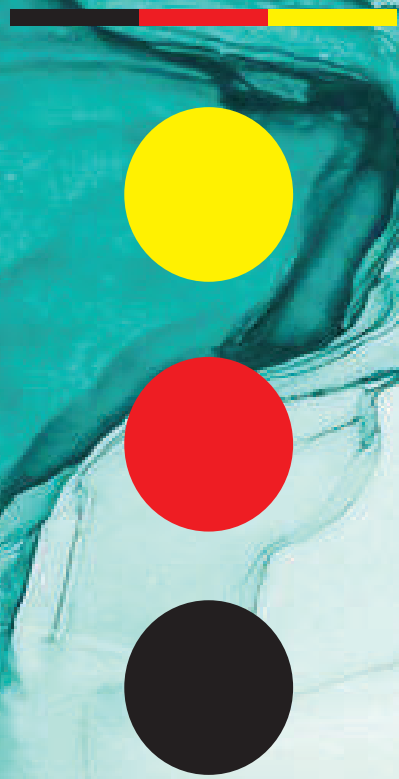




PROMAR

2023

format

professional quality

Türkiye Distribütörü



SHAVIV

vargus
NEUMO Ehrenberg Group



martor



GEDORE

HALDER
NORM+TECHNIK



wiha
Tools that work for you

HAIMER
Qualität gewinnt.

GESIPA
Le Rivetage
Professionnel



RÖHM

GÜHRING

DÜZ KANALLI MAKİNE KILAVUZ

1676 M 1 - M 10 DIN 371 HSS-E Çelik

1679 M 12 - M 30 DIN 376 HSS-E

Form B - Eğik Ağız Bilemeli

M

HSS-E

DIN 371

DIN 376

ISO 2 6H

Typ N

60°

≤ 3xd

format
professional quality



Çelik

ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit/ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	12	10	8	-	-	-	-	-	17	17	-	-	-	-	-

Ürün Kodu	Ölçü	Hatve	Tam Boy mm	Şaft Çapı	Kare Ölçüsü	Matkap Çapı mm	Fiyat €
16760010	M 1	0.25	40	2.5	2.1	0.75	42.60
16760012	M 1.2	0.25	40	2.5	2.1	0.95	40.97
16760014	M 1.4	0.30	40	2.5	2.1	1.10	32.29
16760016	M 1.6	0.35	40	2.5	2.1	1.25	28.75
16760018	M 1.8	0.35	40	2.5	2.1	1.45	28.75
16760020	M 2	0.40	45	2.8	2.1	1.60	16.25
16760025	M 2.5	0.45	50	2.8	2.1	2.00	15.90
16760030	M 3	0.50	56	3.5	2.7	2.50	11.80
16760040	M 4	0.70	63	4.5	3.4	3.30	12.24
16760050	M 5	0.80	70	6	4.9	4.20	12.56
16760060	M 6	1.00	80	6	4.9	5.00	12.56
16760080	M 8	1.25	90	8	6.2	6.80	14.67
16760100	M 10	1.50	100	10	8	8.50	18.06
16790120	M 12	1.75	110	9	7	10.20	24.75
16790140	M 14	2.00	110	11	9	12.00	34.20
16790160	M 16	2.00	110	12	9	14.00	35.43
16790180	M 18	2.50	125	14	11	15.50	55.51
16790200	M 20	2.50	140	16	12	17.50	55.03
16790220	M 22	2.50	140	18	14.5	19.50	72.00
16790240	M 24	3.00	160	18	14.5	21.00	73.95
16790270	M 27	3.00	160	20	16	24.00	92.01
16790300	M 30	3.50	180	22	18	26.50	114.64

HELİS KANALLI MAKİNE KILAVUZ

1682

M 3 - M 10 DIN 371 HSS-E
M 12 - M 30 DIN 376 HSS-E

M

HSS-E

DIN 371

DIN 376

ISO 2 6H

Typ N

60°

40°

≤ 3xd

format
professional quality



Çelik

	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
	< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit/ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	8	6	5	-	-	-	-	-	-	10	10	-	-	-	-	-

Ürün Kodu	Ölçü	Hatve	Tam Boy mm	Şaft Çapı	Karesi mm	Matkap Çapı mm	Fiyat €
16820020	M 2	0.40	45	2.8	2.1	1.60	15.28
16820025	M 2.5	0.45	50	2.8	2.1	2.00	15.41
16820030	M 3	0.50	56	3.5	2.7	2.50	11.26
16820040	M 4	0.70	63	4.5	3.4	3.30	11.51
16820050	M 5	0.80	70	6	4.9	4.20	11.80
16820060	M 6	1.00	80	6	4.9	5.00	11.80
16820080	M 8	1.25	90	8	6.2	6.80	14.01
16820100	M 10	1.50	100	10	8	8.50	18.13
16820120	M 12	1.75	110	9	7	10.20	23.98
16820140	M 14	2.00	110	11	9	12.00	33.96
16820160	M 16	2.00	110	12	9	14.00	38.27
16820180	M 18	2.50	125	14	11	15.50	49.77
16820200	M 20	2.50	140	16	12	17.50	53.95
16820220	M 22	2.50	140	18	14.5	19.50	69.45
16820240	M 24	3.00	160	18	14.5	21.00	68.39
16820270	M 27	3.00	160	20	16	24.00	92.16
16820300	M 30	3.50	180	22	18	26.50	114.18

DÜZ KANALLI MAKİNE KILAVUZ

1660 M 3 - M 10 DIN 371 HSS-E

1661 M 3 - M 20 DIN 376 HSS-E

M

HSS-E

DIN 371

DIN 376

ISO 2 6H

Typ N

60°

≤ 3xd

format
professional quality



Çelik / Paslanmaz / Döküm / Alüminyum

	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DIŞI METALLER				SERT ÇELİK		
	< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit./ martens.	austenit- sch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	12	10	8	8	6	5	15	12	-	15	15	-	-	-	-	-

V_c [m/min]

Ürün Kodu	Ölçü	Hatve	Tam Boy mm	Şaft Çapı	Kare Ölçüsü	Matkap Çapı mm	Fiyat €
16600030	M 3	0.50	56	3.5	2.7	2.50	12.36
16600040	M 4	0.70	63	4.5	3.4	3.30	12.58
16600050	M 5	0.80	70	6.0	4.9	4.20	12.58
16600060	M 6	1.00	80	6.0	4.9	5.00	12.81
16600080	M 8	1.25	90	8.0	6.2	6.80	14.89
16600100	M 10	1.50	100	10.0	8.0	8.50	17.73
16610030	M 3	0.50	56	2.2	-	2.50	12.96
16610040	M 4	0.70	63	2.8	2.1	3.30	13.49
16610050	M 5	0.80	70	3.5	2.7	4.20	13.49
16610060	M 6	1.00	80	4.5	3.4	5.00	14.18
16610080	M 8	1.25	90	6.0	4.9	6.80	15.76
16610100	M 10	1.50	100	7.0	5.5	8.50	19.11
16610120	M 12	1.75	110	9.0	7.0	10.20	24.86
16610140	M 14	2.00	110	11.0	9.0	12.00	33.18
16610160	M 16	2.00	110	12.0	9.0	14.00	34.73
16610200	M 20	2.50	140	16.0	12.0	17.50	52.87

HELİS KANALLI MAKİNE KILAVUZ

1664 M 3 - M 10 DIN 371 HSS-E

1665 M 12 - M 20 DIN 376 HSS-E

M

HSS-E

DIN 371

DIN 376

ISO 2 6H

Typ N

60°

40°

≤ 3xd

format
professional quality



Çelik / Paslanmaz / Döküm / Alüminyum

	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DIŞI METALLER				SERT ÇELİK		
	< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit./ martens.	austenit- sch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	12	10	8	6	5	4	10	8	-	15	15	-	-	-	-	-

V_c [m/min]

Ürün Kodu	Ölçü	Hatve	Tam Boy mm	Şaft Çapı	Kare Ölçüsü	Matkap Çapı mm	Fiyat €
16640030	M 3	0.50	56	3.5	2.7	2.50	12.91
16640040	M 4	0.70	63	4.5	3.4	3.30	12.91
16640050	M 5	0.80	70	6.0	4.9	4.20	13.55
16640060	M 6	1.00	80	6.0	4.9	5.00	14.03
16640080	M 8	1.25	90	8.0	6.2	6.80	16.47
16640100	M 10	1.50	100	10.0	8.0	8.50	18.88
16650120	M 12	1.75	110	9.0	7.0	10.20	23.10
16650160	M 16	2.00	110	12.0	9.0	14.00	35.75
16650200	M 20	2.50	140	16.0	12.0	17.50	50.57

OVALAMA KILAVUZU TİN KAPLI

1780

M 3 - M 10 DIN 371 HSS-E Tin Kaplamalı
M 12 - M 16 DIN 376 HSS-E Tin Kaplamalı
6HX Tolerans (Standart)



format
professional quality

Çelik / Paslanmaz / Bakır / Alüminyum



	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
	< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit/ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	10	8	6	12	10	8	-	23	6	45	35	-	-	-	-	-

Ürün Kodu	Ölçü	Hatve	Tam Boy mm	Şaft Çapı	Karesi mm	Matkap Çapı mm	Fiyat €
17800001	M 3	0.50	56	3.5	2.7	2.80	21.05
17800003	M 4	0.70	63	4.5	3.4	3.70	21.05
17800005	M 5	0.80	70	6	4.9	4.65	22.18
17800007	M 6	1.00	80	6	4.9	5.55	22.18
17800009	M 8	1.25	90	8	6.2	7.40	26.05
17800011	M 10	1.50	100	10	8	9.25	33.56
17800013	M 12	1.75	110	9	7	11.20	40.35
17800015	M 16	2.00	110	12	9	15.00	66.28

İNCE DİŞ OVALAMA KILAVUZLARI TİN KAPLI

1785

DIN 374 ISO 2 6HX Tin Kaplamalı



format
professional quality



	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
	< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit/ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	10	8	6	12	10	8	-	23	6	35	-	-	-	-	-	-

Ürün Kodu	Ölçü mm	Tam Boy	Şaft mm	Karesi mm	Matkap Çapı mm	Fiyat €
17850001	M 6 X 0.75	80	4.5	3.4	5.65	58.99
17850003	M 8 X 0.75	80	6	4.9	7.65	58.99
17850005	M 8 X 1.00	90	6	4.9	7.55	61.79
17850007	M 10 X 1.00	90	7	5.5	9.55	63.60
17850009	M 10 X 1.25	100	7	5.5	9.40	74.87
17850011	M 12 X 1.00	100	9	7	11.55	77.83
17850013	M 12 X 1.25	100	9	7	11.40	79.41
17850015	M 12 X 1.50	100	9	7	11.30	79.77
17850017	M 16 X 1.50	100	12	9	15.30	101.77
17850019	M 18 X 1.50	110	14	11	17.30	120.94
17850021	M 20 X 1.50	125	16	12	19.30	137.66

◆ - İşaretili Ürünler Almanya Stoklarımızda Olan Ürünlerdir. Sipariş Üzerine Getirilmiştir. Teslim Süresi Yaklaşık 2-3 Haftadır.

SERT ÇELİK DÜZ MAKİNE KILAVUZU

1705

M 3 - M 10 DIN 371 HSS-E
M 12 - M 24 DIN 376 HSS-E
Form B - Eğik Ağız Bilemeli

M

HSS-E

DIN 371

DIN 376

ISO 2 6H

Typ H

60°

≤ 3xd

format
professional quality



Sert Çelik

ÇELİK	PASLANMAZ	DÖKÜM	TİTANYUM	DEMİR DIŞI METALLER	SERT ÇELİK
< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit./ martens.	austeni- tisch	Duplex
GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.
Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC		
V _c [m/min]	-	10	-	-	-

Ürün Kodu	Ölçü	Hatve	Tam Boy mm	Şaft Çapı	Karesi mm	Matkap Çapı mm	Fiyat €
17050020	M 2	0.40	45	2.8	2.1	1.60	20.00
17050025	M 2.5	0.45	50	2.8	2.1	2.05	22.26
17050030	M 3	0.50	56	3.5	2.7	2.50	12.46
17050040	M 4	0.70	63	4.5	3.4	3.30	12.46
17050050	M 5	0.80	70	6	4.9	4.20	13.09
17050060	M 6	1.00	80	6	4.9	5.00	13.09
17050080	M 8	1.25	90	8	6.2	6.80	15.03
17050100	M 10	1.50	100	10	8	8.50	18.27
17050120	M 12	1.75	110	9	7	10.20	23.84
17050140	M 14	2.00	110	11	9	12.00	30.12
17050160	M 16	2.00	110	12	9	14.00	33.68
17050200	M 20	2.50	140	16	12	17.50	49.45
17050240	M 24	3.00	160	18	14.5	21.00	112.85

SERT ÇELİK HELİS MAKİNE KILAVUZU

1712

M 3 - M 10 DIN 371 HSS-E
M 12 - M 20 DIN 376 HSS-E

M

HSS-E

DIN 371

DIN 376

ISO 2 6H

Typ H

60°

40°

≤ 3xd

format
professional quality



Sert Çelik

ÇELİK	PASLANMAZ	DÖKÜM	TİTANYUM	DEMİR DIŞI METALLER	SERT ÇELİK
< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit./ martens.	austeni- tisch	Duplex
GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.
Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC		
V _c [m/min]	-	12	3	-	-

Ürün Kodu	Ölçü	Hatve	Tam Boy mm	Şaft Çapı	Karesi mm	Matkap Çapı mm	Fiyat €
17120030	M 3	0.50	56	3.5	2.7	2.50	13.23
17120040	M 4	0.70	63	4.5	3.4	3.30	13.69
17120050	M 5	0.80	70	6	4.9	4.20	14.24
17120060	M 6	1.00	80	6	4.9	5.00	14.24
17120080	M 8	1.25	90	8	6.2	6.80	15.01
17120100	M 10	1.50	100	10	8	8.50	19.01
17120120	M 12	1.75	110	9	7	10.20	26.39
17120140	M 14	2.00	110	11	9	12.00	37.07
17120160	M 16	2.00	110	12	9	14.00	36.66
17120180	M 18	2.50	125	14	11	15.50	52.45
17120200	M 20	2.50	140	16	12	17.50	54.16

