	0.09	0.12	0.17	0.10	0.14	0.19	0.10	0.14	0.19
37	46	58	0.04	0.06	0.08	0.09	0.12	0.17	0.10	0.14	0.19	0.13	0.17	0.23
29	36	45	0.04	0.06	0.08	0.08	0.10	0.14	0.09	0.12	0.17	0.10	0.14	0.19
19	24	30	0.04	0.06	0.08	0.09	0.12	0.17	0.10	0.14	0.19	0.13	0.17	0.23
15	19	24	0.04	0.06	0.08	0.08	0.10	0.14	0.09	0.12	0.17	0.10	0.14	0.19
78	98	122	0.09	0.12	0.17	0.16	0.21	0.29	0.21	0.28	0.39	0.26	0.34	0.47
75	94	117	0.08	0.10	0.14	0.14	0.19	0.26	0.19	0.25	0.34	0.23	0.31	0.43
67	84	105	0.08	0.10	0.14	0.12	0.16	0.22	0.16	0.21	0.29	0.21	0.28	0.39
58	72	90	0.07	0.09	0.12	0.09	0.12	0.17	0.12	0.16	0.22	0.16	0.21	0.29
75	94	117	0.09	0.12	0.17	0.16	0.21	0.29	0.21	0.28	0.39	0.26	0.34	0.47
52	66	82	0.05	0.07	0.10	0.08	0.10	0.14	0.09	0.12	0.17	0.12	0.16	0.22
105	150	195	0.05	0.07	0.10	0.08	0.10	0.14	0.13	0.17	0.23	0.16	0.21	0.29
91	130	169	0.10	0.14	0.19	0.17	0.22	0.31	0.21	0.28	0.39	0.23	0.31	0.43
105	150	195	0.10	0.14	0.19	0.17	0.22	0.31	0.21	0.28	0.39	0.26	0.34	0.47
91	130	169	0.10	0.14	0.19	0.17	0.22	0.31	0.21	0.28	0.39	0.23	0.31	0.43
91	130	169	0.10	0.14	0.19	0.17	0.22	0.31	0.21	0.28	0.39	0.23	0.31	0.43
105	150	195	0.08	0.10	0.14	0.14	0.19	0.26	0.19	0.25	0.34	0.23	0.31	0.43
105	150	195	0.07	0.09	0.12	0.09	0.12	0.17	0.12	0.16	0.22	0.16	0.21	0.29
105	150	195	0.09	0.12	0.17	0.16	0.21	0.29	0.21	0.28	0.39	0.26	0.34	0.47
105	150	195	0.10	0.14	0.19	0.17	0.22	0.31	0.21	0.28	0.39	0.23	0.31	0.43
105	150	195	0.10	0.14	0.19	0.17	0.22	0.31	0.21	0.28	0.39	0.23	0.31	0.43
19	24	30	0.04	0.06	0.08	0.09	0.12	0.17	0.10	0.14	0.19	0.13	0.17	0.23
15	18	23	0.04	0.06	0.08	0.08	0.10	0.14	0.09	0.12	0.17	0.10	0.14	0.19
19	24	30	0.04	0.06	0.08	0.09	0.12	0.17	0.10	0.14	0.19	0.13	0.17	0.23
15	18	23	0.04	0.06	0.08	0.08	0.10	0.14	0.09	0.12	0.17	0.10	0.14	0.19
15	18	23	0.04	0.06	0.08	0.08	0.10	0.14	0.09	0.12	0.17	0.10	0.14	0.19
22	27	34	0.04	0.06	0.08	0.09	0.12	0.17	0.10	0.14	0.19	0.13	0.17	0.23
17	21	26	0.04	0.06	0.08	0.08	0.10	0.14	0.09	0.12	0.17	0.10	0.14	0.19
23	29	36	0.04	0.06	0.08	0.08	0.10	0.14	0.10	0.14	0.19	0.12	0.16	0.22
19	24	30	0.02	0.03	0.04	0.07	0.09	0.12	0.09	0.12	0.17	0.10	0.14	0.19
24	30	38	0.04	0.06	0.08	0.08	0.10	0.14	0.10	0.14	0.19	0.12	0.16	0.22
19	24	30	0.02	0.03	0.04	0.07	0.09	0.12	0.09	0.12	0.17	0.10	0.14	0.19

Not: Yukarıda önerilen kesme parametreleri 20 serisine dayanmaktadır. 20/30/40/50/60/70/90 / etc serisini kullanırken parametreler şöyle olmalıdır.

çalışma durumuna göre uygun şekilde azaltılır.

Parametre: 20 serisi =% 100, 30/40 serisi =% 80'in altında, 2: 50 serisi =% 70'in altında.

Maça Matkap kesme parametresi öneri listesi - HSS-PM uç serisi

ISO	Malzeme	Isıl İşlem	HB	N/mm ²	Vc(m/min)		
					Dk.	Tavsiye etmek	Maks.
P	Alaşımsız çelik Y13 1215 1.0736 Y15 1213 1.0715 45 1045 1.0503 Q345B 1140 1.7026	<0.25%C Tavlınmış	100-150	370-500	38	54	70
		≥0.25%C Tavlınmış	175-225	600-775	35	50	64
		<0.55%C Söndürülmüş ve temperlenmiş	225-275	775-940	32	45	59
		≥0.55%C Tavlınmış	275-325	940-1090	25	36	47
		≥0.55%C Söndürülmüş ve temperlenmiş	300	1000	22	32	41
	Düşük alaşımlı çelik 40Cr 5140 1.7035 42CrMo 4140 1.7225	Tavlınmış	175-225	600-775	33	47	62
		Tavlınmış	225-275	775-940	32	45	59
		Tavlınmış	275-325	940-1090	28	41	53
		Asabi	325-375	1090-1265	24	34	44
	Yüksek alaşımlı çelik, takım çeliği, Dökme çelik Cr12, D3, 1.2080; 4Cr5MoSiV, H13, 1.2344	Tavlınmış	225-300	600-1020	22	32	41
		Asabi	300-350	1020-1180	19	27	35
	Paslanmaz çelik Ferritik / martensitik 0Cr13 403 1.400 2Cr13 410 1.4021	Ferritik	185-275	640-940	16	23	29
		Martensitik	275-350	940-1180	19	27	35
M	Paslanmaz çelik Östenitik 0Cr18Ni9 304 1.4301 0Cr17Ni11Mo2 316 1.4401	Tavlınmış / Sertleştirilmiş	135-185	480-640	18	25	32
		Oyuncular + İşlenmemiş	185-275	640-940	18	25	32
	Süper Dupleks Paslanmaz Çelik	N <0.1% Ferritik	135-185	480-640	19	27	35
		N ≥0.1% Ferritik	185-275	640-940	16	23	29
K	Gri dökme demir HT200 NO.30 GG20 HT250 NO.35 GG25	Ferritik	120-150	430-500	38	54	70
		Perlitik	150-200	500-700	35	50	64
	Dökme demir nodüler QT400-18 60-40-18 GGG40 QT600-3 80-60-03 GGG60	Ferritik	200-220	700-755	32	45	59
		Perlitik	220-260	755-890	32	45	59
	Dövülebilir dökme demir	Ferritik	120-150	430-500	32	45	59
		Perlitik	260-320	890-1020	32	45	59
N	Dövülebilir dökme demir	Tedavi edilemez	30	100	47	68	88
		Tedavi edilmiş	180	600	41	59	76
	Alüminyum Döküm	≤12% Si Tedavi edilemez	30	100	47	68	88
		>12% Si Tedavi edilmiş	180	600	41	59	76
	Bakır Alaşımları	>1% Pb Yüksek sıcaklık	—	—	41	59	76
		Serbest kesim	100-200	370-670	47	68	88
		Pirinç	200-250	670-855	47	68	88
		Elektrolitik bakır	100	370	47	68	88
	Metalik olmayan	Duroplastikler elyaf plastikler	—	—	47	68	88
		Sert kauçuk	60	200	47	68	88
S	Yüksek Sıcaklık. Alaşım Hastelloy B, Inconel 600,	Fe tabanı Tavlınmış	140-220	480-755	14	20	27
		Fe tabanı Tedavi edilmiş	223-310	755-990	11	16	21
		Ni veya co tabanı Tavlınmış	250	—	11	16	21
		Ni veya co tabanı Tedavi edilmiş	350	—	11	16	21
	Titanyum Alaşımı	Oyuncular	320	—	11	16	21
		Kürlenmiş alaşımlar	320	Rm 400	11	16	21
H	Aşınma Plakası Hardox, AR400, T-1,	Sertleşmek	400	1365	7	10	13
		Sertleşmek	500	1600	—	—	—
	Sertleştirilmiş Çelik	Sertleşmek	300-400	1020-1365	9	13	16
		Sertleşmek	400-500	1365+	—	—	—