DÖKÜM DÜZ MAKİNE KILAVUZU

1731

M 3 - M 10 DIN 371 HSS-E
M 12 - M 20 DIN 376 HSS-E
Form C

M

HSS-E

DIN 371

DIN 376

ISO 2 6HX

Typ GG

60°

≤ 3xd

format
professional quality



Döküm

ÇELİK	PASLANMAZ	DÖKÜM	TİTANYUM	DEMİR DİŞİ METALLER	SERT ÇELİK
< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit./ martens.	austeni- tisch	Duplex
GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.
Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC		
V _c [m/min]	-	-	-	-	-

Ürün Kodu	Ölçü	Hatve	Tam Boy mm	Şaft Çapı	Karesi mm	Matkap Çapı mm	Fiyat €
17310030	M 3	0.50	56	3.5	2.7	2.50	11.08
17310040	M 4	0.70	63	4.5	3.4	3.30	11.38
17310050	M 5	0.80	70	6	4.9	4.20	11.38
17310060	M 6	1.00	80	6	4.9	5.00	11.38
17310080	M 8	1.25	90	8	6.2	6.80	12.71
17310100	M 10	1.50	100	10	8	8.50	16.11
17310120	M 12	1.75	110	9	7	10.20	24.14
17310140	M 14	2.00	110	11	9	12.00	29.18
17310160	M 16	2.00	110	12	9	14.00	31.59
17310180	M 18	2.50	125	14	11	15.50	45.71
17310200	M 20	2.50	140	16	12	17.50	49.79

MS - PİRİNÇ DÜZ MAKİNE KILAVUZU

1734

DIN 371 HSS-E
Form C

M

HSS-E

DIN 371

ISO 2 6H

Typ MS

60°

≤ 3xd

format
professional quality



Bakır Pirinç

ÇELİK	PASLANMAZ	DÖKÜM	TİTANYUM	DEMİR DİŞİ METALLER	SERT ÇELİK
< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit./ martens.	austeni- tisch	Duplex
GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.
Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC		
V _c [m/min]	-	-	-	-	-

Ürün Kodu	Ölçü	Hatve	Tam Boy mm	Şaft Çapı	Karesi mm	Matkap Çapı mm	Fiyat €
17340030	M 3	0.50	56	3.5	2.7	2.50	10.14
17340040	M 4	0.70	63	4.5	3.4	3.30	10.46
17340050	M 5	0.80	70	6	4.9	4.20	10.46
17340060	M 6	1.00	80	6	4.9	5.00	11.19
17340080	M 8	1.25	90	8	6.2	6.80	11.86
17340100	M 10	1.50	100	10	8	8.50	14.47

UZUN HELİS MAKİNE KILAVUZU TİN KAPLI

1669 DIN 376 ISO 2 6HX Tin Kaplamalı



format
professional quality



	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
	< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	12	10	8	6	5	4	10	8	-	12	-	-	-	-	-	-

Ürün Kodu	Ölçü mm	Hatve mm	Tam Boy mm	Şaft mm	Karesi mm	Matkap Çapı mm	Fiyat €
16690030	M 3	0.5	112	3.5	2.7	2.5	41.97
16690040	M 4	0.7	112	2.8	2.1	3.3	37.69
16690050	M 5	0.8	125	3.5	2.7	4.2	37.38
16690060	M 6	1	125	4.5	3.4	5	37.69
16690080	M 8	1.25	140	6	4.9	6.8	38.42
16690100	M 10	1.5	160	6	5.5	8.5	44.55
16690120	M 12	1.75	180	9	7	10.2	53.57
16690160	M 16	2	220	12	9	14	70.64
16690200	M 20	2.5	280	16	12	17.5	110.21

KARBÜR DÜZ MAKİNE KILAVUZU

1721 DIN 371 Karbür, M 5 - M10 (İçten Su Vermeli)



GÜHRING



	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
	< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	-	-	-	-	-	-	25	30	-	50	50	-	-	-	-	-

Ürün Kodu	Ölçü	Hatve	Tam Boy mm	Şaft Çapı	Karesi mm	Matkap Çapı mm	Fiyat €
17210030	M 3	0.50	56	3.5	2.7	2.50	33.43
17210040	M 4	0.70	63	4.5	3.4	3.30	48.65
17210050	M 5	0.80	70	6	4.9	4.20	86.79
17210060	M 6	1.00	80	6	4.9	5.00	75.27
17210080	M 8	1.25	90	8	6.2	6.80	113.44
17210100	M 10	1.50	100	10	8	8.50	121.09

KOBALTLI SOMUN KILAVUZU

1750

M 3 - M 20 DIN 357 HSS-E

M

HSS-E

DIN
357

ISO 2
6H

Typ
N



format
professional quality



ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	10	8	6	-	-	-	-	-	5	-	-	-	-	-	-

Ürün Kodu	Ölçü	Hatve	Tam Boy mm	Şaft Çapı	Kare Ölçüsü	Matkap Çapı mm	Fiyat €
17500030	M 3	0.50	70	2.2	-	2.50	17.95
17500035	M 3,5	0.60	80	2.5	2.1	2.90	20.86
17500040	M 4	0.70	90	2.8	2.1	3.30	17.95
17500050	M 5	0.80	100	3.5	2.7	4.20	19.44
17500060	M 6	1.00	110	4.5	3.4	5.00	20.12
17500080	M 8	1.25	125	6.0	4.9	6.80	26.09
17500100	M 10	1.50	140	7.0	5.5	8.50	29.23
17500120	M 12	1.75	180	9.0	7.0	10.20	38.79
17500140	M 14	2.00	200	11.0	9.0	12.00	49.87
17500160	M 16	2.00	200	12.0	9.0	14.00	56.40
17500180	M 18	2.50	220	14.0	11.0	15.50	109.28
17500200	M 20	2.50	250	16.0	12.0	17.50	120.80

PM DÜZ MAKİNE KILAVUZLU TİN KAPLI

1663 M 2 - M 10 DIN 371 HSS-E PM Tin Kaplı
M 12 - M 20 DIN 376 HSS-E PM Tin Kaplı
Form B - Eğik Ağız Bilemeli



format
professional quality



PM

ÇELİK	PASLANMAZ	DÖKÜM	TİTANYUM	DEMİR DIŞI METALLER	SERT ÇELİK
< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex
GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.
Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC		
V _c [m/min]	20	16	13	12	10

Ürün Kodu	Ölçü	Hatve	Tam Boy mm	Şaft Çapı	Kare Ölçüsü	Matkap Çapı mm	Fiyat €
16630020	M 2	0.40	45	2.8	2.1	1.60	14.79
16630030	M 3	0.50	56	3.5	2.7	2.50	17.43
16630040	M 4	0.70	63	4.5	3.4	3.30	15.94
16630050	M 5	0.80	70	6	4.9	4.20	17.80
16630060	M 6	1.00	80	6	4.9	5.00	21.24
16630080	M 8	1.25	90	8	6.2	6.80	23.77
16630100	M 10	1.50	100	10	8	8.50	31.36
16630120	M 12	1.75	110	9	7	10.20	37.38
16630140	M 14	2.00	110	11	9	12.00	56.64
16630160	M 16	2.00	110	12	9	14.00	52.61
16630180	M 18	2.50	125	14	11	15.50	92.04
16630200	M 20	2.50	140	16	12	17.50	95.09

PM HELİS MAKİNE KILAVUZU TİN KAPLI

1667 M 2 - M 10 DIN 371 HSS-E PM Tin Kaplı
M 12 - M 20 DIN 376 HSS-E PM Tin Kaplı
Form B - Eğik Ağız Bilemeli



format
professional quality



PM

ÇELİK	PASLANMAZ	DÖKÜM	TİTANYUM	DEMİR DIŞI METALLER	SERT ÇELİK
< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex
GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.
Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC		
V _c [m/min]	20	16	13	8	6

Ürün Kodu	Ölçü	Hatve	Tam Boy mm	Şaft Çapı	Karesi mm	Matkap Çapı mm	Fiyat €
16670030	M 3	0.50	56	3.5	2.7	2.50	19.86
16670040	M 4	0.70	63	4.5	3.4	3.30	19.86
16670050	M 5	0.80	70	6	4.9	4.20	21.24
16670060	M 6	1.00	80	6	4.9	5.00	24.80
16670080	M 8	1.25	90	8	6.2	6.80	29.31
16670100	M 10	1.50	100	10	8	8.50	36.91
16670120	M 12	1.75	110	9	7	10.20	43.47
16670140	M 14	2.00	110	11	9	12.00	62.69
16670160	M 16	2.00	110	12	9	14.00	62.69
16670200	M 20	2.50	140	16	12	17.50	95.72

6G TOLERANS DÜZ MAKİNE KILAVUZU

1662

M 3 - M 10 DIN 371 HSS-E

M

HSS-E

DIN 371

ISO 3 6G

Typ N

60°

≤ 3xd

format
professional quality



6 G Tolerans

	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DIŞI METALLER				SERT ÇELİK		
	< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	12	10	8	8	6	5	15	12	-	15	15	-	-	-	-	-

Ürün Kodu	Ölçü		Hatve	Tam Boy mm	Şaft Çapı	Kare Ölçüsü	Matkap Çapı mm	Fiyat €
16620030	M	3	0.50	56	3.5	2.7	2.50	14.18
16620040	M	4	0.70	63	4.5	3.4	3.30	14.18
16620050	M	5	0.80	70	6.0	4.9	4.20	14.72
16620060	M	6	1.00	80	6.0	4.9	5.00	14.70
16620080	M	8	1.25	90	8.0	6.2	6.80	15.10
16620100	M	10	1.50	100	10.0	8.0	8.50	21.38

6G TOLERANS HELİS MAKİNE KILAVUZU

1666

M 3 - M 10 DIN 371 HSS-E

M

HSS-E

DIN 371

ISO 3 6G

Typ N

60°

40°

≤ 3xd

format
professional quality



6 G Tolerans

	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DIŞI METALLER				SERT ÇELİK		
	< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	12	10	8	6	5	4	10	-	-	15	15	-	-	-	-	-

Ürün Kodu	Ölçü		Hatve	Tam Boy mm	Şaft Çapı	Kare Ölçüsü	Matkap Çapı mm	Fiyat €
16660030	M	3	0.50	56	3.5	2.7	2.50	14.89
16660040	M	4	0.70	63	4.5	3.4	3.30	15.11
16660050	M	5	0.80	70	6.0	4.9	4.20	15.33
16660060	M	6	1.00	80	6.0	4.9	5.00	15.84
16660080	M	8	1.25	90	8.0	6.2	6.80	17.30
16660100	M	10	1.50	100	10.0	8.0	8.50	22.80

6G TOLERANS PASLANMAZ HELİS MAKİNE KILAVUZU

1691

M 3 - M 10 DIN 371 HSS-E
M 12 - M 20 DIN 376 HSS-E
Form B
6G Toleranslı Makine Kılavuz



format
professional quality



	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DIŞI METALLER				SERT ÇELİK		
	< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	-	-	-	10	8	-	-	-	-	15	15	-	-	-	-	-

Ürün Kodu	Ölçü mm	Hatve mm	Tam Boy mm	Şaft Çapı mm	Karesi mm	Matkap Çapı mm	Fiyat €
16910030	M 3	0.5	56	3.5	2.7	2.5	18.92
16910040	M 4	0.7	63	4.5	3.4	3.3	19.32
16910050	M 5	0.8	70	6	4.9	4.2	19.85
16910060	M 6	1	80	6	4.9	5	20.24
16910080	M 8	1.25	90	8	6.2	6.8	23.96
16910100	M 10	1.5	100	10	8	8.5	29.05
16910120	M 12	1.75	110	9	7	10.2	30.16
16910140	M 14	2	110	11	9	12	39.66
16910160	M 16	2	110	12	9	14	53.52
16910200	M 20	2.5	140	16	12	17.5	81.21

ATLAMALI DİŞ MAKİNE KILAVUZU

1728

M 3 - M 10 DIN 371 HSS-E
M 12 - M 20 DIN 376 HSS-E
Form B



format
professional quality



	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DIŞI METALLER				SERT ÇELİK		
	< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-

Ürün Kodu	Ölçü mm	Hatve mm	Tam Boy mm	Şaft Çapı mm	Karesi mm	Matkap Çapı mm	Fiyat €
17280030	M 3	0.50	56	3.5	2.7	2.50	19.79
17280040	M 4	0.70	63	4.5	3.4	3.30	19.79
17280050	M 5	0.80	70	6	4.9	4.20	18.27
17280060	M 6	1.00	80	6	4.9	5.00	18.55
17280080	M 8	1.25	90	8	6.2	6.80	20.77
17280100	M 10	1.50	100	10	8	8.50	24.80
17280120	M 12	1.75	110	9	7	10.20	30.82
17280140	M 14	2.00	110	11	9	12.00	45.26
17280160	M 16	2.00	110	12	9	14.00	44.07
17280180	M 18	2.50	125	14	11	15.50	69.79
17280200	M 20	2.50	140	16	12	17.50	67.53

SOL DİŞ DÜZ MAKİNE KILAVUZLARI

1737

M 3 - M 10 DIN 371 HSS-E "Sol"
M 12 DIN 376 HSS-E "Sol"
Form B - Eğik Ağz Bilemeli

M-LH

HSS-E

DIN 371

DIN 376

ISO 2 6H

Typ N

60°

≤ 3xd

format
professional quality



	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
	< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	10	8	6	-	-	-	-	-	-	15	-	-	-	-	-	-