(fn)mm/r																				
Ø 9.5-12.5mm			Ø 13.0-17.5mm			Ø 18.0-24.00mm			Ø 25.0-35.0mm			Ø 36.0-47.0mm			Ø 48.0-65.0mm			Ø 66.0-114.0mm		
Dk.	Tavsiye etmek	Maks.	Dk.	Tavsiye etmek	Maks.	Dk.	Tavsiye etmek	Maks.	Dk.	Tavsiye etmek	Maks.	Dk.	Tavsiye etmek	Maks.	Dk.	Tavsiye etmek	Maks.	Dk.	Tavsiye etmek	Maks.
0.09	0.12	0.17	0.13	0.17	0.23	0.17	0.22	0.31	0.21	0.28	0.39	0.26	0.34	0.47	0.29	0.39	0.54	0.36	0.48	0.66
0.07	0.09	0.12	0.1	0.14	0.19	0.13	0.17	0.23	0.19	0.25	0.34	0.23	0.31	0.43	0.27	0.36	0.5	0.31	0.42	0.57
0.07	0.09	0.12	0.1	0.14	0.19	0.13	0.17	0.23	0.19	0.25	0.34	0.23	0.31	0.43	0.27	0.36	0.5	0.31	0.42	0.57
0.05	0.07	0.10	0.09	0.12	0.17	0.12	0.16	0.22	0.16	0.21	0.29	0.21	0.28	0.39	0.25	0.33	0.45	0.29	0.38	0.53
0.04	0.06	0.08	0.08	0.10	0.14	0.12	0.16	0.22	0.16	0.21	0.29	0.19	0.26	0.35	0.22	0.30	0.41	0.26	0.34	0.47
0.07	0.09	0.12	0.1	0.14	0.19	0.13	0.17	0.23	0.19	0.25	0.34	0.22	0.3	0.41	0.25	0.33	0.45	0.29	0.38	0.53
0.07	0.09	0.12	0.09	0.12	0.17	0.13	0.17	0.23	0.19	0.25	0.34	0.22	0.3	0.41	0.25	0.33	0.45	0.29	0.38	0.53
0.05	0.07	0.1	0.08	0.1	0.14	0.12	0.16	0.22	0.16	0.21	0.29	0.19	0.26	0.35	0.22	0.3	0.41	0.26	0.34	0.47
0.04	0.06	0.08	0.08	0.1	0.14	0.12	0.16	0.22	0.16	0.21	0.29	0.19	0.26	0.35	0.22	0.3	0.41	0.26	0.34	0.47
0.07	0.09	0.12	0.09	0.12	0.17	0.12	0.16	0.22	0.13	0.17	0.23	0.19	0.25	0.34	0.22	0.30	0.41	0.26	0.34	0.47
0.05	0.07	0.1	0.09	0.12	0.17	0.12	0.16	0.22	0.13	0.17	0.23	0.19	0.25	0.34	0.22	0.30	0.41	0.26	0.34	0.47
0.08	0.10	0.14	0.10	0.14	0.19	0.12	0.16	0.22	0.13	0.17	0.23	0.19	0.25	0.34	0.21	0.28	0.39	0.26	0.34	0.47
0.07	0.09	0.12	0.09	0.12	0.17	0.10	0.14	0.19	0.10	0.14	0.19	0.16	0.21	0.29	0.19	0.25	0.34	0.23	0.31	0.43
0.04	0.06	0.08	0.09	0.12	0.17	0.10	0.14	0.19	0.13	0.17	0.23	0.19	0.25	0.34	0.21	0.28	0.39	0.26	0.34	0.47
0.04	0.06	0.08	0.08	0.10	0.14	0.09	0.12	0.17	0.10	0.14	0.19	0.16	0.21	0.29	0.19	0.25	0.34	0.23	0.31	0.43
0.04	0.06	0.08	0.09	0.12	0.17	0.10	0.14	0.19	0.13	0.17	0.23	0.19	0.25	0.34	0.21	0.28	0.39	0.26	0.34	0.47
0.04	0.06	0.08	0.08	0.10	0.14	0.09	0.12	0.17	0.10	0.14	0.19	0.16	0.21	0.29	0.19	0.25	0.34	0.23	0.31	0.43
0.09	0.12	0.17	0.16	0.21	0.29	0.21	0.28	0.39	0.26	0.34	0.47	0.31	0.42	0.57	0.35	0.47	0.65	0.39	0.52	0.72
0.08	0.10	0.14	0.14	0.19	0.26	0.19	0.25	0.34	0.23	0.31	0.43	0.29	0.38	0.53	0.32	0.43	0.59	0.36	0.48	0.66
0.08	0.10	0.14	0.12	0.16	0.22	0.16	0.21	0.29	0.21	0.8	0.39	0.23	0.31	0.43	0.27	0.36	0.50	0.31	0.42	0.57
0.07	0.09	0.12	0.09	0.12	0.17	0.12	0.16	0.22	0.16	0.21	0.29	0.19	0.25	0.34	0.22	0.30	0.41	0.26	0.34	0.47
0.09	0.12	0.17	0.16	0.21	0.29	0.21	0.28	0.39	0.26	0.34	0.47	0.31	0.42	0.57	0.35	0.47	0.65	0.39	0.52	0.72
0.05	0.07	0.10	0.08	0.10	0.14	0.09	0.12	0.17	0.12	0.16	0.22	0.16	0.21	0.29	0.19	0.25	0.34	0.21	0.28	0.39
0.05	0.07	0.10	0.08	0.10	0.14	0.13	0.17	0.23	0.16	0.21	0.29	0.29	0.38	0.53	0.32	0.43	0.59	0.32	0.43	0.59
0.10	0.14	0.19	0.17	0.22	0.31	0.21	0.28	0.39	0.23	0.31	0.43	0.29	0.38	0.53	0.32	0.43	0.59	0.32	0.43	0.59
0.10	0.14	0.19	0.17	0.22	0.31	0.21	0.28	0.39	0.26	0.34	0.47	0.29	0.38	0.53	0.32	0.43	0.59	0.32	0.43	0.59
0.10	0.14	0.19	0.17	0.22	0.31	0.21	0.28	0.39	0.23	0.31	0.43	0.29	0.38	0.53	0.32	0.43	0.59	0.32	0.43	0.59
0.10	0.14	0.19	0.17	0.22	0.31	0.21	0.28	0.39	0.23	0.31	0.43	0.29	0.38	0.53	0.32	0.43	0.59	0.32	0.43	0.59
0.08	0.10	0.14	0.14	0.19	0.26	0.19	0.25	0.34	0.23	0.31	0.43	0.29	0.38	0.53	0.34	0.45	0.62	0.36	0.48	0.66
0.07	0.09	0.12	0.09	0.12	0.17	0.12	0.16	0.22	0.16	0.21	0.29	0.19	0.25	0.34	0.22	0.30	0.41	0.26	0.34	0.47
0.09	0.12	0.17	0.16	0.21	0.29	0.21	0.28	0.39	0.26	0.34	0.47	0.31	0.42	0.57	0.36	0.48	0.66	0.39	0.52	0.72
0.10	0.14	0.19	0.17	0.22	0.31	0.21	0.28	0.39	0.23	0.31	0.43	0.29	0.38	0.53	0.32	0.43	0.59	0.32	0.43	0.59
0.10	0.14	0.19	0.17	0.22	0.31	0.21	0.28	0.39	0.23	0.31	0.43	0.29	0.38	0.53	0.32	0.43	0.59	0.32	0.43	0.59
0.04	0.06	0.08	0.09	0.12	0.17	0.10	0.14	0.19	0.13	0.17	0.23	0.16	0.21	0.29	0.19	0.26	0.35	—	—	—
0.04	0.06	0.08	0.08	0.10	0.14	0.09	0.12	0.17	0.10	0.14	0.19	0.13	0.17	0.23	0.16	0.21	0.29	—	—	—
0.04	0.06	0.08	0.09	0.12	0.17	0.10	0.14	0.19	0.13	0.17	0.23	0.16	0.21	0.29	0.19	0.26	0.35	—	—	—
0.04	0.06	0.08	0.08	0.10	0.14	0.09	0.12	0.17	0.10	0.14	0.19	0.13	0.17	0.23	0.16	0.21	0.29	—	—	—
0.04	0.06	0.08	0.08	0.10	0.14	0.09	0.12	0.17	0.10	0.14	0.19	0.13	0.17	0.23	0.16	0.21	0.29	—	—	—
0.04	0.06	0.08	0.09	0.12	0.17	0.10	0.14	0.19	0.13	0.17	0.23	0.16	0.21	0.29	0.19	0.26	0.35	—	—	—
0.04	0.06	0.08	0.08	0.10	0.14	0.09	0.12	0.17	0.10	0.14	0.19	0.13	0.17	0.23	0.16	0.21	0.29	—	—	—
0.04	0.06	0.08	0.08	0.10	0.14	0.10	0.14	0.19	0.12	0.16	0.22	0.16	0.21	0.29	0.21	0.28	0.39	0.23	0.31	0.43
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0.04	0.06	0.08	0.08	0.10	0.14	0.10	0.14	0.19	0.12	0.16	0.22	0.16	0.21	0.29	0.21	0.28	0.39	0.23	0.31	0.43
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Not: Yukarıda önerilen kesme parametreleri 20 serisine dayanmaktadır. 20/30/40/50/60/70/90 / etc serisini kullanırken parametreler şöyle olmalıdır
çalışma durumuna göre uygun şekilde azaltılır.

Parametre: 20 serisi =% 100, 30/40 serisi =% 80'in altında, ;, YANİ serisi =% 70'in altında.

Jöyer



High Performance Tools



Hızlı Matkap(Speed Drill)



Giriş

Hızlı matkap, orijinal olarak JOYER tarafından piyasaya sürülen yüksek performanslı değiştirilebilir uçlu bir matkap sistemidir.

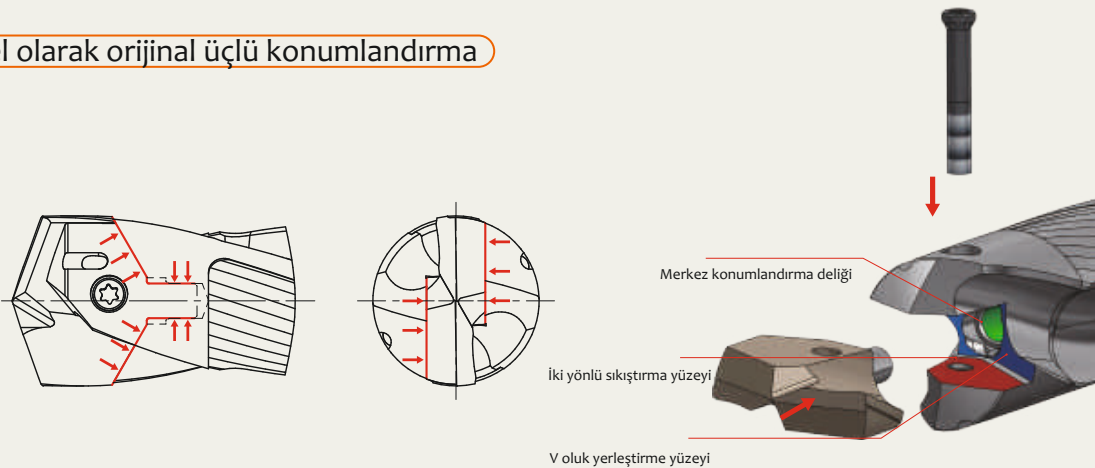
Bir patentin lisanslandığı üçlü konumlandırma yapısı, olağanüstü bağlantı gücü ve konumlandırma doğruluğuna sahiptir ve optimum geometrik tasarım ve malzemeler, mükemmel delme hızına ve dayanıklılığına katkıda bulunur. Bölünmüş değiştirilebilir yapı göz önüne alındığında, çeşitli işlevlere sahip kesici uçların ve farklı uzunluklardaki tutucuların esnek kombinasyonunu elde edebilir, böylece işlenecek farklı malzemelerin ihtiyaçlarını, farklı delme derinliklerini ve oyster uygulamasını karşılayabilir ve en aza indirilmiş takım yatırımının avantajlarını elde edebilir ve daha az envanter.

kesici uç çapı aralığı: Q10.00-Q39.99 mm; delme derinliği: 3D, 5D ve 8D; kesici uç malzemeleri, sırasıyla son derece sert CNC takım tezgahlarına ve yaygın takım tezgahlarına uyan karbür ve HSS-pm'yi içerir. Hızlı matkap ucu, çelik, paslanmaz, dökme demir ve demir dışı metaller gibi malzeme serilerinizi işlemek için tasarlanmıştır, böylece işlenmekte olan farklı malzemelerin ihtiyaçlarını karşılar.