Ürün Kodu	Ölçü	Hatve	Tam Boy mm	Şaft Çapı	Karesi mm	Matkap Çapı mm	Fiyat €
17370030	M 3	0.50	56	3.5	2.7	2.50	15.92
17370040	M 4	0.70	63	4.5	3.4	3.30	15.92
17370050	M 5	0.80	70	6	4.9	4.20	16.93
17370060	M 6	1.00	80	6	4.9	5.00	16.93
17370080	M 8	1.25	90	8	6.2	6.80	19.44
17370100	M 10	1.50	100	10	8	8.50	24.17
17370120	M 12	1.75	110	9	7	10.20	45.37

SOL DİŞ HELİS MAKİNE KILAVUZLARI

1724

M 3 - M 10 DIN 371 HSS-E
M 12 - DIN 376 HSS-E

ML-H

HSS-E

DIN 371

DIN 376

ISO 2 6H

Typ N

60°

≤ 3xd

format
professional quality



	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
	< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	10	8	6	-	-	-	-	-	-	12	-	-	-	-	-	-

Ürün Kodu	Ölçü	Hatve	Tam Boy mm	Şaft Çapı	Karesi mm	Matkap Çapı mm	Fiyat €
17240030	M 3	0.50	56	3.5	2.7	2.50	30.66
17240040	M 4	0.70	63	4.5	3.4	3.30	27.99
17240050	M 5	0.80	70	6	4.9	4.20	29.36
17240060	M 6	1.00	80	6	4.9	5.00	27.99
17240080	M 8	1.25	90	8	6.2	6.80	34.66
17240100	M 10	1.50	100	10	8	8.50	39.52

İNCE DİŞ DÜZ MAKİNE KILAVUZU

1753

DIN 374 HSS-E

Form B - Eğik Ağız Bilemeli

MF

HSS-E

DIN 374

ISO 2 6H

Typ N

60°

≤ 3xd

format
professional quality



ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	11	9	7	-	-	-	-	-	20	-	-	-	-	-	-

Ürün Kodu	Ölçü - Hatve mm	Tam Boy mm	Şaft Çapı	Karesi mm	Matkap Çapı mm	Fiyat €
17530001	M 3 x 0.35	56	2.2	-	2.65	21.85
17530003	M 4 x 0.50	63	2.8	2.1	3.50	21.46
17530005	M 5 x 0.50	70	3.5	2.7	4.50	21.12
17530007	M 6 x 0.50	80	4.5	3.4	5.50	18.03
17530009	M 6 x 0.75	80	4.5	3.4	5.20	17.93
17530011	M 8 x 0.50	80	6	4.9	7.50	23.99
17530013	M 8 x 0.75	80	6	4.9	7.20	20.86
17530015	M 8 x 1.00	90	6	4.9	7.00	19.50
17530017	M 10 x 0.75	90	7	5.5	9.20	28.64
17530019	M 10 x 1.00	90	7	5.5	9.00	21.85
17530021	M 10 x 1.25	100	7	5.5	8.80	23.65
17530023	M 12 x 1.00	100	9	7	11.00	25.79
17530025	M 12 x 1.25	100	9	7	10.80	27.44
17530027	M 12 x 1.50	100	9	7	10.50	24.59
17530029	M 14 x 1.00	100	11	9	13.00	34.03
17530031	M 14 x 1.25	100	11	9	12.80	32.43
17530033	M 14 x 1.50	100	11	9	12.50	32.14
17530035	M 16 x 1.00	100	12	9	15.00	38.57
17530037	M 16 x 1.50	100	12	9	14.50	36.84
17530039	M 18 x 1.50	110	14	11	16.50	44.08
17530041	M 20 x 1.00	125	16	12	19.00	56.21
17530043	M 20 x 1.50	125	16	12	18.50	51.68
17530045	M 22 x 1.50	125	18	14.5	20.50	54.23
17530047	M 24 x 1.50	140	18	14.5	22.50	58.99
17530049	M 27 x 1.50	140	20	16	25.50	93.00
17530051	M 30 x 1.50	150	22	18	28.50	93.70

İNCE DİŞ HELİS MAKİNE KILAVUZU

1755

DIN 374 HSS-E

MF

HSS-E

DIN
374

ISO 2
6H

Typ
N

60°

40°

≤ 3xd

format
professional quality



ÇELİK	PASLANMAZ	DÖKÜM	TİTANYUM	DEMİR DİŞİ METALLER	SERT ÇELİK
< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit./ martens.	austeni- tisch	Duplex
GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.
Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC		
V _c [m/min]	10	8	6	-	-

Ürün Kodu	Ölçü mm	Tam Boy mm	Şaft Çapı	Karesi mm	Matkap Çapı mm	Fiyat €
17550001	M 4 x 0.50	63	2.8	2.1	3.50	22.58
17550003	M 5 x 0.50	70	3.5	2.7	4.50	22.24
17550005	M 6 x 0.50	80	4.5	3.4	5.50	18.03
17550007	M 6 x 0.75	80	4.5	3.4	5.20	17.93
17550009	M 8 x 0.50	80	6	4.9	7.50	23.99
17550011	M 8 x 0.75	80	6	4.9	7.20	20.86
17550013	M 8 x 1.00	90	6	4.9	7.00	19.50
17550015	M 10 x 0.75	90	7	5.5	9.20	28.64
17550017	M 10 x 1.00	90	7	5.5	9.00	21.85
17550019	M 10 x 1.25	100	7	5.5	8.80	23.65
17550021	M 12 x 1.00	100	9	7	11.00	27.44
17550023	M 12 x 1.25	100	9	7	10.80	27.44
17550025	M 12 x 1.50	100	9	7	10.50	25.56
17550027	M 14 x 1.00	100	11	9	13.00	32.90
17550029	M 14 x 1.25	100	11	9	12.80	33.66
17550031	M 14 x 1.50	100	11	9	12.50	31.44
17550033	M 16 x 1.00	100	12	9	15.00	39.30
17550035	M 16 x 1.50	100	12	9	14.50	38.92
17550037	M 18 x 1.50	110	14	11	16.50	50.36
17550039	M 20 x 1.00	125	16	12	19.00	57.44
17550041	M 20 x 1.50	125	16	12	18.50	53.16
17550043	M 22 x 1.50	125	18	14.5	20.50	62.53
17550045	M 24 x 1.50	140	18	14.5	22.50	75.70
17550047	M 27 x 1.50	140	20	16	25.50	122.79
17550049	M 30 x 1.50	150	22	18	28.50	126.48

İNCE DİŞ DÜZ MAKİNE KILAVUZ

1779 DIN 374 HSS-E

MF

HSS-E

DIN 374

ISO 2 6H

Typ N

60°

40°

≤ 3xd

format
professional quality



Çelik / Paslanmaz / Döküm / Alüminyum

	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DIŞI METALLER				SERT ÇELİK		
	< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	15	12	10	10	8	6	10	8	2	15	15	-	-	-	-	-

Ürün Kodu	Ölçü - Hatve mm	Tam Boy mm	Şaft Çapı	Karesi mm	Matkap Çapı mm	Fiyat €
17790009	M 6 x 0.75	80	4.5	3.4	5.20	21.95
17790015	M 8 x 1.00	90	6	4.9	7.00	20.65
17790017	M 10 x 1.00	90	7	5.5	9.00	22.93
17790019	M 12 x 1.00	100	9	7	11.00	27.31
17790021	M 12 x 1.50	100	11	7	10.50	25.80
17790023	M 14 x 1.50	100	11	9	12.50	33.74
17790025	M 16 x 1.50	100	12	9	14.50	38.31
17790029	M 20 x 1.50	125	16	12	18.50	53.95

İNCE DİŞ HELİS MAKİNE KILAVUZ

1796 DIN 374 HSS-E

MF

HSS-E

DIN 374

ISO 2 6H

Typ N

60°

40°

≤ 3xd

format
professional quality



Çelik / Paslanmaz / Döküm / Alüminyum

	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DIŞI METALLER			SERT ÇELİK			
	< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	12	10	8	6	5	4	10	8	-	15	15	-	-	-	-	-

Ürün Kodu	Ölçü - Hatve mm	Tam Boy mm	Şaft Çapı	Karesi mm	Matkap Çapı mm	Fiyat €
17960009	M 6 x 0.75	80	4.5	3.4	5.20	21.39
17960015	M 8 x 1.00	90	6	4.9	7.00	20.24
17960017	M 10 x 1.00	90	7	5.5	9.00	22.47
17960018	M 10 x 1.25	100	7	5.5	8.80	24.49
17960019	M 12 x 1.00	100	9	7	11.00	28.22
17960020	M 12 x 1.25	100	9	7	10.80	29.31
17960021	M 12 x 1.50	100	9	7	10.50	26.76
17960022	M 14 x 1.00	100	11	9	13.00	34.46
17960023	M 14 x 1.50	100	11	9	12.50	32.69
17960024	M 16 x 1.00	100	12	9	15.00	40.33
17960025	M 16 x 1.50	100	12	9	14.50	41.19
17960029	M 20 x 1.50	125	16	12	18.50	54.76

GAZ / BORU DIŞ DÜZ KANALLI MAKİNE KILAVUZU

1763

DIN 5156 HSS-E
Form B - Eğik Ağız Bilemeli

G

HSS-E

DIN 5156

Typ N

55°

≤ 3xd

format
professional quality



ÇELİK	PASLANMAZ	DÖKÜM	TİTANYUM	DEMİR DIŞI METALLER	SERT ÇELİK
< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit./ martens.	austeni- tisch	Duplex
GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.
Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC		
V _c [m/min]	10	8	6	-	-

Ürün Kodu	Ölçü	Hatve mm	Diş Üstü Ölçüsü mm	Tam Boy mm	Şaft Çapı	Karesi mm	Matkap Çapı mm	Fiyat €
17630001	G 1/8	28	9.728	90	7	5.5	8.80	22.18
17630003	G 1/4	19	13.157	100	11	9	11.80	29.33
17630005	G 3/8	19	16.662	100	12	9	15.25	37.15
17630007	G 1/2	14	20.955	125	16	12	19.00	49.79
17630009	G 3/4	14	26.441	140	20	16	24.50	79.02
17630011	G 1*	11	33.249	160	25	20	30.75	110.71
17630015	G 1 1/4*	11	41.910	170	32	24	39.50	183.08
17630017	G 1 1/2*	11	47.803	190	36	29	45.25	252.30

GAZ / BORU DIŞ HELİS KANALLI MAKİNE KILAVUZU

1765

DIN 5156 HSS-E

G

HSS-E

DIN 5156

Typ N

55°

40°

≤ 3xd

format
professional quality



ÇELİK	PASLANMAZ	DÖKÜM	TİTANYUM	DEMİR DIŞI METALLER	SERT ÇELİK
< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit./ martens.	austeni- tisch	Duplex
GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.
Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC		
V _c [m/min]	10	8	6	-	-

Ürün Kodu	Ölçü	Hatve mm	Diş Üstü Ölçüsü mm	Tam Boy mm	Şaft Çapı	Karesi mm	Matkap Çapı mm	Fiyat €
17650001	G 1/8	28	9.728	90	7	5.5	8.80	24.50
17650003	G 1/4	19	13.157	100	11	9	11.80	32.44
17650005	G 3/8	19	16.662	100	12	9	15.25	35.64
17650007	G 1/2	14	20.955	125	16	12	19.00	52.69
17650009	G 3/4	14	26.441	140	20	16	24.50	85.08
17650011	G 1*	11	33.249	160	25	20	30.75	128.73

* - HSS Malzemedan İmal Edilmiştir.

GAZ / BORU DIŞ DÜZ KANALLI MAKİNE KILAVUZU

1798 DIN 5156 HSS-E - Buhar Menevişli
Form B

G

HSS-E

DIN 5156

Typ N

55°

≤ 3xd

format
professional quality



	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DIŞI METALLER				SERT ÇELİK		
	< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit/ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	15	12	10	10	8	6	10	8	2	15	15	-	-	-	-	-

Ürün Kodu	Ölçü	Hatve mm	Diş Üstü Ölçüsü mm	Tam Boy mm	Şaft Çapı	Karesi mm	Matkap Çapı mm	Fiyat €
17980001	G 1/8	28	9.728	90	7	5.5	8.80	23.00
17980003	G 1/4	19	13.157	100	11	9	11.80	31.02
17980005	G 3/8	19	16.662	100	12	9	15.25	37.98
17980007	G 1/2	14	20.955	125	16	12	19.00	52.45
17980009	G 3/4	14	26.441	140	20	16	24.50	90.69
17980011	G 1	11	33.249	160	25	20	30.75	113.48

GAZ / BORU DIŞ HELİS KANALLI MAKİNE KILAVUZU

1799 DIN 5156 HSS-E - Buhar Menevişli

G

HSS-E

DIN 5156

Typ N

55°

40°

≤ 3xd

format
professional quality



	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DIŞI METALLER				SERT ÇELİK		
	< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit/ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	12	10	8	6	5	4	10	8	-	15	15	-	-	-	-	-

Ürün Kodu	Ölçü	Hatve mm	Diş Üstü Ölçüsü mm	Tam Boy mm	Şaft Çapı	Karesi mm	Matkap Çapı mm	Fiyat €
17990001	G 1/8	28	9.728	90	7	5.5	8.80	24.81
17990003	G 1/4	19	13.157	100	11	9	11.80	35.28
17990005	G 3/8	19	16.662	100	12	9	15.25	46.88
17990007	G 1/2	14	20.955	125	16	12	19.00	60.46
17990009	G 3/4	14	26.441	140	20	16	24.50	92.71
17990011	G 1	11	33.249	160	25	20	30.75	141.05

UNC DÜZ MAKİNE KILAVUZU

1768

DIN 2184-1 HSS-E
Form B - Eğik Ağız Bilemeli

UNC

HSS-E

DIN
2184-1

Tol.
2B

Typ
N



format
professional quality



ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
10	8	6	-	-	-	-	-	-	20	-	-	-	-	-	-

Ürün Kodu	Ölçü	Hatve	Dış Üstü Ölçüsü mm	Tam Boy mm	Şaft Çapı	Karesi mm	Matkap Çapı mm	Fiyat €
17680001	UNC Nr 2	56	2.184	45	2.8	2.1	1.80	20.87
17680003	UNC Nr 3	48	2.515	50	2.8	2.1	2.10	17.54
17680005	UNC Nr 4	40	2.845	56	3.5	2.7	2.30	15.46
17680007	UNC Nr 5	40	3.175	56	3.5	2.7	2.60	14.66
17680009	UNC Nr 6	32	3.505	56	4	3	2.85	14.23
17680011	UNC Nr 8	32	4.166	63	4.5	3.4	3.50	13.79
17680013	UNC Nr 10	24	4.826	70	6	4.9	3.90	15.46
17680015	UNC Nr 12	24	5.486	80	6	4.9	4.50	17.54
17680017	UNC 1/4	20	6.350	80	7	5.5	5.20	15.78
17680019	UNC 5/16	18	7.938	90	8	6.2	6.60	18.17
17680021	UNC 3/8	16	9.525	100	9	8	8.00	20.54
17680023	UNC 7/16	14	11.113	100	8	6.2	9.40	25.41
17680025	UNC 1/2	13	12.700	110	9	7	10.70	27.72
17680027	UNC 5/8	11	15.875	110	12	9	13.50	35.98
17680029	UNC 3/4	10	19.050	125	14	11	16.50	46.68
17680031	UNC 7/8	9	22.225	140	18	14.5	19.50	58.17
17680033	UNC 1	8	25.400	160	18	14.5	22.20	76.01

UNC HELİS MAKİNE KILAVUZU

1770 UNC DIN 2184-1 Helis Kanallı Makine Kılavuzu HSS-E

Tol.
2B

Typ
N

60°

40°

≤ 3xd

format
professional quality

UNC

HSS-E

DIN
2184-1



ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austenit- sch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
10	8	6	-	-	-	-	-	-	12	-	-	-	-	-	-

Ürün Kodu	Ölçü	Hatve	Diş Üstü Ölçüsü mm	Tam Boy mm	Şaft Çapı	Karesi mm	Matkap Çapı mm	Fiyat €
17700001	UNC Nr 4	40	2.845	56	3.5	2.7	2.30	17.54
17700003	UNC Nr 5	40	3.175	56	3.5	2.7	2.60	17.20
17700005	UNC Nr 6	32	3.505	56	4	3	2.85	16.34
17700007	UNC Nr 8	32	4.166	63	4.5	3.4	3.50	17.20
17700009	UNC Nr 10	24	4.826	70	6	4.9	3.90	17.54
17700011	UNC Nr 12	24	5.486	80	6	4.9	4.50	20.87
17700013	UNC 1/4	20	6.350	80	7	5.5	5.10	19.67
17700015	UNC 5/16	18	7.938	90	8	6.2	6.60	20.87
17700017	UNC 3/8	16	9.525	100	9	7	8.00	23.76
17700019	UNC 7/16	14	11.113	100	8	6.2	9.40	32.57
17700021	UNC 1/2	13	12.700	110	9	7	10.80	31.99
17700023	UNC 9/16	12	14.288	110	11	9	12.20	45.72
17700025	UNC 5/8	11	15.875	110	12	9	13.50	45.21
17700027	UNC 3/4	10	19.050	125	14	11	16.50	55.79
17700029	UNC 7/8	9	22.225	140	18	14.5	19.50	68.05
17700031	UNC 1	8	25.400	160	18	14.5	22.20	91.12

UNF DÜZ MAKİNE KILAVUZU

1772

UNF DIN 2184-1 HSS-E
Form B - Eğik Ağız Bilemeli

UNF

HSS-E

DIN
2184-1

Tol.
2B

Typ
N

60°

≤ 3xd

format
professional quality



ÇELİK	PASLANMAZ	DÖKÜM	TİTANYUM	DEMİR DIŞI METALLER	SERT ÇELİK
< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex
GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.
Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC		

V _c [m/min]	10	8	6	-	-	-	-	-	-	12	-	-	-	-	-	-
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Ürün Kodu	Ölçü	Hatve	Diş Üstü Ölçüsü mm	Tam Boy mm	Şaft Çapı	Karesi mm	Matkap Çapı mm	Fiyat €
17720001	UNF Nr 10	32	4.826	70	3.5	2.7	4.10	17.36
17720003	UNF Nr 12	28	5.486	80	4	3	4.60	20.87
17720005	UNF 1/4	28	6.350	80	4.5	3.4	5.50	21.63
17720007	UNF 5/16	24	7.938	90	6	4.9	6.90	21.25
17720009	UNF 3/8	24	9.525	90	7	5.5	8.50	22.09
17720011	UNF 7/16	20	11.113	100	8	6.2	9.90	28.10
17720013	UNF 1/2	20	12.700	100	9	7	11.50	28.10
17720015	UNF 5/8	18	15.875	100	12	9	14.50	38.05
17720017	UNF 3/4	16	19.050	110	14	11	17.50	49.43
17720019	UNF 7/8	14	22.225	125	18	14.5	20.40	61.90
17720021	UNF 1	12	25.400	140	18	14.5	23.25	82.13

UNF HELİS MAKİNE KILAVUZU

1774

UNF DIN 2184-1 HSS-E

UNF

HSS-E

DIN
2184-1

Tol.
2B

Typ
N

60°

≤ 3xd

format
professional quality



ÇELİK	PASLANMAZ	DÖKÜM	TİTANYUM	DEMİR DIŞI METALLER	SERT ÇELİK
< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex
GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.
Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC		

V _c [m/min]	10	8	6	-	-	-	-	-	-	12	-	-	-	-	-	-
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Ürün Kodu	Ölçü	Hatve	Diş Üstü Ölçüsü mm	Tam Boy mm	Şaft Çapı	Karesi mm	Matkap Çapı mm	Fiyat €
17740001	UNF Nr 10	32	4.826	70	3.5	2.7	4.10	20.87
17740003	UNF Nr 12	28	5.486	80	4	3	4.60	23.76
17740005	UNF 1/4	28	6.350	80	4.5	3.4	5.50	25.36
17740007	UNF 5/16	24	7.938	90	6	4.9	6.90	26.66
17740009	UNF 3/8	24	9.525	90	7	5.5	8.50	27.40
17740011	UNF 7/16	20	11.113	100	8	6.2	9.90	32.57
17740013	UNF 1/2	20	12.700	100	9	7	11.50	33.00
17740015	UNF 9/16	18	14.288	100	11	9	12.90	48.97
17740017	UNF 5/8	18	15.875	100	12	9	14.50	45.21
17740019	UNF 3/4	16	19.050	110	14	11	17.50	57.41
17740021	UNF 7/8	14	22.225	125	18	14.5	20.40	71.34
17740023	UNF 1	12	25.400	140	18	14.5	23.25	100.48

NPT MAKİNE KILAVUZU KOBALTLI

1670 HSS-E

NPT

HSS-E

Typ N

60°

≤1.5xd

format
professional quality



ÇELİK	PASLANMAZ	DÖKÜM	TİTANYUM	DEMİR DİŞİ METALLER	SERT ÇELİK
< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit./ martens.	austeni- tisch	Duplex
GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.
Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC		

V _c [m/min]	10	8	6	-	-	-	10	8	-	15	15	-	-	-	-	-
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Ürün Kodu	Ölçü	Hatve mm	Diş Üstü Ölçüsü mm	Tam Boy mm	Şaft Çapı	Karesi mm	Matkap Çapı mm	Fiyat €
16700001	NPT 1/16	27	8.190	56	6	4.9	6.30	26.20
16700003	NPT 1/8	27	10.620	63	7	5.5	8.50	26.58
16700005	NPT 1/4	18	14.140	63	11	9	11.10	33.56
16700007	NPT 3/8	18	17.570	70	12	9	14.50	39.62
16700009	NPT 1/2	14	21.900	80	16	12	17.70	53.89
16700011	NPT 3/4	14	27.230	100	20	16	23.00	72.63
16700013	NPT 1*	11.5	34.180	110	25	20	29.00	101.72

* - HSS Malzemedan İmal Edilmiştir.

PG MAKİNE KILAVUZU

1777 DIN 40432 HSS-E

PG

HSS-E

DIN 40432

Typ N

80°

≤1.5xd

format
professional quality



ÇELİK	PASLANMAZ	DÖKÜM	TİTANYUM	DEMİR DİŞİ METALLER	SERT ÇELİK
< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit./ martens.	austeni- tisch	Duplex
GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.
Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC		

V _c [m/min]	10	8	6	-	-	-	-	-	-	15	15	-	-	-	-	-
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Ürün Kodu	Ölçü	Hatve	Diş Üstü Ölçüsü mm	Tam Boy mm	Şaft Çapı	Karesi mm	Matkap Çapı mm	Fiyat €
17770001	PG 7	20	12.5	70	9	7	11.50	37.69
17770003	PG 9	18	15.2	70	12	9	14.00	47.80
17770005	PG 11	18	18.6	80	14	11	17.25	40.15
17770007	PG 13.5	18	20.4	80	16	12	19.00	39.87
17770009	PG 16	18	22.5	80	18	14.5	21.25	72.63
17770011	PG 21	16	28.3	90	22	18	27.00	105.37
17770013	PG 29	16	37	100	28	22	35.50	142.38
17770015	PG 36	16	47	140	36	29	45.50	255.98

EL KILAVUZ TAKIMLARI NORMAL DİŞ

1604

DIN 352 HSS
3'lü Takım

Typ
N

60°

≤ 3xd

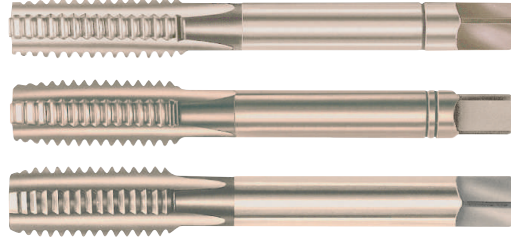
M

HSS

DIN
352

ISO 2
6H

format
professional quality



	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
	< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	●	◐	○	●	●	-	◐	◐	○	●	●	●	-	○	-	-

V_c [m/min]

Ürün Kodu	Ölçü mm	Hatve mm	Tam Boy mm	Karesi mm	Matkap Çapı mm	Fiyat €
16040020	M 2	0.40	36	2.1	1.60	23.03
16040025	M 2.5	0.45	40	2.1	2.05	19.00
16040026	M 2.6	0.45	40	2.1	2.10	21.77
16040030	M 3	0.50	40	2.7	2.50	10.48
16040040	M 4	0.70	45	3.4	3.30	10.48
16040050	M 5	0.80	50	4.9	4.20	11.14
16040060	M 6	1.00	50	4.9	5.00	11.14
16040080	M 8	1.25	56	4.9	6.80	12.57
16040100	M 10	1.50	70	5.5	8.50	14.79
16040120	M 12	1.75	75	7	10.20	18.55
16040140	M 14	2.00	80	9	12.00	29.65
16040160	M 16	2.00	80	9	14.00	36.62
16040180	M 18	2.50	95	11	15.50	62.91
16040200	M 20	2.50	95	12	17.50	66.90
16040220	M 22	2.50	100	14.5	19.50	80.31
16040240	M 24	3.00	110	14.5	21.00	84.74
16040270	M 27	3.00	110	16	24.00	125.02
16040300	M 30	3.50	125	18	26.50	151.82

NORMAL DİŞ EL KILAVUZU KISA

1603

DIN 352 "Son Kılavuz" HSS
Elde kullanım için uygundur.