Avantajlar

- * Kararlı ve kullanımı kolay değiştirilebilir adaptör, takım tezgahlarındaki kesici uçların değiştirilmesini kolaylaştırır;
- * Merkez kilit vidası, V oluk ve silindirin konumlandırma kombinasyonu tutarlı, sabit ve güvenilir kilitleme kuvveti ve sürtünme kuvveti sağlar ;
- * Optimum malzemeler, birinci sınıf kaplama ve hassas taşlama teknolojisi performansını en üst düzeye çıkarır
- * Yüksek mukavemetli kesici uç yapısı, onu yüksek beslemelerle delme konusunda yetkin kılar ;
- * Çimentolu karbür ve HSS-pm'nin benzersiz çift malzeme sistemi ile CNC makinelerde yüksek hızlı delme ve ortak makinelerde düşük ila orta hızlı delme gerçekleştirebilir;
- * Tutucunun sapı ISO 9766'yı uygular ve bu nedenle uluslararası olarak kullanılır.

Küresel olarak orijinal üçlü konumlandırma



Çimentolu karbür uçların ve toz çelik uçların uygulamaları



Karbür uçlar:
Yüksek sertlikleri ve aşınma direnci göz önüne alındığında,kesici uçlar CNC matkaplarda, CNC torna tezgahlarında ve işleme merkezlerinde yüksek hızlı delme için kullanılır.



HSS-PM kesici uçlar:
Yüksek yonga direncine sahip kesici uçlar, çeşitli radyal delme makinelerinde, dikey delme makinelerinde, ortak torna tezgahlarında ve CNC takım tezgahlarında düşük ila orta hızda delme için kullanılır.

Uygulamalar



Kurulum prosedürü

Çap aralığı Φ	Sıkma Torku (Nm)
10.0-13.99	0.6
14.0-17.99	1.2
18.0-23.99	2.2
24.0-27.99	3.3
28.0-30.99	5.0
31.0-36.99	7.5
37.0-39.99	15.0



Kurulum prosedürü

- 1 Önce kesici ucu ve montaj oluğunu basınçlı hava ile temizleyin.
- S2 Eki tutucudaki montaj oluğuna yerleştirin ve eki hafifçe itin.
- S3 Eki sabitleme ile sabitleyin bolt.İt kullanıcıların mümkün olduğunca bir tork anahtarı kullanmaları önerilir ve sıkma torkları şekilde gösterilmiştir.

Hızlı Matkap Ucu

Model Kodlama Kuralı

A10 — C PA — 1000

Ürün Serisi	Malzeme Ekle	Delme Noktası	Uç Çapı
A10 - Hızlı matkap	C - Karbür H - HSS-PM	PA - Üniversal delme noktası MA - Paslanmaz çelik için delme noktası KA - Dökme demir için delme noktası NA - Demir dışı metaller için delme noktası PC - Yüksek merkezleme Matkap Noktası	1000 - 10.0 mm 1270 - 12.7mm 10000 - 100.0mm

Karbür

mikro
tahıl

HSC
HPC

Karbür Uç Serisi

	P	M	K	N	S
PCA	●	○	○		
ACM	○	●			○
ACK			●		
NAC				●	

● Karbür Uç Serisi

○ Karbür Uç Serisi

HSS
PM

HPC

HSS PM Uç Serisi

	P	M	K	N	S
HPC	●	○	○	○	

● N Tercih Edileni

○ X Alternatif

Hızlı matkap tutucu

Model kodlama kuralı

A10 — K 1800 — 03 B 25

Ürün Serisi	Tip	Dk. Uç Çapı	Maks. Delik Derinliği	Şaft Tipi	Sap Çapı
A10- Hız dirli	K-tutucu	1800-18.0mm	03-3xD 05-5xD 08-8xD	B- Yan kilit sapı M- Mors konik şaft	16-16.0 20-20.0 25-25.0 32-32.0 40-40.0 T3-MT3



ISO 9766



3D

5D

8D

Özellikler

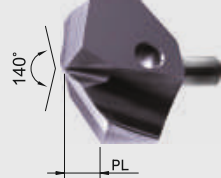
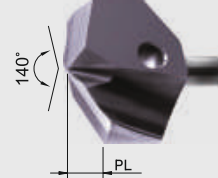
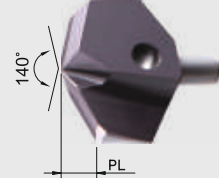
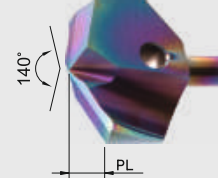
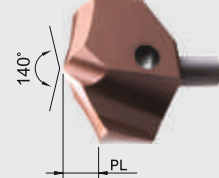
Karbür

mikro
tahıl

HSC
HPC

HSS
PM

HPC

		 Karbür	 Karbür	 Karbür	 Karbür	 HSS PM																					
Çap (mm)	PL	P	M	K	N	S	P	M	K	N	S	P	M	K	N	S	P	M	K	N	S	P	M	K	N	S	
		●	○	○			○	●				○			●						●		●	○	○	○	
		PCA					ACM					AKC					NAC					HPC					
10.00 10.20	1.8 1.9	A10-PCA-1000 A10-PCA-1020					A10-ACM-1000 A10-ACM-1020					A10-AKC-1000 A10-AKC-1020					A10-NAC-1000 A10-NAC-1020					A10-HPC-1000 A10-HPC-1020					
10.50	1.9	A10-PCA-1050					A10-ACM-1050					A10-AKC-1050					A10-NAC-1050					A10-HPC-1050					
11.00	2.0	A10-PCA-1100					A10-ACM-1100					A10-AKC-1100					A10-NAC-1100					A10-HPC-1100					
11.50	2.1	A10-PCA-1150					A10-ACM-1150					A10-AKC-1150					A10-NAC-1150					A10-HPC-1150					
12.00	2.2	A10-PCA-1200					A10-ACM-1200					A10-AKC-1200					A10-NAC-1200					A10-HPC-1200					
12.50	2.3	A10-PCA-1250					A10-ACM-1250					A10-AKC-1250					A10-NAC-1250					A10-HPC-1250					
13.00	2.4	A10-PCA-1300					A10-ACM-1300					A10-AKC-1300					A10-NAC-1300					A10-HPC-1300					
13.50	2.5	A10-PCA-1350					A10-ACM-1350					A10-AKC-1350					A10-NAC-1350					A10-HPC-1350					
14.00	2.5	A10-PCA-1400					A10-ACM-1400					A10-AKC-1400					A10-NAC-1400					A10-HPC-1400					

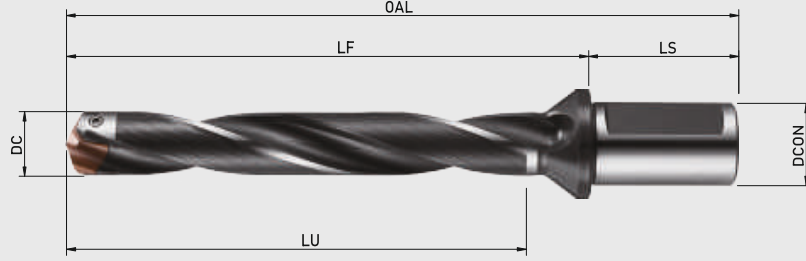


3D

5D

8D

boyut
(mm)



	LU	Sipariş Kodu	DC	DCON	LF	OAL	LS		
3D	31.5	A10-K1000-03B16	10.0~10.49	16	48	96	48	2102223	2502035
5D	52.5	A10-K1000-05B16	10.0~10.49	16	69	117	48	2102223	2502035
8D	84.0	A10-K1000-08B16	10.0~10.49	16	100	148	48	2102223	2502035
3D	33.0	A10-K1050-03B16	10.5~10.99	16	50	98	48	2102223	2502035
5D	55.0	A10-K1050-05B16	10.5~10.99	16	72	120	48	2102223	2502035
8D	88.0	A10-K1050-08B16	10.5~10.99	16	105	153	48	2102223	2502035
3D	34.5	A10-K1100-03B16	11.0~11.49	16	52	100	48	2102203	2502035
5D	57.5	A10-K1100-05B16	11.0~11.49	16	75	123	48	2102203	2502035
8D	92.0	A10-K1100-08B16	11.0~11.49	16	110	158	48	2102203	2502035
3D	36.0	A10-K1150-05B16	11.5~11.99	16	54	102	48	2102203	2502035
5D	60.0	A10-K1150-05B16	11.5~11.99	16	78	126	48	2102203	2502035
8D	96.0	A10-K1150-05B16	11.5~11.99	16	114	162	48	2102203	2502035
3D	37.5	A10-K1200-03B16	12.0~12.49	16	57	105	48	2102203	2502035
5D	62.5	A10-K1200-05B16	12.0~12.49	16	82	130	48	2102203	2502035
8D	100.0	A10-K1200-08B16	12.0~12.49	16	119	167	48	2102203	2502035
3D	39.0	A10-K1250-03B16	12.5~12.99	16	59	107	48	2102204	2502035
5D	65.0	A10-K1250-05B16	12.5~12.99	16	85	133	48	2102204	2502035
8D	104.0	A10-K1250-08B16	12.5~12.99	16	124	172	48	2102204	2502035
3D	40.5	A10-K1300-03B16	13.0~13.49	16	61	109	48	2102204	2502035
5D	67.5	A10-K1300-05B16	13.0~13.49	16	88	136	48	2102204	2502035
8D	108.0	A10-K1300-08B16	13.0~13.49	16	128	176	48	2102204	2502035
3D	42.0	A10-K1350-03B16	13.5~13.99	16	63	111	48	2102204	2502035
5D	70.0	A10-K1350-05B16	13.5~13.99	16	91	139	48	2102204	2502035
8D	112.0	A10-K1350-08B16	13.5~13.99	16	133	181	48	2102204	2502035
3D	43.5	A10-K1400-03B16	14.0~14.49	16	65	113	48	2102205	2502036
5D	72.5	A10-K1400-05B16	14.0~14.49	16	94	142	48	2102205	2502036
8D	116.0	A10-K1400-08B16	14.0~14.49	16	138	186	48	2102205	2502036

Özellikler

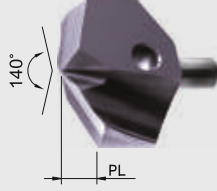
Karbür

mikro
tahlıl

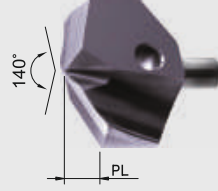
HSC
HPC

HSS
PM

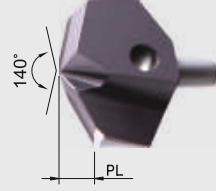
HPC



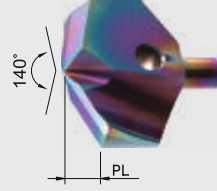
Carbide



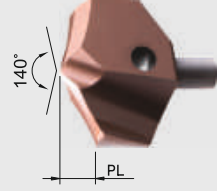
Carbide



Carbide



Carbide



HSS PM

Çap
(mm)

PL

P M K N S P M K N S P M K N S P M K N S P M K N S

● ○ ○ ○ ○ ○ ● ○ ○ ○ ○ ○ ○ ● ○ ○ ○ ○ ○ ● ○ ○ ○ ○ ○ ○ ● ○ ○ ○ ○ ○ ● ○ ○ ○ ○ ○ ○

PCA

ACM

AKC

NAC

HPC

14.50

2.6

A10-PCA-1450

A10-ACM-1450

A10-AKC-1450

A10-NAC-1450

A10-HPC-1450

15.00

2.7

A10-PCA-1500

A10-ACM-1500

A10-AKC-1500

A10-NAC-1500

A10-HPC-1500

15.50

2.8

A10-PCA-1550

A10-ACM-1550

A10-AKC-1550

A10-NAC-1550

A10-HPC-1550

16.00

2.9

A10-PCA-1600

A10-ACM-1600

A10-AKC-1600

A10-NAC-1600

A10-HPC-1600

16.50

3.0

A10-PCA-1650

A10-ACM-1650

A10-AKC-1650

A10-NAC-1650

A10-HPC-1650

17.00

3.1

A10-PCA-1700

A10-ACM-1700

A10-AKC-1700

A10-NAC-1700

A10-HPC-1700

17.50

3.2

A10-PCA-1750

A10-ACM-1750

A10-AKC-1750

A10-NAC-1750

A10-HPC-1750

18.00

3.3

A10-PCA-1800

A10-ACM-1800

A10-AKC-1800

A10-NAC-1800

A10-HPC-1800

18.50

3.4

A10-PCA-1850

A10-ACM-1850

A10-AKC-1850

A10-NAC-1850

A10-HPC-1850

19.00

3.5

A10-PCA-1900

A10-ACM-1900

A10-AKC-1900

A10-NAC-1900

A10-HPC-1900

19.50

3.5

A10-PCA-1950

A10-ACM-1950

A10-AKC-1950

A10-NAC-1950

A10-HPC-1950

20.00

3.6

A10-PCA-2000

A10-ACM-2000

A10-AKC-2000

A10-NAC-2000

A10-HPC-2000

20.50

3.7

A10-PCA-2050

A10-ACM-2050

A10-AKC-2050

A10-NAC-2050

A10-HPC-2050

21.00

3.8

A10-PCA-2100

A10-ACM-2100

A10-AKC-2100

A10-NAC-2100

A10-HPC-2100

21.50

3.9

A10-PCA-2150

A10-ACM-2150

A10-AKC-2150

A10-NAC-2150

A10-HPC-2150

22.00

4.0

A10-PCA-2200

A10-ACM-2200

A10-AKC-2200

A10-NAC-2200

A10-HPC-2200

22.50

4.1

A10-PCA-2250

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A10-AKC-2250

A10-NAC-2250

A10-HPC-2250

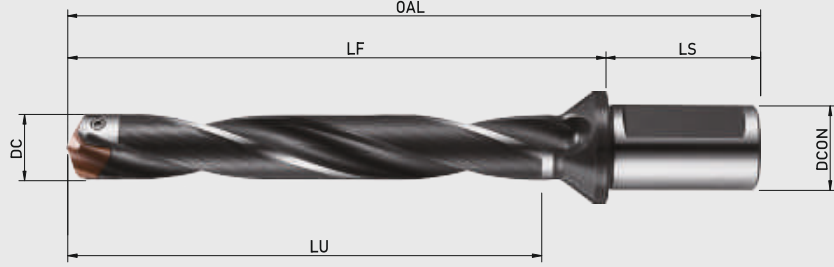


3D

5D

8D

boyut
(mm)



	LU	Sipariş Kodu	DC	DCON	LF	OAL	LS		
3D	45.0	A10-K1450-03B16	14.5~14.99	16	67	115	48	2102205	2502036
5D	75.0	A10-K1450-05B16	14.5~14.99	16	97	145	48	2102205	2502036
8D	120.0	A10-K1450-08B16	14.5~14.99	16	142	190	48	2102205	2502036
3D	48.0	A10-K1500-03B20	15.0~15.99	20	72	122	50	2102205	2502036
5D	80.0	A10-K1500-05B20	15.0~15.99	20	104	154	50	2102205	2502036
8D	128.0	A10-K1500-08B20	15.0~15.99	20	152	202	50	2102205	2502036
3D	51.0	A10-K1600-03B20	16.0~16.99	20	77	127	50	2102206	2502036
5D	85.0	A10-K1600-05B20	16.0~16.99	20	111	161	50	2102206	2502036
8D	140.0	A10-K1600-08B20	16.0~16.99	20	162	212	50	2102206	2502036
3D	54.0	A10-K1700-03B20	17.0~17.99	20	81	131	50	2102206	2502036
5D	90.0	A10-K1700-05B20	17.0~17.99	20	117	167	50	2102206	2502036
8D	144.0	A10-K1700-08B20	17.0~17.99	20	171	221	50	2102206	2502036
3D	57.0	A10-K1800-03B25	18.0~18.99	25	85	141	56	2102225	2502037
5D	95.0	A10-K1800-05B25	18.0~18.99	25	123	179	56	2102225	2502037
8D	152.0	A10-K1800-08B25	18.0~18.99	25	180	236	56	2102225	2502037
3D	60.0	A10-K1900-03B25	19.0~19.99	25	90	146	56	2102207	2502037
5D	100.0	A10-K1900-05B25	19.0~19.99	25	130	186	56	2102207	2502037
8D	160.0	A10-K1900-08B25	19.0~19.99	25	190	246	56	2102207	2502037
3D	63.0	A10-K2000-03B25	20.0~20.99	25	94	150	56	2102207	2502037
5D	105.0	A10-K2000-05B25	20.0~20.99	25	136	192	56	2102207	2502037
8D	168.0	A10-K2000-08B25	20.0~20.99	25	199	255	56	2102207	2502037
3D	66.0	A10-K2100-03B25	21.0~21.99	25	98	154	56	2102208	2502037
5D	110.0	A10-K2100-05B25	21.0~21.99	25	142	198	56	2102208	2502037
8D	176.0	A10-K2100-08B25	21.0~21.99	25	208	264	56	2102208	2502037
3D	69.0	A10-K2200-03B25	22.0~22.99	25	102	158	56	2102208	2502037
5D	115.0	A10-K2200-05B25	22.0~22.99	25	148	204	56	2102208	2502037
8D	184.0	A10-K2200-08B25	22.0~22.99	25	217	273	56	2102208	2502037