Typ
N

60°

≤ 3xd

M

HSS

DIN
352

ISO 2
6H

format
professional quality



ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
●	●	○	●	●	-	●	●	○	●	●	●	-	○	-	-

V_c [m/min]

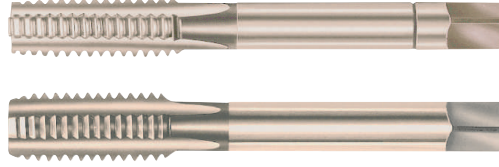
Ürün Kodu	Ölçü mm	Hatve mm	Tam Boy mm	Karesi mm	Matkap Çapı mm	Fiyat €
16030020	M 2	0.40	36	2.1	1.60	7.43
16030025	M 2.5	0.45	40	2.1	2.05	6.26
16030030	M 3	0.50	40	2.7	2.50	3.41
16030040	M 4	0.70	45	3.4	3.30	3.41
16030050	M 5	0.80	50	4.9	4.20	3.60
16030060	M 6	1.00	50	4.9	5.00	3.60
16030080	M 8	1.25	56	4.9	6.80	4.11
16030100	M 10	1.50	70	5.5	8.50	4.80
16030120	M 12	1.75	75	7	10.20	6.10
16030140	M 14	2.00	80	9	12.00	9.72
16030160	M 16	2.00	80	9	14.00	11.96
16030180	M 18	2.50	95	11	15.50	20.66
16030200	M 20	2.50	95	12	17.50	21.90
16030220	M 22	2.50	100	14.5	19.50	26.36
16030240	M 24	3.00	110	14.5	21.00	27.72
16030270	M 27	3.00	110	16	24.00	41.02
16030300	M 30	3.50	125	18	26.50	49.71

İNCE DİŞ EL KILAVUZ TAKIMLARI

1627 DIN 2181 HSS
2'li Takım



format
professional quality



ÇELİK		PASLANMAZ		DÖKÜM		TİTANYUM		DEMİR DİŞİ METALLER		SERT ÇELİK					
< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	●	●	○	●	●	-	●	●	○	●	●	●	-	-	-
Ürün Kodu	Ölçü mm	Tam Boy mm	Karesi mm	Matkap Çapı mm	Fiyat €	Ürün Kodu	Ölçü mm	Tam Boy mm	Karesi mm	Matkap Çapı mm	Fiyat €				
16270001	M 2 x 0.25	36	2.1	1.75	34.75	16270055	M 16 x 1.50	70	9	14.50	36.13				
16270003	M 2.5 x 0.35	40	2.1	2.15	23.18	16270057	M 18 x 1.00	80	11	17.00	47.53				
16270005	M 2.6 x 0.35	40	2.1	2.25	23.18	16270059	M 18 x 1.50	80	11	16.50	42.70				
16270007	M 3 x 0.35	40	2.7	2.65	15.48	16270061	M 18 x 2.00	80	11	16.00	54.91				
16270009	M 4 x 0.35	45	3.4	3.65	15.48	16270063	M 20 x 1.00	80	12	19.00	49.47				
16270011	M 4 x 0.50	45	3.4	3.50	15.48	16270065	M 20 x 1.50	80	12	18.50	46.55				
16270013	M 5 x 0.50	50	4.9	4.50	15.48	16270067	M 20 x 2.00	80	12	18.00	65.85				
16270015	M 6 x 0.50	50	4.9	5.50	15.48	16270069	M 22 x 1.00	80	14.5	21.00	71.37				
16270017	M 6 x 0.75	50	4.9	5.20	15.11	16270071	M 22 x 1.50	80	14.5	20.50	58.05				
16270019	M 7 x 0.75	50	4.9	6.20	18.86	16270073	M 22 x 2.00	80	14.5	20.00	60.71				
16270021	M 8 x 0.50	50	4.9	7.50	19.76	16270075	M 24 x 1.50	90	14.5	22.50	46.95				
16270023	M 8 x 0.75	50	4.9	7.20	18.54	16270077	M 24 x 2.00	90	14.5	22.00	71.43				
16270025	M 8 x 1.00	56	4.9	7.00	17.59	16270079	M 25 x 1.50	90	14.5	23.50	88.29				
16270027	M 9 x 1.00	63	5.5	8.00	31.76	16270081	M 26 x 1.50	90	14.5	24.50	89.01				
16270029	M 10 x 0.75	63	5.5	9.20	24.90	16270083	M 27 x 1.50	90	16	25.50	91.19				
16270031	M 10 x 1.00	63	5.5	9.00	20.23	16270085	M 27 x 2.00	90	16	25.00	101.39				
16270033	M 10 x 1.25	70	5.5	8.80	20.23	16270087	M 28 x 1.50	90	16	26.50	94.75				
16270035	M 11 x 1.00	63	6.2	10.00	26.19	16270089	M 30 x 1.00	90	18	29.00	126.02				
16270037	M 12 x 1.00	70	7	11.00	24.23	16270091	M 30 x 1.50	90	18	28.50	103.85				
16270039	M 12 x 1.25	70	7	10.80	24.23	16270093	M 30 x 2.00	90	18	28.00	120.84				
16270041	M 12 x 1.50	70	7	10.50	23.58	16270095	M 32 x 1.50	90	18	30.50	120.65				
16270043	M 14 x 1.00	70	9	13.00	33.30	16270103	M 35 x 1.50	100	22	33.50	149.05				
16270045	M 14 x 1.25	70	9	12.80	32.72	16270105	M 36 x 1.50	100	22	34.50	157.73				
16270047	M 14 x 1.50	70	9	12.50	29.56	16270107	M 36 x 2.00	125	22	34.00	171.15				
16270049	M 15 x 1.00	70	9	14.00	42.37	16270109	M 36 x 3.00	125	22	33.00	180.01				
16270051	M 15 x 1.50	70	9	13.50	37.34	16270111	M 38 x 1.50	110	22	36.50	171.28				
16270053	M 16 x 1.00	70	9	15.00	38.88	16270117	M 40 x 1.50	110	24	38.50	219.35				
						16270123	M 45 x 1.50	110	29	43.50	266.24				

GAZ / BORU DIŞ TAKIM KILAVUZU

1640

DIN 5157 Takım Kılavuz 2 Parçalı HSS
(DIN 353)

G

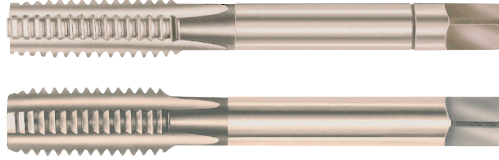
HSS

DIN 5157

Typ N



format
professional quality



ÇELİK	PASLANMAZ	DÖKÜM	TİTANYUM	DEMİR DIŞI METALLER	SERT ÇELİK
< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex
GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.
Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC		
V _c [m/min]	●	●	●	●	●

Ürün Kodu	Ölçü mm	Hatve	Diş Üstü Ölçüsü mm	Tam Boy mm	Karesi mm	Matkap Çapı mm	Fiyat €
16400001	G 1/8	28	9.728	63	5.5	8.80	18.77
16400003	G 1/4	19	13.157	70	9	11.80	22.80
16400005	G 3/8	19	16.662	70	9	15.25	30.01
16400007	G 1/2	14	20.955	80	12	19.00	43.53
16400011	G 3/4	14	26.441	90	16	24.50	72.18
16400015	G 1	11	33.249	100	20	30.75	120.80
16400017	G 1 1/4	11	41.910	125	24	39.50	283.08

CİRCİRLİ KILAVUZ KOLU

Komple çelik, krom kaplamalı. Cırcır saat yönünde veya ileri istikamette ayarlanabilir. Ulaşılması güç çalışma alanlarına uygun.

format
professional quality



Ürün Kodu	Kare Aralığı mm	DIN	Kılavuz Ölçüleri ISO	Toplam Boy mm	Fiyat €
18500001	2.0-5.0	M 3 - 8	M 1 - 6	85	12.42
18500003	2.0-5.0	M 3 - 8	M 1 - 6	250	20.44
18500005	4.6-8.0	M 5 - 12	M 6 - 12	100	14.99
18500007	4.6-8.0	M 5 - 12	M 6 - 12	300	24.90



DÖKÜM GÖVDE KILAVUZ KOLU

1843

Galvanizli çelik kulplu, çeneler sertleştirilmiş ve fosfat kaplanmış.

DIN
1814

format
professional quality



Ürün Kodu	Ölçü	Kılavuz Ölçüleri DIN 352	Fiyat €
18430001	0	M 1 - 8	5.86
18430003	1	M 1 - 10	6.96
18430005	1 1/2	M 1 - 12	6.96
18430007	2	M 4 - 12	12.64

Ürün Kodu	Ölçü	Kılavuz Ölçüleri DIN 352	Fiyat €
18430009	3	M 5 - 20	21.96
18430011	4	M 9 - 27	31.38
18600013	5	M 12 - 33	46.70

ÇELİK GÖVDE KILAVUZ KOLU

1861

Galvanizli çelik kulplu, çeneler sertleştirilmiş ve fosfat kaplanmış.

DIN
1814

format
professional quality



Ürün Kodu	Ölçü	Kılavuz Ölçüleri DIN 352	Fiyat €
18610005	1 1/2	M 1 - 12	8.61
18610007	2	M 4 - 12	14.57
18610009	3	M 5 - 20	28.30
18610011	4	M 9 - 27	47.94

Ürün Kodu	Ölçü	Kılavuz Ölçüleri DIN 352	Fiyat €
18610013	5	M 12 - 33	71.54
18610015	6	M 20 - 42	91.11
18610017	7/8	M 27 - 86	136.30

METRİK KILAVUZ SETLERİ

M

HSS

DIN 352

DIN 338

EN 22568



format
professional quality

Ürün Kodu	Set İçeriği	Fiyat €
17950080	M3-M12 7 Adet Son Kılavuz DIN 352 M3; 4; 5; 6; 8; 10; 12 / 7 Adet Matkap Ucu HSS, DIN 338 RN. Kılavuz Kolu No: 1 1/2	45.11



1795 0080

Ürün Kodu	Set İçeriği	Fiyat €
17950100	M3-M12 7 Takım 3'lü Kılavuz DIN 352 M3; 4; 5; 6; 8; 10; 12	65.12



1795 0100



1795 0120

Ürün Kodu	Set İçeriği	Fiyat €
17950120	M3-M12 7 Takım 3'lü Kılavuz DIN 352 M3; 4; 5; 6; 8; 10; 12 / 7 Adet Matkap Ucu HSS, DIN 338 RN. Kılavuz Kolu No: 1 1/2	103.34

METRİK KILAVUZ & PAFTA TAKIMLARI M3-M12 (30 PARÇA)

Metrik Kılavuz & Pafta Takımları M3-M12 (30 Parça)

M

HSS

DIN 352

DIN 338

EN 22568



format
professional quality

Ürün Kodu	Açıklama	Fiyat €
17950220	M3-M12 Metrik Normal Vidalı Set	144.67



METRİK KILAVUZ & PAFTA TAKIMLARI M3-M20 (32 PARÇA)

M

HSS

DIN 352

DIN 338

EN 22568



format
professional quality

Ürün Kodu	Açıklama	Fiyat €
17950200	M3-M20 Metrik Normal Vidalı Set	325.46



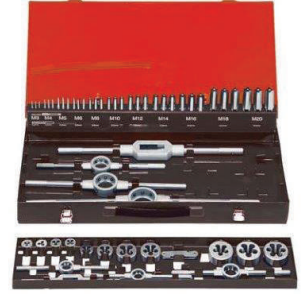
METRİK KILAVUZ & PAFTA TAKIMLARI KOBALTLI M3-M12 (28 PARÇA)

M

HSS-E

DIN
352DIN
338EN
22568**format**
professional quality

Ürün Kodu	Açıklama	Fiyat €
17950222	M3-M12 Metrik Normal Vidalı Set	250.57



METRİK KILAVUZ & PAFTA TAKIMLARI İNCE DİŞ MF3-MF20 (28 PARÇA)

MF

HSS

DIN
352DIN
338EN
22568**format**
professional quality

Ürün Kodu	Açıklama	Fiyat €
17950224	MF3-MF12/Metrik İnce / Vidalı Set	180.20



METRİK KILAVUZ & PAFTA TAKIMLARI M3-M24 (36 PARÇA)

M

HSS

DIN
352DIN
338EN
22568**format**
professional quality

Ürün Kodu	Açıklama	Fiyat €
17950240	M3-M24/Metrik Normal / Vidalı Set	654.37



METRİK KILAVUZ & PAFTA TAKIMLARI M3-M12 (38 PARÇA)

M

HSS

DIN
352DIN
338EN
22568**format**
professional quality

Ürün Kodu	Açıklama	Fiyat €
17950250	M3-M12 /Metrik Normal / Vidalı Set	186.81



G BORU DIŞ KILAVUZ & PAFTA TAKIMLARI G1/8-G1 (27 PARÇA)

G

HSS

DIN
2184EN
22568**format**
professional quality

Ürün Kodu	Açıklama	Set İçeriği	Fiyat €
16460001	G 1/8 - G 1 G (Boru) Vidalı Set	DIN2184 1/8 - 1/4 - 3/8 - 1/2 - 3/4 - 1 DIN22568 1/8 - 1/4 - 3/8 - 1/2 - 3/4 - 1 DIN1814 NO:3 - NO:5 DIN225 30X11 - 38X10 - 45X14 - 55X16 - 65X18 TORNAVİDA - METRİK DIŞ TARAĞI	580.53



UNC KILAVUZ & PAFTA TAKIMLARI UNC1/4-UNC1 (28 PARÇA)

UNC

HSS

DIN
2184EN
22568**format**
professional quality

Ürün Kodu	Açıklama	Set İçeriği	Fiyat €
16470039	UNC 1/4 - UNC 1 UNC Normal Vidalı Set	DIN2184 1/4 - 5/16 - 3/8 - 7/16 - 1/2 - 5/8 - 3/4 - 7/8 - 1 DIN22568 1/4 - 5/16 - 3/8 - 7/16 - 1/2 - 5/8 - 3/4 - 7/8 - 1 DIN1814 NO:1 1/2 - NO:4 DIN225 20X5 - 20X7 - 25X9 - 30X11 - 38X14 45X18 - 55X22 TORNAVİDA - METRİK DIŞ TARAĞI	683.54



UNF KILAVUZ & PAFTA TAKIMLARI UNF1/4-UNF1 (28 PARÇA)

UNF

HSS

DIN
2184EN
22568**format**
professional quality

Ürün Kodu	Açıklama	Set İçeriği	Fiyat €
16500041	UNF 1/4 - UNF 1 UNF İnce Vidalı Set	DIN2184 1/4 - 5/16 - 3/8 - 7/16 - 1/2 - 5/8 - 3/4 - 7/8 - 1 DIN22568 1/4 - 5/16 - 3/8 - 7/16 - 1/2 - 5/8 - 3/4 - 7/8 - 1 DIN1814 NO:1 1/2 - NO:4 DIN225 20X7 - 25X9 - 30X11 - 38X10 - 45X14 - 55X16 TORNAVİDA - METRİK DIŞ TARAĞI	523.36



METRİK DİŞ PAFTA EĞİK AĞIZ BİLEME

1800

EN 22568 - DIN 223 HSS



	ÇELİK			PASLANMAZ			DÖKÜM	TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK			
	< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit/ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	10	-	-	-	-	-	5	5	-	18	-	12	-	-	-	-

Ürün Kodu	Ölçü mm	Hatve	Kutur mm	Fiyat €
18000020	M 2	0.40	16 X 5	24.17
18000025	M 2.5	0.45	16 X 5	22.47
18000030	M 3	0.50	20 X 5	18.96
18000040	M 4	0.70	20 X 5	18.96
18000050	M 5	0.80	20 X 7	18.96
18000060	M 6	1.00	20 X 7	18.96
18000080	M 8	1.25	25 X 9	20.79
18000100	M 10	1.50	30 X 11	25.66
18000120	M 12	1.75	38 X 14	33.34
18000140	M 14	2.00	38 X 14	34.33
18000160	M 16	2.00	45 X 18	44.69
18000180	M 18	2.50	45 X 18	47.19
18000200	M 20	2.50	45 X 18	47.19
18000220	M 22	2.50	55 X 22	70.59
18000240	M 24	3.00	55 X 22	70.59
18000270	M 27	3.00	65 X 25	117.77
18000300	M 30	3.50	65 X 25	117.77



GAZ / BORU DİŞ PAFTA EĞİK AĞIZ BİLEME

1817

EN 24231 - HSS

Klas A Tolerans, Boru Diş



	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
	< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	10	-	-	-	-	-	5	5	-	18	-	12	-	-	-	-

Ürün Kodu	Ölçü	Hatve	Kutur	Fiyat €
18170001	G 1/8	28	30 X 11	39.01
18170003	G 1/4	19	38 X 10	41.05
18170005	G 3/8	19	45 X 14	55.18
18170007	G 1/2	14	45 X 14	55.18
18170011	G 3/4	14	55 X 16	90.95
18170015	G 1	11	65 X 18	124.43



PAFTA KOLU

Gövde ZL 0410 çinko döküm.
Çelik kollar çinko kaplamalı, sökülebilir.

DIN
250

EN
22568

format
professional quality

Ürün Kodu	Kutur	Toplam Boy mm	Fiyat €
18450001	16 x 5	160	5.18
18450003	20 x 5	180	5.65
18450005	20 x 7	180	5.65
18450007	25 x 9	210	6.38
18450009	30 x 11	270	8.42
18450011	38 x 10	310	13.10
18450013	38 x 14	310	13.11
18450015	45 x 14	440	16.26
18450017	45 x 18	440	16.26
18450019	55 x 16	490	21.10
18450021	55 x 22	490	21.10
18450023	65 x 18	630	32.18
18450025	65 x 25	630	32.18



NC PUNTA MATKAP UCU KOBALTLI

1140 DIN 1835/B 90° HSS Co5

HSS
Co5

DIN
1835-B

90°

format
professional quality

	ÇELİK			PASLANMAZ			DÖKÜM	TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK			
	< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit/ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	20	10	6	-	-	-	15	5	3	30	30	20	3	-	-	-

Ürün Kodu	Ölçü h8 mm	Helis Boyu mm	Tam Boy mm	Fiyat €
11400300	3	12	46	3.49
11400400	4	12	55	4.05
11400500	5	14	62	5.08
11400600	6	16	66	8.56
11400800	8	21	79	12.55
11401000	10	25	89	18.47
11401200	12	30	102	23.86
11401600	16	38	115	42.86
11402000	20	45	131	65.88



FORM A PUNTA MATKAP UCU

1120 DIN 333/A HSS

HSS



DIN 333/A

format
professional quality



Form A

ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	20	10	6	-	-	-	15	5	3	30	30	20	3	-	-

Ürün Kodu	Ölçü	Gövde Çapı	Tam Boy mm	Çalışma Çapı mm	Fiyat €
11200100	1.00	3.15	31.5	6 - 8	2.85
11200125	1.25	3.15	31.5	8 - 10	2.85
11200160	1.60	4	35.5	10 - 15	2.97
11200200	2.00	5	40	15 - 20	3.16
11200250	2.50	6.3	45	20 - 30	3.69
11200315	3.15	8	50	30 - 40	4.77
11200400	4.00	10	56	40 - 63	6.87
11200500	5.00	12.5	63	63 - 100	9.47
11200630	6.30	16	71	100 - 150	15.53
11200800	8.00	20	80	150 - 250	23.94
11201000	10.00	25	100	>250	50.74

KOBALTLI FORM A PUNTA MATKAP UCU

1126 DIN 333/A HSS-E

HSS-E



DIN 333/A

format
professional quality



Form A

ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	20	10	6	-	-	-	15	5	3	30	30	20	3	-	-

Ürün Kodu	Ölçü	Gövde Çapı	Tam Boy mm	Çalışma Çapı mm	Fiyat €
11200100	1.00	3.15	31.5	6 - 8	5.10
11200160	1.60	4	35.5	10 - 15	5.02
11200200	2.00	5	40	15 - 20	6.15
11200250	2.50	6.3	45	20 - 30	7.02
11200315	3.15	8	50	30 - 40	8.39
11200400	4.00	10	56	40 - 63	11.74
11200500	5.00	12.5	63	63 - 100	20.09
11200630	6.30	16	71	100 - 150	25.50

FORM R PUNTA MATKAP UCU

1129 DIN 333/R HSS

HSS



DIN 333/R

format
professional quality



Form R

	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
	< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	20	10	6	-	-	-	15	5	3	30	30	20	3	-	-	-

Ürün Kodu	Ölçü	Gövde Çapı	Tam Boy mm	Çalışma Çapı mm	Fiyat €
11290100	1.00	3.15	31.5	6 - 8	3.60
11290125	1.25	3.15	31.5	8 - 10	3.60
11290160	1.60	4	35.5	10 - 15	3.99
11290200	2.00	5	40	15 - 20	4.21
11290250	2.50	6.3	45	20 - 30	4.62
11290315	3.15	8	50	30 - 40	6.18
11290400	4.00	10	56	40 - 63	8.39
11290500	5.00	12.5	63	63 - 100	13.43
11290630	6.30	16	71	100 - 150	19.65

FORM B PUNTA MATKAP UCU

1132 DIN 333/B HSS

HSS



DIN 333/B

format
professional quality



Form B

	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
	< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	20	10	6	-	-	-	15	5	3	30	30	20	3	-	-	-

Ürün Kodu	Ölçü	Gövde Çapı	Tam Boy mm	Çalışma Çapı mm	Fiyat €
11320125	1.25	5	40	8 - 10	7.40
11320160	1.60	6.3	45	10 - 15	6.14
11320200	2.00	8	50	15 - 20	8.25
11320250	2.50	10	56	20 - 30	8.25
11320315	3.15	11.2	60	30 - 40	8.92
11320400	4.00	14	67	40 - 63	14.49
11320500	5.00	18	75	63 - 100	20.13
11320630	6.30	20	80	100 - 150	27.56

TAŞLANMIŞ MATKAP UCU DIN 338

1001 Taşlanmış Matkap Ucu DIN 338 HSS

HSS

Typ N

DIN 338

118°

25°-30°

format
professional quality



ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit/ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	25	22	-	-	-	-	30	24	-	70	-	-	-	-	-

Ürün Kodu	Ölçü h8 mm	Tam Boy mm	Helis Boyu mm	Fiyat €	Ürün Kodu	Ölçü h8 mm	Tam Boy mm	Helis Boyu mm	Fiyat €
10010020	0.2	19	2.5	3.62	10010350	3.5	70	39	1.22
10010030	0.3	19	3	2.59	10010360	3.6	70	39	1.29
10010040	0.4	20	5	2.08	10010370	3.7	70	39	1.34
10010050	0.5	22	6	1.71	10010380	3.8	75	43	1.54
10010060	0.6	24	7	1.63	10010390	3.9	75	43	1.44
10010070	0.7	28	9	1.54	10010400	4.0	75	43	1.22
10010080	0.8	30	10	1.49	10010410	4.1	75	43	1.54
10010090	0.9	32	11	1.39	10010420	4.2	75	43	1.34
10010100	1.0	34	12	1.54	10010430	4.3	80	47	1.54
10010110	1.1	36	14	1.34	10010440	4.4	80	47	1.54
10010120	1.2	38	16	1.54	10010450	4.5	80	47	1.39
10010130	1.3	38	16	1.37	10010460	4.6	80	47	1.54
10010140	1.4	40	18	1.39	10010470	4.7	80	47	1.58
10010150	1.5	40	18	1.25	10010480	4.8	86	52	1.58
10010160	1.6	43	20	1.15	10010490	4.9	86	52	1.63
10010170	1.7	43	20	1.25	10010500	5.0	86	52	1.54
10010180	1.8	46	22	1.15	10010510	5.1	86	52	1.71
10010190	1.9	46	22	1.15	10010520	5.2	86	52	1.71
10010200	2.0	49	24	0.91	10010530	5.3	86	52	1.71
10010210	2.1	49	24	1.15	10010540	5.4	93	57	1.91
10010220	2.2	53	27	1.11	10010550	5.5	93	57	1.92
10010230	2.3	53	27	1.11	10010560	5.6	93	57	1.97
10010240	2.4	57	30	1.22	10010570	5.7	93	57	2.06
10010250	2.5	57	30	1.22	10010580	5.8	93	57	2.08
10010260	2.6	57	30	1.15	10010590	5.9	93	57	2.08
10010270	2.7	61	33	1.15	10010600	6.0	93	57	1.92
10010280	2.8	61	33	1.25	10010610	6.1	101	63	2.33
10010290	2.9	61	33	1.25	10010620	6.2	101	63	2.33
10010300	3.0	61	33	1.11	10010630	6.3	101	63	2.33
10010310	3.1	65	36	1.29	10010640	6.4	101	63	2.49
10010320	3.2	65	36	1.29	10010650	6.5	101	63	2.33
10010330	3.3	65	36	1.29	10010660	6.6	101	63	2.59
10010340	3.4	70	39	1.29	10010670	6.7	101	63	2.72

TAŞLANMIŞ MATKAP UCU DIN 338

1001 Taşlanmış Matkap Ucu DIN 338 HSS



ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit/ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	25	22	-	-	-	-	30	24	-	70	-	-	-	-	-

Ürün Kodu	Ölçü h8 mm	Tam Boy mm	Helis Boyu mm	Fiyat €	Ürün Kodu	Ölçü h8 mm	Tam Boy mm	Helis Boyu mm	Fiyat €
10010680	6.8	109	69	3.11	10011020	10.2	133	87	6.77
10010690	6.9	109	69	3.11	10011050	10.5	133	87	7.61
10010700	7.0	109	69	2.79	10011080	10.8	142	94	9.96
10010710	7.1	109	69	3.17	10011100	11.0	142	94	8.14
10010720	7.2	109	69	3.26	10011120	11.2	142	94	10.14
10010730	7.3	109	69	3.26	10011150	11.5	142	94	8.88
10010740	7.4	109	69	3.28	10011180	11.8	142	94	11.43
10010750	7.5	109	69	3.11	10011200	12.0	151	101	9.96
10010760	7.6	117	75	3.62	10011220	12.2	151	101	13.35
10010770	7.7	117	75	3.62	10011250	12.5	151	101	11.11
10010780	7.8	117	75	3.60	10011280	12.8	151	101	14.91
10010790	7.9	117	75	3.67	10011300	13.0	151	101	12.17
10010800	8.0	117	75	3.11	10011320	13.2	151	101	15.92
10010810	8.1	117	75	4.17	10011350	13.5	160	108	14.19
10010820	8.2	117	75	4.34	10011380	13.8	160	108	20.48
10010830	8.3	117	75	4.66	10011400	14.0	160	108	15.63
10010840	8.4	117	75	4.66	10011420	14.2	169	114	23.35
10010850	8.5	117	75	3.96	10011450	14.5	169	114	16.83
10010860	8.6	125	81	4.81	10011480	14.8	169	114	24.85
10010870	8.7	125	81	4.81	10011500	15.0	169	114	18.05
10010880	8.8	125	81	4.87	10011520	15.2	178	120	42.47
10010890	8.9	125	81	5.09	10011550	15.5	178	120	19.83
10010900	9.0	125	81	4.56	10011580	15.8	178	120	45.45
10010910	9.1	125	81	5.09	10011600	16.0	178	120	21.34
10010920	9.2	125	81	5.09	10011650	16.5	184	125	39.54
10010930	9.3	125	81	5.67	10011700	17.0	184	125	40.90
10010940	9.4	125	81	5.67	10011750	17.5	191	130	43.62
10010950	9.5	125	81	5.62	10011800	18.0	191	130	46.91
10010960	9.6	133	87	5.67	10011850	18.5	198	135	47.52
10010970	9.7	133	87	5.67	10011900	19.0	198	135	54.61
10010980	9.8	133	87	6.96	10011950	19.5	205	140	58.09
10010990	9.9	133	87	6.96	10012000	20.0	205	140	63.84
10011000	10.0	133	87	5.30					

ALTIN SERİ / KOBALTLI MATKAP UCU DIN 338

1013 DIN 338 HSS Co5 (Altın Seri)

HSS
Co5

Typ
Ti

DIN
338

130°

35°

format
professional quality



ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
-	-	16	18	14	-	-	-	10	-	-	-	-	-	-	-

V_c [m/min]