Özellikler

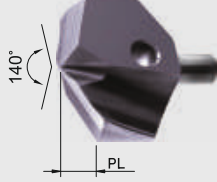
Karbür

mikro
tahl

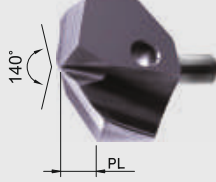
HSC
HPC

HSS
PM

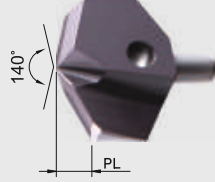
HPC



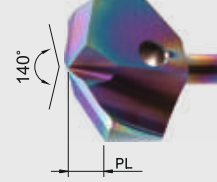
Carbide



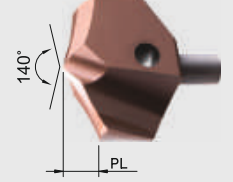
Carbide



Carbide



Carbide



HSS PM

Çap (mm)	PL	P	M	K	N	S	P	M	K	N	S	P	M	K	N	S	P	M	K	N	S	P	M	K	N	S		
		●	○	○			○	●				○			●							●		●	○	○	○	
		PCA					ACM					AKC					NAC					HPC						
23.00 23.50	4.2 4.3	A10-PCA-2300 A10-PCA-2350					A10-ACM-2300 A10-ACM-2350					A10-AKC-2300 A10-AKC-2350					A10-NAC-2300 A10-NAC-2350					A10-HPC-2300 A10-HPC-2350						
24.00 24.50	4.4 4.5	A10-PCA-2400 A10-PCA-2450					A10-ACM-2400 A10-ACM-2450					A10-AKC-2400 A10-AKC-2450					A10-NAC-2400 A10-NAC-2450					A10-HPC-2400 A10-HPC-2450						
25.00 25.50	4.5 4.6	A10-PCA-2500 A10-PCA-2550					A10-ACM-2500 A10-ACM-2550					A10-AKC-2500 A10-AKC-2550					A10-NAC-2500 A10-NAC-2550					A10-HPC-2500 A10-HPC-2550						
26.00 26.50	4.7 4.8	A10-PCA-2600 A10-PCA-2650					A10-ACM-2600 A10-ACM-2650					A10-AKC-2600 A10-AKC-2650					A10-NAC-2600 A10-NAC-2650					A10-HPC-2600 A10-HPC-2650						
27.00 27.50	4.9 5.0	A10-PCA-2700 A10-PCA-2750					A10-ACM-2700 A10-ACM-2750					A10-AKC-2700 A10-AKC-2750					A10-NAC-2700 A10-NAC-2750					A10-HPC-2700 A10-HPC-2750						
28.00 28.50	5.1 5.2	A10-PCA-2800 A10-PCA-2850					A10-ACM-2800 A10-ACM-2850					A10-AKC-2800 A10-AKC-2850					A10-NAC-2800 A10-NAC-2850					A10-HPC-2800 A10-HPC-2850						
29.00 29.50	5.3 5.4	A10-PCA-2900 A10-PCA-2950					A10-ACM-2900 A10-ACM-2950					A10-AKC-2900 A10-AKC-2950					A10-NAC-2900 A10-NAC-2950					A10-HPC-2900 A10-HPC-2950						
30.00 30.50	5.5 5.6	A10-PCA-3000 A10-PCA-3050					A10-ACM-3000 A10-ACM-3050					A10-AKC-3000 A10-AKC-3050					A10-NAC-3000 A10-NAC-3050					A10-HPC-3000 A10-HPC-3050						
31.00 31.50	5.6 5.7	A10-PCA-3100 A10-PCA-2350					A10-ACM-3100 A10-ACM-2350					A10-AKC-3100 A10-AKC-2350					A10-NAC-3100 A10-NAC-2350					A10-HPC-3100 A10-HPC-3150						

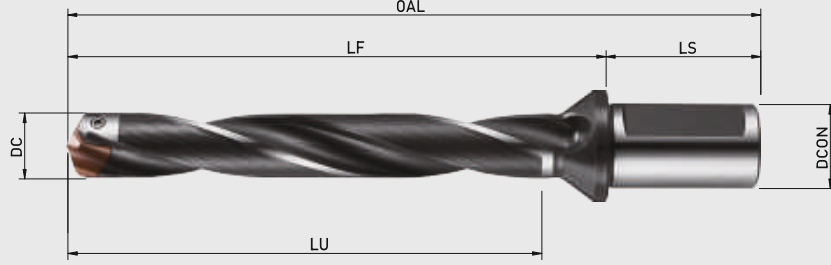


3D

5D

8D

boyut
(mm)



	LU	Sipariş Kodu	DC	DCON	LF	OAL	LS		
3D	72.0	A10-K2300-03B25	23.0~23.99	25	107	163	56	2102208	2502037
5D	120.0	A10-K2300-05B25	23.0~23.99	25	155	211	56	2102208	2502037
8D	192.0	A10-K2300-08B25	23.0~23.99	25	227	283	56	2102208	2502037
3D	75.0	A10-K2400-03B32	24.0~24.99	32	112	172	60	2102209	2502038
5D	125.0	A10-K2400-05B32	24.0~24.99	32	162	222	60	2102209	2502038
8D	200.0	A10-K2400-08B32	24.0~24.99	32	237	297	60	2102209	2502038
3D	78.0	A10-K2500-03B32	25.0~25.99	32	116	176	60	2102209	2502038
5D	130.0	A10-K2500-05B32	25.0~25.99	32	168	228	60	2102209	2502038
8D	208.0	A10-K2200-08B32	25.0~25.99	32	246	306	60	2102209	2502038
3D	81.0	A10-K2600-03B32	26.0~26.99	32	121	181	60	2102210	2502038
5D	135.0	A10-K2600-05B32	26.0~26.99	32	175	235	60	2102210	2502038
8D	216.0	A10-K2600-08B32	26.0~26.99	32	256	316	60	2102210	2502038
3D	84.0	A10-K2700-03B32	27.0~27.99	32	125	185	60	2102210	2502038
5D	140.0	A10-K2700-05B32	27.0~27.99	32	181	241	60	2102210	2502038
8D	224.0	A10-K2700-08B32	27.0~27.99	32	265	325	60	2102210	2502038
3D	87.0	A10-K2800-03B32	28.0~28.99	32	129	189	60	2102211	2502039
5D	145.0	A10-K2800-05B32	28.0~28.99	32	187	247	60	2102211	2502039
8D	232.0	A10-K2800-08B32	28.0~28.99	32	274	334	60	2102211	2502039
3D	90.0	A10-K2900-03B32	29.0~29.99	32	133	193	60	2102211	2502039
5D	150.0	A10-K2900-05B32	29.0~29.99	32	193	253	60	2102211	2502039
8D	240.0	A10-K2900-08B32	29.0~29.99	32	283	343	60	2102211	2502039
3D	93.0	A10-K3000-03B32	30.0~30.99	32	138	198	60	2102211	2502039
5D	155.0	A10-K3000-05B32	30.0~30.99	32	200	260	60	2102211	2502039
8D	248.0	A10-K3000-08B32	30.0~30.99	32	293	353	60	2102211	2502039
3D	96.0	A10-K3100-03B32	31.0~31.99	32	142	202	60	2102212	2502040
5D	160.0	A10-K3100-05B32	31.0~31.99	32	206	266	60	2102212	2502040
8D	256.0	A10-K3100-08B32	31.0~31.99	32	302	362	60	2102212	2502040

Özellikler

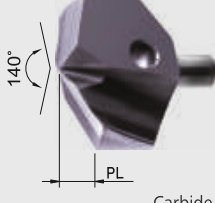
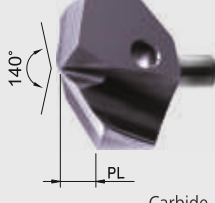
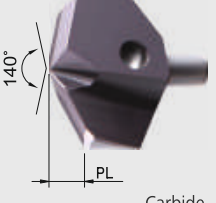
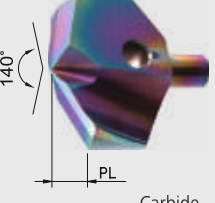
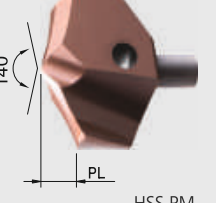
Karbür

mikro
tahıl

HSC
HPC

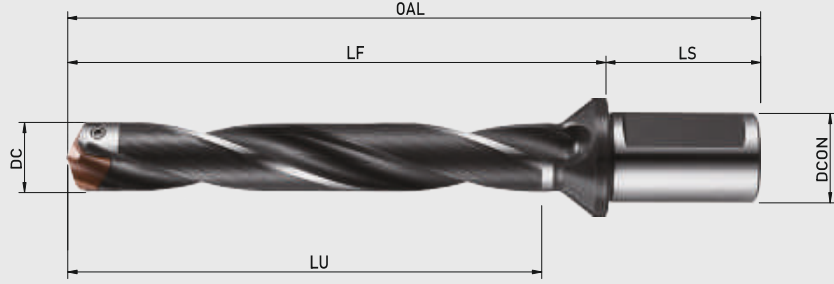
HSS
PM

HPC

		 Carbide					 Carbide					 Carbide					 Carbide					 HSS PM				
Çap (mm)	PL	P	M	K	N	S	P	M	K	N	S	P	M	K	N	S	P	M	K	N	S	P	M	K	N	S
		●	○	○			○	●			○			●						●		●	○	○	○	
		PCA					ACM					AKC					NAC					HPC				
32.00 32.50	5.8 5.9	A10-PCA-3200 A10-PCA-3250					A10-ACM-3200 A10-ACM-3250					A10-AKC-3200 A10-AKC-3250					A10-NAC-3200 A10-NAC-3250					A10-HPC-3200 A10-HPC-3250				
33.00 33.50	6.0 6.1	A10-PCA-3300 A10-PCA-3350					A10-ACM-3300 A10-ACM-3350					A10-AKC-3300 A10-AKC-3350					A10-NAC-3300 A10-NAC-3350					A10-HPC-3300 A10-HPC-3350				
34.00 34.50	6.2 6.3	A10-PCA-3400 A10-PCA-3450					A10-ACM-3400 A10-ACM-3450					A10-AKC-3400 A10-AKC-3450					A10-NAC-3400 A10-NAC-3450					A10-HPC-3400 A10-HPC-3450				
35.00 35.50	6.4 6.5	A10-PCA-3500 A10-PCA-3550					A10-ACM-3500 A10-ACM-3550					A10-AKC-3500 A10-AKC-3550					A10-NAC-3500 A10-NAC-3550					A10-HPC-3500 A10-HPC-3550				
36.00 36.50	6.6 6.6	A10-PCA-3600 A10-PCA-3650					A10-ACM-3600 A10-ACM-3650					A10-AKC-3600 A10-AKC-3650					A10-NAC-3600 A10-NAC-3650					A10-HPC-3600 A10-HPC-3650				
37.00 37.50	6.7 6.8	A10-PCA-3700 A10-PCA-3750					A10-ACM-3700 A10-ACM-3750					A10-AKC-3700 A10-AKC-3750					A10-NAC-3700 A10-NAC-3750					A10-HPC-3700 A10-HPC-3750				
38.00 38.50	6.9 7.0	A10-PCA-3800 A10-PCA-3850					A10-ACM-3800 A10-ACM-3850					A10-AKC-3800 A10-AKC-3850					A10-NAC-3800 A10-NAC-3850					A10-HPC-3800 A10-HPC-3850				
39.00	7.1	A10-PCA-3900					A10-ACM-3900					A10-AKC-3900					A10-NAC-3900					A10-HPC-3900				
39.50	7.2	A10-PCA-3950					A10-ACM-3950					A10-AKC-3950					A10-NAC-3950					A10-HPC-3950				
39.99	7.3	A10-PCA-3999					A10-ACM-3999					A10-AKC-3999					A10-NAC-3999					A10-HPC-3999				



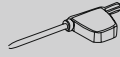
boyut
(mm)