Ürün Kodu	Ölçü h8 mm	Helis Boyu mm	Tam Boy mm	Fiyat €	Ürün Kodu	Ölçü h8 mm	Helis Boyu mm	Tam Boy mm	Fiyat €
10130100	1.0	12	34	2.32	10130380	3.8	43	75	3.04
10130110	1.1	14	36	2.12	10130390	3.9	43	75	3.12
10130120	1.2	16	38	2.12	10130400	4.0	43	75	2.89
10130130	1.3	16	38	2.12	10130410	4.1	43	75	3.10
10130140	1.4	18	40	2.12	10130420	4.2	43	75	3.04
10130150	1.5	18	40	1.98	10130430	4.3	47	80	3.22
10130160	1.6	20	43	2.12	10130440	4.4	47	80	3.22
10130170	1.7	20	43	2.12	10130450	4.5	47	80	3.14
10130180	1.8	22	46	2.12	10130460	4.6	47	80	3.22
10130190	1.9	22	46	2.12	10130470	4.7	47	80	3.22
10130200	2.0	24	49	1.98	10130480	4.8	52	86	3.22
10130210	2.1	24	49	1.98	10130490	4.9	52	86	3.22
10130220	2.2	27	53	1.98	10130500	5.0	52	86	3.22
10130230	2.3	27	53	1.98	10130510	5.1	52	86	3.37
10130240	2.4	30	57	2.12	10130520	5.2	52	86	3.37
10130250	2.5	30	57	2.14	10130530	5.3	52	86	3.37
10130260	2.6	30	57	2.30	10130540	5.4	57	93	4.23
10130270	2.7	33	61	2.42	10130550	5.5	57	93	4.08
10130280	2.8	33	61	2.42	10130560	5.6	57	93	4.47
10130290	2.9	33	61	2.55	10130570	5.7	57	93	4.47
10130300	3.0	33	61	2.32	10130580	5.8	57	93	4.47
10130310	3.1	36	65	2.42	10130590	5.9	57	93	4.47
10130320	3.2	36	65	2.42	10130600	6.0	57	93	4.15
10130330	3.3	36	65	2.55	10130610	6.1	63	101	5.01
10130340	3.4	39	70	2.84	10130620	6.2	63	101	5.01
10130350	3.5	39	70	2.80	10130630	6.3	63	101	5.01
10130360	3.6	39	70	2.80	10130640	6.4	63	101	5.43
10130370	3.7	39	70	2.80	10130650	6.5	63	101	4.99

ALTIN SERİ / KOBALTLI MATKAP UCU DIN 338

1013 DIN 338 HSS Co5 (Altın Seri)

HSS
Co5

Typ
Ti

DIN
338

130°

35°

format
professional quality



ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit./ martens.	austenit- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
-	-	16	18	14	-	-	-	10	-	-	-	-	-	-	-

V_c [m/min]

Ürün Kodu	Ölçü h8 mm	Helis Boyu mm	Tam Boy mm	Fiyat €	Ürün Kodu	Ölçü h8 mm	Helis Boyu mm	Tam Boy mm	Fiyat €
10130660	6.6	63	101	5.43	10130940	9.4	81	125	12.35
10130670	6.7	63	101	5.43	10130950	9.5	81	125	8.98
10130680	6.8	69	109	5.81	10130960	9.6	87	133	12.60
10130690	6.9	69	109	5.81	10130970	9.7	87	133	12.60
10130700	7.0	69	109	5.25	10130980	9.8	87	133	12.91
10130710	7.1	69	109	7.19	10130990	9.9	87	133	12.91
10130720	7.2	69	109	7.19	10131000	10.0	87	133	10.08
10130730	7.3	69	109	7.19	10131010	10.1	87	133	17.40
10130740	7.4	69	109	7.19	10131020	10.2	87	133	14.29
10130750	7.5	69	109	5.57	10131050	10.5	87	133	14.29
10130760	7.6	75	117	8.66	10131080	10.8	94	142	28.84
10130770	7.7	75	117	8.66	10131100	11.0	94	142	17.94
10130780	7.8	75	117	8.66	10131120	11.2	94	142	31.84
10130790	7.9	75	117	8.66	10131150	11.5	94	142	20.91
10130800	8.0	75	117	6.61	10131180	11.8	94	142	34.76
10130810	8.1	75	117	8.18	10131200	12.0	101	151	21.42
10130820	8.2	75	117	8.18	10131220	12.2	101	151	36.04
10130830	8.3	75	117	8.66	10131250	12.5	101	151	27.63
10130840	8.4	75	117	8.66	10131280	12.8	101	151	42.04
10130850	8.5	75	117	6.84	10131300	13.0	101	151	30.93
10130860	8.6	81	125	10.08	10131350	13.5	108	160	33.36
10130870	8.7	81	125	10.08	10131380	13.8	108	160	48.74
10130880	8.8	81	125	10.42	10131400	14.0	108	160	30.04
10130890	8.9	81	125	10.42	10131450	14.5	114	169	34.53
10130900	9.0	81	125	8.77	10131500	15.0	114	169	33.09
10130910	9.1	81	125	11.29	10131550	15.5	120	169	49.45
10130920	9.2	81	125	11.29	10131600	16.0	120	169	50.03
10130930	9.3	81	125	12.35					

KARBÜR MATKAP UÇLARI KAPLAMASIZ KISA

1183

DIN 6539 Kısa Tip Kaplamasız

VHM

K10/
K20

Typ
N

DIN
6539

118°

25°- 30°

format
professional quality



	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
	< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit/ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	80	70	50	25	15	-	80	64	20	150	120	180	-	20	-	-

Ürün Kodu	Ölçü mm	Helis Boyu mm	Tam Boy mm	Fiyat €	Ürün Kodu	Ölçü mm	Helis Boyu mm	Tam Boy mm	Fiyat €
11830100	1.0	6	26	4.53	11830420	4.2	22	55	10.97
11830110	1.1	7	28	5.12	11830430	4.3	24	58	10.97
11830120	1.2	8	30	5.00	11830440	4.4	24	58	10.97
11830130	1.3	8	30	5.16	11830450	4.5	24	58	10.97
11830140	1.4	9	32	3.74	11830460	4.6	24	58	11.72
11830150	1.5	9	32	4.56	11830470	4.7	24	58	11.72
11830160	1.6	10	34	3.96	11830480	4.8	26	62	11.72
11830170	1.7	10	34	5.06	11830490	4.9	26	62	11.72
11830180	1.8	11	36	5.16	11830500	5.0	26	62	11.72
11830190	1.9	11	36	4.11	11830510	5.1	26	62	13.61
11830200	2.0	12	38	5.52	11830520	5.2	26	62	15.13
11830210	2.1	12	38	5.52	11830530	5.3	26	62	15.13
11830220	2.2	13	40	5.52	11830540	5.4	28	66	16.28
11830230	2.3	13	40	5.77	11830550	5.5	28	66	15.13
11830240	2.4	14	43	5.52	11830560	5.6	28	66	15.60
11830250	2.5	14	43	5.52	11830570	5.7	28	66	15.80
11830260	2.6	14	43	5.52	11830580	5.8	28	66	15.94
11830270	2.7	16	46	8.02	11830590	5.9	28	66	16.22
11830280	2.8	16	46	8.02	11830600	6.0	28	66	15.94
11830290	2.9	16	46	8.02	11830650	6.5	31	70	27.25
11830300	3.0	16	46	8.02	11830680	6.8	34	74	25.26
11830310	3.1	18	49	8.02	11830700	7.0	34	74	27.46
11830320	3.2	18	49	8.02	11830750	7.5	34	74	28.24
11830330	3.3	18	49	9.96	11830800	8.0	37	79	32.48
11830340	3.4	20	52	8.48	11830850	8.5	37	79	40.24
11830350	3.5	20	52	8.48	11830900	9.0	40	84	42.37
11830360	3.6	20	52	9.19	11830950	9.5	40	84	45.21
11830370	3.7	20	52	9.19	11831000	10.0	43	89	48.66
11830380	3.8	22	55	9.94	11831020	10.2	43	89	62.28
11830390	3.9	22	55	10.04	11831050	10.5	43	89	56.49
11830400	4.0	22	55	10.04	11831100	11.0	47	95	62.11
11830410	4.1	22	55	10.97	11831200	12.0	51	102	70.57

KARBÜR MATKAP UÇLARI TİN KAPLI KISA

1184

DIN 6539 Kısa Tip Tin Kaplamalı

VHM

K10/
K20

Typ
N

DIN
6539

118°

25°- 30°

format
professional quality



	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
	< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit/ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	90	72	58	35	28	22	90	72	20	200	200	-	-	-	-	-

Ürün Kodu	Ölçü mm	Helis Boyu mm	Tam Boy mm	Fiyat €	Ürün Kodu	Ölçü mm	Helis Boyu mm	Tam Boy mm	Fiyat €
11840100	1.0	6	26	5.38	11840420	4.2	22	55	12.21
11840110	1.1	7	28	6.06	11840430	4.3	24	58	12.68
11840120	1.2	8	30	5.88	11840440	4.4	24	58	12.68
11840130	1.3	8	30	6.10	11840450	4.5	24	58	12.68
11840140	1.4	9	32	4.47	11840460	4.6	24	58	13.49
11840150	1.5	9	32	5.30	11840470	4.7	24	58	13.52
11840160	1.6	10	34	6.03	11840480	4.8	26	62	13.52
11840170	1.7	10	34	6.03	11840490	4.9	26	62	13.56
11840180	1.8	11	36	6.10	11840500	5.0	26	62	13.09
11840190	1.9	11	36	4.80	11840510	5.1	26	62	15.75
11840200	2.0	12	38	6.29	11840520	5.2	26	62	17.43
11840210	2.1	12	38	6.36	11840530	5.3	26	62	17.43
11840220	2.2	13	40	6.56	11840540	5.4	28	66	17.92
11840230	2.3	13	40	6.77	11840550	5.5	28	66	17.43
11840240	2.4	14	43	6.36	11840560	5.6	28	66	17.95
11840250	2.5	14	43	6.14	11840570	5.7	28	66	18.25
11840260	2.6	14	43	8.02	11840580	5.8	28	66	18.36
11840270	2.7	16	46	8.98	11840590	5.9	28	66	18.73
11840280	2.8	16	46	9.87	11840600	6.0	28	66	17.78
11840290	2.9	16	46	9.55	11840650	6.5	31	70	30.37
11840300	3.0	16	46	9.17	11840680	6.8	34	74	27.63
11840310	3.1	18	49	9.32	11840700	7.0	34	74	30.66
11840320	3.2	18	49	9.32	11840750	7.5	34	74	31.45
11840330	3.3	18	49	11.52	11840800	8.0	37	79	35.57
11840340	3.4	20	52	9.77	11840850	8.5	37	79	42.56
11840350	3.5	20	52	9.72	11840900	9.0	40	84	45.20
11840360	3.6	20	52	10.59	11840950	9.5	40	84	48.26
11840370	3.7	20	52	10.59	11841000	10.0	43	89	51.95
11840380	3.8	22	55	11.50	11841020	10.2	43	89	63.60
11840390	3.9	22	55	11.63	11841050	10.5	43	89	60.31
11840400	4.0	22	55	11.22	11841100	11.0	47	95	66.31
11840410	4.1	22	55	12.66	11841200	12.0	51	102	75.33

TAŞLANMIŞ UZUN SİLİNDİRİK SAPLI MATKAP UCU HSS

1045 DIN 340

HSS

N

DIN
340

118°

25°-30°

format
professional quality



ÇELİK	PASLANMAZ	DÖKÜM	TİTANYUM	DEMİR DIŞI METALLER	SERT ÇELİK
< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex
GG/GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.
Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC		
V _c [m/min]	22	20	-	-	-

Ürün Kodu	Ölçü h8 mm	Helis Boyu mm	Tam Boy mm	Fiyat €	Ürün Kodu	Ölçü h8 mm	Helis Boyu mm	Tam Boy mm	Fiyat €
10450100	1.0	33	56	4.14	10450600	6.0	91	139	4.33
10450150	1.5	45	70	2.94	10450650	6.5	97	148	4.63
10450200	2.0	56	85	2.00	10450680	6.8	102	156	6.73
10450250	2.5	62	95	2.01	10450700	7.0	102	156	5.44
10450300	3.0	66	100	2.13	10450750	7.5	102	156	6.41
10450310	3.1	69	106	2.70	10450800	8.0	109	165	6.47
10450320	3.2	69	106	2.26	10450850	8.5	109	165	7.42
10450330	3.3	69	106	2.50	10450900	9.0	115	175	7.92
10450350	3.5	73	112	2.51	10450950	9.5	115	175	9.47
10450400	4.0	78	119	2.78	10451000	10.0	121	184	9.31
10450410	4.1	78	119	3.25	10451020	10.2	121	184	13.18
10450420	4.2	78	119	2.78	10451050	10.5	121	184	13.18
10450450	4.5	82	126	3.16	10451100	11.0	128	195	13.66
10450500	5.0	87	132	3.32	10451150	11.5	128	195	15.13
10450510	5.1	87	132	4.51	10451200	12.0	134	205	17.21
10450520	5.2	87	132	3.80	10451250	12.5	134	205	17.21
10450550	5.5	91	139	4.05	10451300	13.0	134	205	18.19
10450580	5.8	91	139	4.05					

ÇOK UZUN MATKAP UÇLARI

1067 DIN 1869 - 1-2-3 Tip TF HSS

1022 DIN 1869 - 1-2-3 Tip TF HSS-CO

HSS
CO

HSS

Typ
TF

DIN
1869

130°

38°

format
professional quality



	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DIŞI METALLER				SERT ÇELİK		
	< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit/ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ GFK/CFK/ Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	22	18	-	-	-	-	20	16	-	45	36	-	-	-	-	-
V _c [m/min]	25	20	10	10	8	-	22	18	-	30	40	30	-	-	-	-