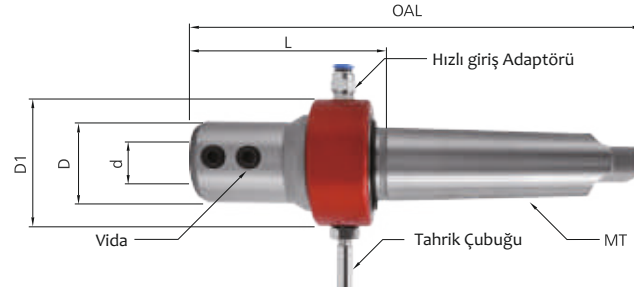
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3D	99.0	A10-K3200-03B32	32.0~32.99	32	146	206	60	2102212	2502040
5D	165.0	A10-K3200-05B32	32.0~32.99	32	212	272	60	2102212	2502040
8D	264.0	A10-K3200-08B32	32.0~32.99	32	311	371	60	2102212	2502040
3D	102.0	A10-K3300-03B32	33.0~33.99	32	151	211	60	2102212	2502040
5D	170.0	A10-K3300-05B32	33.0~33.99	32	219	279	60	2102212	2502040
8D	272.0	A10-K3300-08B32	33.0~33.99	32	321	381	60	2102212	2502040
3D	105.0	A10-K3400-03B40	34.0~34.99	40	156	226	70	2102213	2502040
5D	175.0	A10-K3400-05B40	34.0~34.99	40	224	294	70	2102213	2502040
8D	280.0	A10-K3400-08B40	34.0~34.99	40	329	399	70	2102213	2502040
3D	108.0	A10-K3500-03B40	35.0~35.99	40	160	230	70	2102213	2502040
5D	180.0	A10-K3500-05B40	35.0~35.99	40	230	300	70	2102213	2502040
8D	288.0	A10-K3500-08B40	35.0~35.99	40	338	408	70	2102213	2502040
3D	111.0	A10-K3600-03B40	36.0~36.99	40	164	234	70	2102213	2502040
5D	185.0	A10-K3600-05B40	36.0~36.99	40	236	306	70	2102213	2502040
8D	296.0	A10-K3600-08B40	36.0~36.99	40	347	417	70	2102213	2502040
3D	114.0	A10-K3700-03B40	37.0~37.99	40	169	239	70	2102214	2502041
5D	190.0	A10-K3700-05B40	37.0~37.99	40	243	313	70	2102214	2502041
8D	304.0	A10-K3700-08B40	37.0~37.99	40	357	427	70	2102214	2502041
3D	117.0	A10-K3800-03B40	38.0~38.99	40	173	243	70	2102214	2502041
5D	195.0	A10-K3800-05B40	38.0~38.99	40	249	319	70	2102214	2502041
8D	312.0	A10-K3800-08B40	38.0~38.99	40	366	436	70	2102214	2502041
3D	123.0	A10-K3900-03B40	39.0~39.99	40	182	252	70	2102214	2502041
5D	205.0	A10-K3900-05B40	39.0~39.99	40	262	332	70	2102214	2502041
8D	328.0	A10-K3900-08B40	39.0~39.99	40	385	455	70	2102214	2502041

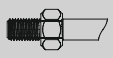
Aksesuarlar

Vidalar ve anahtarlar

Uç Çapı Aralığı Ø						
	TORX PLUS	Spesifikasyon	Sipariş Kodu	Spesifikasyon	Ürün No.	Şekil
10.0~10.99	6IP	M2×9	02189	6IP	02203	
11.0~12.49	6IP	M2×10	02190	6IP		
12.5~13.99	6IP	M2×11.5	02191	6IP		
14.0~15.99	7IP	M2.5×13	02192	7IP	02204	
16.0~17.99	7IP	M2.5×15	02193	7IP		
18.0~18.99	9IP	M3×16	02194	9IP	02205	
19.0~20.99	9IP	M3×17	02195	9IP		
21.0~23.99	9IP	M3×20	02196	9IP		
24.0~25.99	10IP	M3.5×22	02197	10IP	02206	
26.0~27.99	10IP	M3.5×24	02198	10IP		
28.0~30.99	15IP	M4×26	02199	15IP	02207	
31.0~33.99	20IP	M5×29	02200	20IP	02208	
34.0~36.99	20IP	M5×32	02201	20IP		
37.0~39.99	25IP	M6×35	02202	25IP	02209	

Konik sap tutucu



Sipariş Kodu	d	L	D	D1	OAL	MT				
							Ürün No.	Ürün No.	Ürün No.	Ürün No.
A10-ŞFT3-B16-100	16	100	37	54	194	#3	2102006	2301258	2301399	2301203
A10-ŞFT3-B20-103	20	103	40	54	197.5	#3	2102006	2301258	2301399	2301203
A10-ŞFT3-B25-109	25	109	49	54	204	#3	2102007	2301258	2301399	2301203
A10-ŞFT4-B16-100	16	110	37	63.5	227.5	#4	2102006	2301257	2301400	2301202
A10-ŞFT4-B20-113	20	113	40	63.5	230.5	#4	2102006	2301257	2301400	2301202
A10-ŞFT4-B25-119	25	119	49	63.5	236.5	#4	2102007	2301257	2301400	2301202
A10-ŞFT4-B32-128	32	128	64	76	245.5	#4	2102147	2301256	2301400	2301204
A10-ŞFT4-B40-139	40	139	73	76	256.5	#4	2102147	2301256	2301400	2301204
A10-ŞFT5-B16-105	16	105	37	76	254	#5	2102006	2301256	2301400	2301204
A10-ŞFT5-B20-108	20	108	40	76	257	#5	2102006	2301256	2301400	2301204
A10-ŞFT5-B25-114	25	114	49	76	263	#5	2102007	2301256	2301400	2301204
A10-ŞFT5-B32-120	32	120	64	76	269	#5	2102147	2301256	2301400	2301204
A10-ŞFT5-B40-130	40	130	73	76	279	#5	2102147	2301256	2301400	2301204

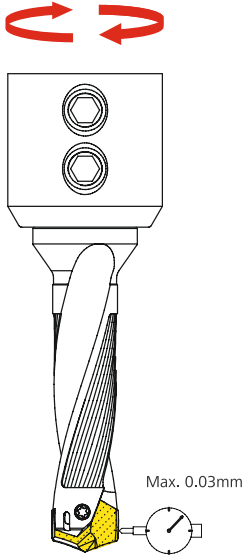
Kullanım şartları ve önlemler

Kurul

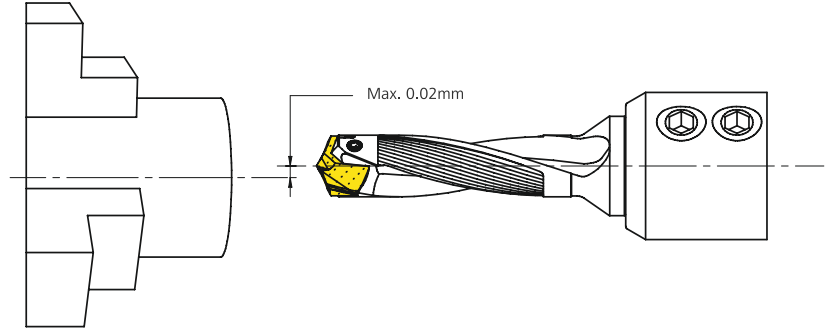
Optimum takım ömrü ve delik doğruluğu için uygulamaların kararlılığı esastır. Takım tezgahı milinin, armatürlerin ve iş parçasının tutuşunu kontrol ederek maksimum stabilite ve sağlamlığı garanti edin. Dengesiz çalışma koşulları matkap uçlarının kırılmasına neden olur.

Maks. Salgı ve Yanlış Hizalama

Salgı

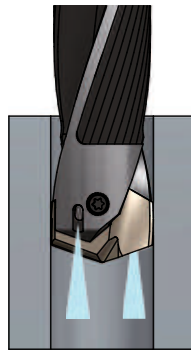


Maks. Salgı ve Yanlış Hizalama



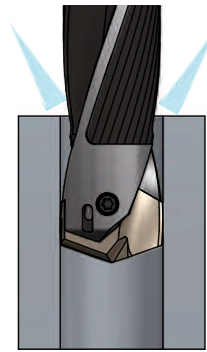
Soğutma Basıncı

İç soğutma



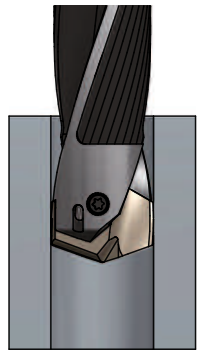
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5xD: 10bar	✓
8xD: 15bar	✓
10xD: 20bar	✓

Dış soğutma



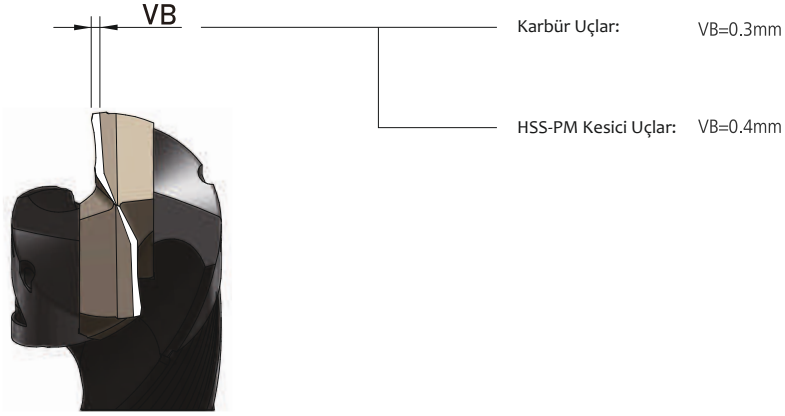
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5xD: 10bar	×
8xD: 15bar	×
10xD: 20bar	×

Yarı kuru kesim

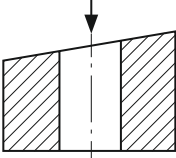
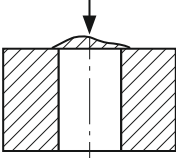
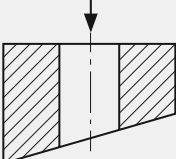
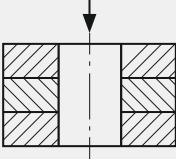
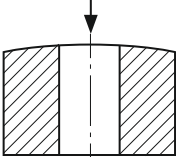
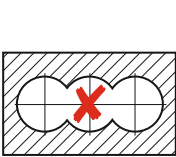
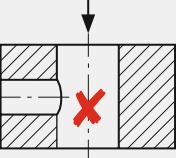
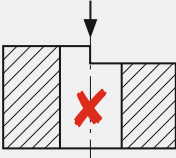


3xD: MQL	✓
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Matkap ucu değişimi için standart

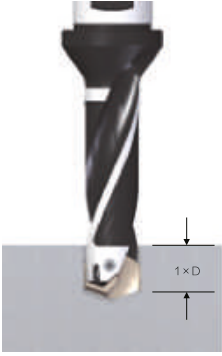
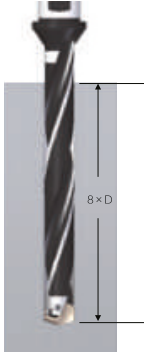


Uygulama

Çalışma Koşulları	Talimatlar	Çalışma Koşulları	Talimatlar
	Giriş yüzeyi eğimlidir Eğim $< 3^\circ$ Serbest Oran 50%		Talimatlar Talimatlar
	Çıkış eğimli Eğim $< 3^\circ$ Serbest Oran 50%		Giriş yüzeyi kaynaklıdır İşlemeden önce noktaya bakacak şekilde düzleştirin
	Giriş yüzeyi yaydır Azaltılmış ilerleme hızında merkezde delmeizin verilir Giriş noktası ise nokta kaplaması gereklidirarkin merkezinde değil		Yığılmış plakalar Prensip olarak izin verilmiş parçası uygun şekilde kelepçelenmelidir Plakalar arasında boşluk olmamalıdır
	Delikten izin verilmiyor		Boşluklar İzin verilmiyor

Tedbirler

8D uzunluğa sahip tutucular için delme işlemi

			
Kısa bir matkap ucu ile 1D ile 1,5D arasında bir pilot delik açın	Pilot deliğe düşük hızda ve düşük ilerleme hızında girin	soğutucuyu 2 ila 3 saniye tutun	sürekli hız gerçekleştirin göre sondaj parametreleri öner hızı ve besleme hızını azaltın çıkışta

Hızlı matkap kesme parametresi öneri listesi-Karbür uç serisi

ISO	Malzeme			Isıl işlem		HB	N/mm ²	Vc(m/min)		
								Dk.	Tavsiye etmek	Maks.
P	Alaşımsız çelik Y13 1215 1.0736 Y15 1213 1.0715 Düşük karbonlu çelik 45 1045 1.0503 Q345B 1140 1.7026			<0.25%C	Tavlanmış	100-150	370-500	84	120	156
				≥0.25%C	Tavlanmış	175-225	600-775	77	110	143
				<0.55%C	söndürülmüş ve temperlenmiş	225-275	775-940	70	100	130
				≥0.55%C	Tavlanmış	275-325	940-1090	56	80	104
					söndürülmüş ve temperlenmiş	300	1000	49	70	91
	Düşük karbonlu çelik 40Cr 5140 1.7035 42CrMo 4140 1.7225			Tavlanmış	175-225	175-225	600-775	74	105	137
				Tavlanmış	225-275	225-275	775-940	70	100	130
				Tavlanmış	275-325	275-325	940-1090	63	90	117
				Temperlenmiş	325-375	325-375	1090-1265	53	75	98
	Yüksek alaşımlı çelik, takım çeliği, Dökme çelik Cr12, D3, 1.2080; 4Cr5MoSiV, H13, 1.2344			Tavlanmış	225-300	225-300	600-1020	49	70	91
				Temperlenmiş	300-350	300-350	1020-1180	42	60	78
	Paslanmaz çelik Ferritik / martensitik 0Cr13 403 1.400 2Cr13 410 1.4021			Ferritik	185-275	185-275	640-940	35	50	65
Martensitik				275-350	275-350	940-1180	42	60	78	
M	Paslanmaz çelik Östenitik 0Cr18Ni9 304 1.4301 0Cr17Ni11Mo2 316 1.4401			Tavlanmış / Sertleştirilmiş	135-185	135-185	480-640	39	55	72
				Oyuncular + İşlenmemiş	185-275	185-275	640-940	39	55	72
	Süper Dupleks Paslanmaz Çelik		N <0.1%	Ferritik	135-185	480-640	42	60	78	
			N ≥0.1%	Ferne'ye	185-275	640-940	35	50	65	
K	Gri dökme demir HT200 NO.30 GG20 HT250 NO.35 GG25			Ferritik	120-150	120-150	430-500	76	108	140
				Perlitik	150-200	150-200	500-700	69	99	129
	Dökme demir nodüler QT400-18 60-40-18 GGG40 QT600-3 80-60-03 GGG60			Ferritik	200-220	200-220	700-755	63	90	117
				Perlitik	220-260	220-260	755-890	63	90	117
	Dövülebilir dökme demir			Ferritik	120-150	120-150	430-500	63	90	117
				Perlitik	260-320	260-320	890-1020	63	90	117
N	Dövme Alüminyum			Tedavi edilemez	30	30	100	105	150	195
				Tedavi edilmiş	180	180	600	91	130	169
	Alüminyum Döküm		≤12% Si	Tedavi edilemez	30	30	100	105	150	195
			Tedavi edilmiş	180	180	600	91	130	169	
			>12% Si	Tedavi edilemez	—	—	91	130	169	
	Bakır Alaşımları			>1% Pb	Yüksek sıcaklık	100-200	370-670	105	150	195
				Serbest kesim	200-250	200-250	670-855	105	150	195
				Pirinç	100	100	370	105	150	195
	Metalik olmayan				Elektrolitik bakır		—	105	150	195
Duroplastikler elyaf plastikler					60	200	105	150	195	
S	Yüksek Sıcaklık. Alaşım Hastelloy B, inconel 600,		Fe tabanı	Sert kauçuk	140-220	480-755	32	45	59	
				Tavlanmış	223-310	755-990	25	35	46	
			Ni veya co tabanı	Tedavi edilmiş	250	—	25	35	46	
				Tavlanmış	350	—	25	35	46	
				Tedavi edilmiş	320	—	25	35	46	
	Titanyum Alaşımı			GB Döküm	320	Rm 400	25	35	46	
						Rm 1050	25	35	46	
H	Aşınma Plakası Hardox, AR400, T-1,			kürlenmiş alaşımlar	400	1365	21	30	39	
				Sertleşmek	500	1600	15	21	30	
	Güçlendirilmiş çelik			Sertleşmek	300-400	1020-1365	28	40	52	
				Sertleşmek	400-500	1365+	18	25	35	

(fn)mm/r																				
Ø 10.00-11.99mm			Ø 12.00-13.99mm			Ø 14.00-15.99mm			Ø 16.00-19.99mm			Ø 20.00-25.99mm			Ø 26.00-32.99mm			Ø 33.00-39.99mm		
Dk.	Tavsiye etmek	Maks.	Dk.	Tavsiye etmek	Maks.	Dk.	Tavsiye etmek	Maks.	Dk.	Tavsiye etmek	Maks.	Dk.	Tavsiye etmek	Maks.	Dk.	Tavsiye etmek	Maks.	Dk.	Tavsiye etmek	Maks.
0.13	0.18	0.23	0.14	0.20	0.26	0.18	0.25	0.33	0.22	0.32	0.41	0.24	0.35	0.45	0.27	0.38	0.49	0.28	0.40	0.52
0.13	0.18	0.23	0.14	0.20	0.26	0.18	0.25	0.33	0.22	0.32	0.41	0.24	0.35	0.45	0.27	0.38	0.49	0.28	0.40	0.52
0.13	0.18	0.23	0.14	0.20	0.26	0.18	0.25	0.33	0.22	0.32	0.41	0.24	0.35	0.45	0.27	0.38	0.49	0.28	0.40	0.52
0.13	0.18	0.23	0.14	0.20	0.26	0.18	0.25	0.33	0.22	0.32	0.41	0.24	0.35	0.45	0.27	0.38	0.49	0.28	0.40	0.52
0.11	0.16	0.21	0.13	0.18	0.23	0.16	0.23	0.30	0.21	0.30	0.39	0.22	0.32	0.42	0.25	0.36	0.47	0.27	0.38	0.49
0.13	0.18	0.23	0.14	0.20	0.26	0.17	0.24	0.31	0.21	0.30	0.39	0.25	0.35	0.46	0.28	0.40	0.52	0.32	0.45	0.59
0.13	0.18	0.23	0.14	0.20	0.26	0.17	0.24	0.31	0.21	0.30	0.39	0.25	0.35	0.46	0.28	0.40	0.52	0.32	0.45	0.59
0.12	0.17	0.22	0.13	0.19	0.25	0.16	0.23	0.30	0.20	0.29	0.38	0.24	0.34	0.44	0.27	0.39	0.51	0.31	0.44	0.57
0.11	0.16	0.21	0.13	0.18	0.23	0.15	0.22	0.29	0.20	0.28	0.36	0.23	0.33	0.43	0.27	0.38	0.49	0.30	0.43	0.56
0.11	0.16	0.21	0.13	0.19	0.25	0.15	0.22	0.29	0.18	0.25	0.33	0.21	0.30	0.39	0.21	0.30	0.39	0.22	0.32	0.42
0.11	0.16	0.21	0.13	0.19	0.25	0.15	0.22	0.29	0.18	0.25	0.33	0.21	0.30	0.39	0.21	0.30	0.39	0.22	0.32	0.42
0.09	0.14	0.18	0.11	0.16	0.20	0.12	0.17	0.22	0.15	0.22	0.28	0.19	0.27	0.34	0.20	0.29	0.38	0.23	0.33	0.43
0.09	0.13	0.16	0.09	0.14	0.18	0.11	0.15	0.20	0.13	0.19	0.24	0.16	0.24	0.31	0.18	0.26	0.34	0.23	0.33	0.43
0.09	0.13	0.16	0.09	0.14	0.18	0.11	0.15	0.20	0.12	0.18	0.23	0.15	0.22	0.28	0.17	0.24	0.31	0.23	0.33	0.43
0.09	0.13	0.16	0.09	0.14	0.18	0.11	0.15	0.20	0.12	0.18	0.23	0.15	0.22	0.28	0.17	0.24	0.31	0.23	0.33	0.43
0.09	0.13	0.16	0.09	0.14	0.18	0.11	0.15	0.20	0.12	0.18	0.23	0.14	0.21	0.27	0.16	0.23	0.30	0.23	0.33	0.43
0.09	0.13	0.16	0.09	0.14	0.18	0.11	0.15	0.20	0.12	0.18	0.23	0.14	0.21	0.27	0.16	0.23	0.30	0.23	0.33	0.43
0.18	0.25	0.33	0.20	0.29	0.38	0.26	0.37	0.48	0.28	0.41	0.53	0.32	0.45	0.59	0.34	0.48	0.63	0.35	0.50	0.65
0.18	0.25	0.33	0.20	0.29	0.38	0.26	0.37	0.48	0.28	0.41	0.53	0.32	0.45	0.59	0.34	0.48	0.63	0.35	0.50	0.65
0.18	0.25	0.33	0.20	0.29	0.38	0.26	0.37	0.48	0.28	0.41	0.53	0.32	0.45	0.59	0.34	0.48	0.63	0.35	0.50	0.65
0.18	0.25	0.33	0.20	0.29	0.38	0.26	0.37	0.48	0.28	0.41	0.53	0.32	0.45	0.59	0.34	0.48	0.63	0.35	0.50	0.65
0.18	0.25	0.33	0.20	0.29	0.38	0.26	0.37	0.48	0.28	0.41	0.53	0.32	0.45	0.59	0.34	0.48	0.63	0.35	0.50	0.65
0.18	0.25	0.33	0.20	0.29	0.38	0.26	0.37	0.48	0.28	0.41	0.53	0.32	0.45	0.59	0.34	0.48	0.63	0.35	0.50	0.65
0.18	0.25	0.33	0.20	0.28	0.36	0.26	0.37	0.48	0.28	0.40	0.52	0.32	0.45	0.59	0.35	0.50	0.65	0.39	0.55	0.72
0.18	0.25	0.33	0.20	0.28	0.36	0.26	0.37	0.48	0.28	0.40	0.52	0.32	0.45	0.59	0.35	0.50	0.65	0.39	0.55	0.72
0.18	0.25	0.33	0.20	0.28	0.36	0.26	0.37	0.48	0.28	0.40	0.52	0.32	0.45	0.59	0.35	0.50	0.65	0.39	0.55	0.72
0.18	0.25	0.33	0.20	0.28	0.36	0.26	0.37	0.48	0.28	0.40	0.52	0.32	0.45	0.59	0.35	0.50	0.65	0.39	0.55	0.72
0.18	0.25	0.33	0.20	0.28	0.36	0.26	0.37	0.48	0.28	0.40	0.52	0.32	0.45	0.59	0.35	0.50	0.65	0.39	0.55	0.72
0.18	0.25	0.33	0.20	0.28	0.36	0.26	0.37	0.48	0.28	0.40	0.52	0.32	0.45	0.59	0.35	0.50	0.65	0.39	0.55	0.72
0.18	0.25	0.33	0.20	0.28	0.36	0.26	0.37	0.48	0.28	0.40	0.52	0.32	0.45	0.59	0.35	0.50	0.65	0.39	0.55	0.72
0.18	0.25	0.33	0.20	0.28	0.36	0.26	0.37	0.48	0.28	0.40	0.52	0.32	0.45	0.59	0.35	0.50	0.65	0.39	0.55	0.72
0.18	0.25	0.33	0.20	0.28	0.36	0.26	0.37	0.48	0.28	0.40	0.52	0.32	0.45	0.59	0.35	0.50	0.65	0.39	0.55	0.72
0.06	0.08	0.10	0.07	0.10	0.13	0.10	0.14	0.18	0.11	0.16	0.21	0.13	0.18	0.23	0.14	0.20	0.26	0.15	0.22	0.29
0.06	0.08	0.10	0.07	0.10	0.13	0.10	0.14	0.18	0.11	0.16	0.21	0.13	0.18	0.23	0.14	0.20	0.26	0.15	0.22	0.29
0.06	0.08	0.10	0.07	0.10	0.13	0.10	0.14	0.18	0.11	0.16	0.21	0.13	0.18	0.23	0.14	0.20	0.26	0.15	0.22	0.29
0.06	0.08	0.10	0.07	0.10	0.13	0.10	0.14	0.18	0.11	0.16	0.21	0.13	0.18	0.23	0.14	0.20	0.26	0.15	0.22	0.29
0.06	0.08	0.10	0.07	0.10	0.13	0.10	0.14	0.18	0.11	0.16	0.21	0.13	0.18	0.23	0.14	0.20	0.26	0.15	0.22	0.29
0.06	0.08	0.10	0.07	0.10	0.13	0.10	0.14	0.18	0.11	0.16	0.21	0.13	0.18	0.23	0.14	0.20	0.26	0.15	0.22	0.29
0.06	0.08	0.10	0.08	0.12	0.16	0.11	0.15	0.20	0.14	0.20	0.26	0.18	0.25	0.33	0.21	0.30	0.39	0.25	0.35	0.46
0.03	0.04	0.06	0.04	0.06	0.08	0.05	0.07	0.10	0.08	0.11	0.15	0.1	0.14	0.20	0.13	0.18	0.25	0.15	0.21	0.30
0.07	0.10	0.13	0.08	0.12	0.16	0.11	0.15	0.20	0.13	0.18	0.23	0.14	0.20	0.26	0.15	0.22	0.29	0.18	0.25	0.33
0.04	0.06	0.08	0.05	0.07	0.10	0.06	0.08	0.12	0.08	0.11	0.16	0.09	0.13	0.18	0.1	0.14	0.20	0.11	0.15	0.22

Not: 1. Üst hız tarafından önerilen kesme parametreleri 3D modele tabidir. SD ve 8D modelleri kullanırken, çalışma koşullarına göre besleme hızını uygun şekilde azaltın.

Besleme hızı: 3D tipi = J 00%, 5D tipi = 80% veya daha az, 8D tipi = 70% veya daha az. H sınıfı sert malzemeleri kesmek için MQL (mikro yağ buharı soğutma yöntemi)

kullanılması önerilir

Hızlı matkap kesme parametresi öneri listesi-Karbür uç serisi

ISO	Malzeme	Isıl işlem		HB	N/mm ²	Vc(m/min)			
						Dk.	Tavsiye etmek	Maks.	
P	Alaşımsız çelik Y13 1215 1.0736 Y15 1213 1.0715 Düşük karbonlu çelik 45 1045 1.0503 Q345B 1140 1.7026	<0.25%C	Tavlınmış	100-150	370-500	38	54	70	
		≥0.25%C	Tavlınmış	175-225	600-775	35	50	64	
		<0.55%C	söndürülmüş ve temperlenmiş	225-275	775-940	32	45	59	
		≥0.55%C	Tavlınmış	275-325	940-1090	25	36	47	
			söndürülmüş ve temperlenmiş	300	1000	22	32	41	
				Tavlınmış	175-225	600-775	33	47	62
	Düşük karbonlu çelik 40Cr 5140 1.7035 42CrMo 4140 1.7225			Tavlınmış	225-275	775-940	32	45	59
				Tavlınmış	275-325	940-1090	28	41	53
				Temperlenmiş	325-375	1090-1265	24	34	44
				Tavlınmış	225-300	600-1020	22	32	41
			Temperlenmiş	300-350	1020-1180	19	27	35	
			Ferritik	185-275	640-940	16	23	29	
		Martensitik	275-350	940-1180	19	27	35		
M	Paslanmaz çelik Östenitik 0Cr18Ni9 304 1.4301 0Cr17Ni11Mo2 316 1.4401		Tavlınmış / Sertleştirilmiş	135-185	480-640	18	25	32	
			Oyuncular + işlenmemiş	185-275	640-940	18	25	32	
	Süper Dupleks Paslanmaz Çelik	N <0.1%	Ferritik	135-185	480-640	19	27	35	
		N ≥0.1%	Fernie'ye	185-275	640-940	16	23	29	
K	Gri dökme demir HT200 NO.30 GG20 HT250 NO.35 GG25		Ferritik	120-150	430-500	38	54	70	
			Perlitik	150-200	500-700	35	50	64	
	Dökme demir nodüler QT400-18 60-40-18 GGG40 QT600-3 80-60-03 GGG60		Ferritik	200-220	700-755	32	45	59	
			Perlitik	220-260	755-890	32	45	59	
	Dövülebilir dökme demir		Ferritik	120-150	430-500	32	45	59	
			Perlitik	260-320	890-1020	32	45	59	
N	Dövme Alüminyum		Tedavi edilemez	30	100	47	68	88	
			Tedavi edilmiş	180	600	41	59	76	
	Alüminyum Döküm	≤12% Si	Tedavi edilemez	30	100	47	68	88	
			Tedavi edilmiş	180	600	41	59	76	
		>12% Si	Tedavi edilemez	—	—	41	59	76	
	Bakır Alaşımları	>1% Pb	Yüksek sıcaklık	100-200	370-670	47	68	88	
			Serbest kesim	200-250	670-855	47	68	88	
			Pirinç	100	370	47	68	88	
	Metalik olmayan		Elektrolitik bakır		—	47	68	88	
			Duroplastikler elyaf plastikler	60	200	47	68	88	
S	Yüksek Sıcaklık. Alaşım Hastelloy B, Inconel 600,		Fe tabanı	Sert kauçuk	140-220	480-755	14	20	27
				Tavlınmış	223-310	755-990	11	16	21
			Ni veya co tabanı	Tedavi edilmiş	250	—	11	16	21
				Tavlınmış	350	—	11	16	21
				Tedavi edilmiş	320	—	11	16	21
	Titanyum Alaşımı		GB Döküm	320	Rm 400	11	16	21	
					Rm 1050	11	16	21	
H	Aşınma Plakası Hardox, AR400, T-1,		kürlenmiş alaşımlar	400	1365	7	10	13	
			Sertleşmek	500	1600	—	—	—	
	Güçlendirilmiş çelik		Sertleşmek	300-400	1020-1365	9	13	16	
			Sertleşmek	400-500	1365+	—	—	—	

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Besleme hızı: 3D tipi = J 00%, 5D tipi = 80% veya daha az, 8D tipi = 70% veya daha az2. H sınıfı sert malzemeleri kesmek için MQL (mikro yağ buharı soğutma yöntemi) kullanılması önerilir



Bes Kesici A.Ş.



Beskesici



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