Ürün Kodu	Seri mm	Ölçü mm	Tam Boy mm	Helis Boyu mm	Fiyat €	Ürün Kodu	Seri mm	Ölçü mm	Tam Boy mm	Helis Boyu mm	Fiyat €
10670001	1869 / 1	3.0	150	100	11.98	10220001	1869 / 1	3.0	150	100	11.98
10670003	1869 / 2	3.0	190	130	16.22	10220003	1869 / 2	3.0	190	130	16.22
10670005	1869 / 1	3.5	165	115	11.98	10220005	1869 / 1	3.5	165	115	11.98
10670007	1869 / 2	3.5	210	145	16.52	10220007	1869 / 2	3.5	210	145	16.52
10670009	1869 / 1	4.0	175	120	12.36	10220009	1869 / 1	4.0	175	120	12.36
10670011	1869 / 2	4.0	220	150	17.59	10220011	1869 / 2	4.0	220	150	17.59
10670013	1869 / 3	4.0	280	190	22.08	10220013	1869 / 3	4.0	280	190	22.08
10670015	1869 / 1	4.5	185	125	13.32	10220015	1869 / 1	4.5	185	125	13.32
10670017	1869 / 2	4.5	235	160	18.68	10220017	1869 / 2	4.5	235	160	18.68
10670019	1869 / 1	5.0	195	135	14.24	10220019	1869 / 1	5.0	195	135	14.24
10670021	1869 / 2	5.0	245	170	18.68	10220021	1869 / 2	5.0	245	170	18.68
10670023	1869 / 3	5.0	315	210	26.74	10220023	1869 / 3	5.0	315	210	26.74
10670025	1869 / 1	5.5	205	140	15.46	10220025	1869 / 1	5.5	205	140	15.46
10670027	1869 / 2	5.5	260	180	23.03	10220027	1869 / 2	5.5	260	180	23.03
10670029	1869 / 1	6.0	205	140	15.46	10220029	1869 / 1	6.0	205	140	15.46
10670031	1869 / 2	6.0	260	180	22.51	10220031	1869 / 2	6.0	260	180	22.51
10670033	1869 / 3	6.0	330	225	30.66	10220033	1869 / 3	6.0	330	225	30.66
10670035	1869 / 1	6.5	215	150	23.80	10220035	1869 / 1	6.5	215	150	23.80
10670037	1869 / 2	6.5	275	190	25.95	10220037	1869 / 2	6.5	275	190	25.95
10670038	1869 / 1	6.8	225	155	26.34	10220038	1869 / 1	6.8	225	155	26.34
10670039	1869 / 1	7.0	225	155	22.08	10220039	1869 / 1	7.0	225	155	22.08
10670040	1869 / 1	7.5	225	155	24.43	10220040	1869 / 1	7.5	225	155	24.43
10670041	1869 / 2	7.0	290	200	28.35	10220041	1869 / 2	7.0	290	200	28.35
10670042	1869 / 2	7.5	290	200	32.21	10220042	1869 / 2	7.5	290	200	32.21
10670043	1869 / 1	8.0	240	165	27.63	10220043	1869 / 1	8.0	240	165	27.63
10670045	1869 / 2	8.0	305	210	33.03	10220045	1869 / 2	8.0	305	210	33.03
10670047	1869 / 3	8.0	390	265	49.41	10220047	1869 / 3	8.0	390	265	49.41
10670049	1869 / 1	8.5	240	165	35.56	10220049	1869 / 1	8.5	240	165	35.56
10670051	1869 / 2	8.5	305	210	51.92	10220051	1869 / 2	8.5	305	210	51.92
10670053	1869 / 1	9.0	250	175	37.90	10220053	1869 / 1	9.0	250	175	37.90
10670054	1869 / 2	9.0	320	220	48.78	10220054	1869 / 2	9.0	320	220	48.78
10670055	1869 / 1	9.5	320	185	39.30	10220055	1869 / 1	10.0	265	220	39.30
10670056	1869 / 2	10.0	265	220	56.28	10220056	1869 / 2	9.5	320	185	56.28
10670057	1869 / 2	10.0	340	235	53.46	10220057	1869 / 2	10.0	340	235	53.46
10670059	1869 / 3	10.0	430	295	78.48	10220059	1869 / 3	10.0	430	295	78.48
10670060	1869 / 2	10.2	340	235	58.29	10220060	1869 / 2	10.2	340	235	58.29
10670061	1869 / 2	10.5	340	235	78.77	10220061	1869 / 2	10.5	340	235	78.77
10670063	1869 / 2	12.0	375	260	95.16	10220063	1869 / 2	12.0	375	260	95.16
10670065	1869 / 3	12.0	480	330	118.43	10220065	1869 / 3	12.0	480	330	118.43

TAŞLANMIŞ KONİK MATKAP UCU HSS

1080 DIN 345 HSS



format
professional quality

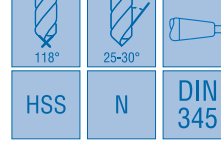
ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit/ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
25	22	-	-	-	-	30	24	-	70	-	-	-	-	-	-

Ürün Kodu	Ölçü h8 mm	Tam Boy mm	Helis Boyu mm	Matkap Morsu mm	Fiyat €	Ürün Kodu	Ölçü h8 mm	Tam Boy mm	Helis Boyu mm	Matkap Morsu mm	Fiyat €
10801000	10.00	168	87	1	17.65	10801700	17.00	223	125	2	30.07
10801025	10.25	168	87	1	25.70	10801725	17.25	228	130	2	37.88
10801050	10.50	168	87	1	18.25	10801750	17.50	228	130	2	30.88
10801075	10.75	175	94	1	25.34	10801775	17.75	228	130	2	38.22
10801100	11.00	175	94	1	18.76	10801800	18.00	228	130	2	32.43
10801125	11.25	175	94	1	23.78	10801825	18.25	233	135	2	38.94
10801150	11.50	175	94	1	21.63	10801850	18.50	233	135	2	26.10
10801175	11.75	175	94	1	24.99	10801875	18.75	233	135	2	40.92
10801200	12.00	182	101	1	19.51	10801900	19.00	233	135	2	34.96
10801225	12.25	182	101	1	25.34	10801925	19.25	238	140	2	43.70
10801250	12.50	182	101	1	20.54	10801950	19.50	238	140	2	40.42
10801275	12.75	182	101	1	25.34	10801975	19.75	238	140	2	45.53
10801300	13.00	182	101	1	21.36	10802000	20.00	238	140	2	37.08
10801325	13.25	189	108	1	26.10	10802025	20.25	243	145	2	49.98
10801350	13.50	189	108	1	24.20	10802050	20.50	243	145	2	39.31
10801375	13.75	189	108	1	27.50	10802075	20.75	243	145	2	44.70
10801400	14.00	189	108	1	22.45	10802100	21.00	243	145	2	41.92
10801425	14.25	212	114	2	24.64	10802125	21.25	248	150	2	56.45
10801450	14.50	212	114	2	23.55	10802150	21.50	248	150	2	48.12
10801475	14.75	212	114	2	35.98	10802175	21.75	248	150	2	54.34
10801500	15.00	212	114	2	24.99	10802200	22.00	248	150	2	46.65
10801525	15.25	218	120	2	33.37	10802225	22.25	248	150	2	55.85
10801550	15.50	218	120	2	26.89	10802250	22.50	253	155	2	50.33
10801575	15.75	218	120	2	30.52	10802275	22.75	253	155	2	57.29
10801600	16.00	218	120	2	26.89	10802300	23.00	253	155	2	54.79
10801625	16.25	223	125	2	41.09	10802325	23.25	276	155	3	69.04
10801650	16.50	223	125	2	29.04	10802350	23.50	276	155	3	54.34
10801675	16.75	223	125	2	41.09	10802375	23.75	281	160	3	74.94

TAŞLANMIŞ KONİK MATKAP UCU HSS

1080

DIN 345 HSS



format
professional quality

Ürün Kodu	Ölçü h8 mm	Tam Boy mm	Helis Boyu mm	Matkap Morsu mm	Fiyat €
10802400	24.00	281	160	3	56.92
10802425	24.25	281	160	3	84.78
10802450	24.50	281	160	3	59.14
10802475	24.75	281	160	3	82.37
10802500	25.00	281	160	3	62.84
10802525	25.25	286	165	3	91.22
10802550	25.50	286	165	3	65.28
10802575	25.75	286	165	3	85.26
10802600	26.00	286	165	3	72.30
10802625	26.25	286	165	3	98.40
10802650	26.50	286	165	3	69.80
10802675	26.75	291	170	3	110.20
10802700	27.00	291	170	3	72.00
10802725	27.25	291	170	3	107.83
10802750	27.50	291	170	3	74.22
10802775	27.75	291	170	3	105.46
10802800	28.00	291	170	3	79.34
10802825	28.25	296	175	3	118.23
10802850	28.50	296	175	3	97.80
10802875	28.75	296	175	3	110.20
10802900	29.00	296	175	3	85.91
10802925	29.25	296	175	3	122.30
10802950	29.50	296	175	3	88.21
10802975	29.75	296	175	3	112.52
10803000	30.00	296	175	3	85.91
10803025	30.25	301	180	3	124.72
10803050	30.50	301	180	3	105.12
10803075	30.75	301	180	3	132.72
10803100	31.00	301	180	3	101.93

Ürün Kodu	Ölçü h8 mm	Tam Boy mm	Helis Boyu mm	Matkap Morsu mm	Fiyat €
10803125	31.25	301	180	3	135.91
10803150	31.50	301	180	3	116.13
10803175	31.75	306	185	3	131.07
10803200	32.00	334	185	4	107.49
10803250	32.25	334	185	4	123.54
10803300	33.00	334	185	4	115.22
10803350	33.50	334	185	4	127.61
10803400	34.00	339	190	4	134.94
10803450	34.50	339	190	4	149.24
10803500	35.00	339	190	4	137.34
10803550	35.50	339	190	4	158.84
10803600	36.00	344	195	4	147.78
10803650	36.50	344	195	4	166.20
10803700	37.00	344	195	4	161.60
10803750	37.50	344	195	4	182.28
10803800	38.00	349	200	4	171.24
10803850	38.50	349	200	4	205.64
10803900	39.00	349	200	4	187.37
10803950	39.50	349	200	4	235.02
10804000	40.00	349	200	4	194.56
10804100	41.00	354	205	4	209.37
10804200	42.00	354	205	4	227.71
10804300	43.00	359	210	4	242.33
10804400	44.00	359	210	4	253.44
10804500	45.00	359	210	4	264.34
10804600	46.00	364	215	4	275.34
10804700	47.00	364	215	4	293.81
10804800	48.00	369	220	4	301.18
10804900	49.00	369	220	4	315.84
10805000	50.00	369	220	4	323.15

TAŞLANMIŞ UZUN MORS KONİK SAPLI MATKAP UÇLARI DIN 341

1089 DIN 341 Taşlanmış (Siyah-Beyaz)

HSS

Typ
N

DIN
341

MK 1-4

118°

25-30°

format
professional quality



ÇELİK	PASLANMAZ	DÖKÜM	TİTANYUM	DEMİR DİŞİ METALLER	SERT ÇELİK
< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex
GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.
			Graphit/ GFK/CFK/ Duropl.		< 55 HRC
					< 60 HRC
					> 60 HRC

V _c [m/min]	22	20	-	-	-	-	27	18	-	45	-	-	-	-	-	-
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Ürün Kodu	Ölçü mm	Tam Boy mm	Helis Boyu mm	Matkap Morsu mm	Fiyat €
10891000	10.0	197	116	1	27.56
10891050	10.5	197	116	1	28.24
10891100	11.0	206	125	1	29.01
10891150	11.5	206	125	1	29.01
10891200	12.0	215	134	1	29.01
10891250	12.5	215	134	1	29.33
10891300	13.0	215	134	1	29.33
10891350	13.5	223	142	1	32.74
10891400	14.0	223	142	1	33.04
10891450	14.5	245	147	2	41.92
10891500	15.0	245	147	2	41.46
10891550	15.5	251	153	2	40.42
10891600	16.0	251	153	2	43.34
10891650	16.5	257	159	2	45.50
10891700	17.0	257	159	2	45.14
10891750	17.5	263	165	2	51.76
10891800	18.0	263	165	2	51.33
10891850	18.5	269	171	2	62.03
10891900	19.0	269	171	2	56.57
10891950	19.5	275	177	2	64.84
10892000	20.0	275	177	2	62.08
10892050	20.5	282	184	2	77.79
10892100	21.0	282	184	2	70.77

UZUN MORS KONİK SAPLI MATKAP UÇLARI DIN 341

1089 DIN 341 Taşlanmış (Siyah-Beyaz)

HSS

Typ
N

DIN
341

MK 1-4

118°

25-30°

format
professional quality



ÇELİK	PASLANMAZ	DÖKÜM	TİTANYUM	DEMİR DİŞİ METALLER	SERT ÇELİK
< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex
GG/	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.
			Graphit/ GFK/CFK/ Duropl.		< 55 HRC
					< 60 HRC
					> 60 HRC

V_c [m/min]

22 20 - - - - 27 18 - 45 - - - - -

Ürün Kodu	Ölçü mm	Tam Boy mm	Helis Boyu mm	Matkap Morsu mm	Fiyat €
10892150	21.5	289	191	2	83.74
10892200	22.0	289	191	2	77.04
10892250	22.5	296	198	2	85.14
10892300	23.0	296	198	2	80.02
10892400	24.0	327	206	3	98.33
10892500	25.0	327	206	3	99.14
10892600	26.0	335	214	3	113.89
10892700	27.0	343	222	3	121.98
10892800	28.0	343	222	3	135.84
10892900	29.0	351	230	3	157.09
10893000	30.0	351	230	3	156.30
10893100	31.0	360	239	3	206.40
10893200	32.0	397	248	4	218.16
10893300	33.0	397	248	4	218.16
10893400	34.0	406	257	4	273.77
10893500	35.0	406	257	4	265.84
10893600	36.0	416	267	4	305.54
10893700	37.0	416	267	4	345.20
10893800	38.0	426	277	4	329.29
10893900	39.0	426	277	4	353.07
10894000	40.0	426	277	4	368.98
10894500	45.0	447	298	4	619.04
10895000	50.0	470	321	4	619.04

KONİK SAC DELME MATKABI

1300

Sertleştirilmiş Yüzey, HSS

HSS

format
professional quality



	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DIŞI METALLER				SERT ÇELİK		
	< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit/ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	●	●	-	-	-	-	-	-	-	●	●	●	-	-	-	-

Ürün Kodu	Ölçü mm	Tam Boy mm	Helis Boyu mm	Şaft Çapı	Fiyat €
13000010	3 - 14	58	20	6	11.53
13000020	4 - 20	71	22	8	19.11
13000070	4 - 31	103	25	9	48.90
13000030	16 - 30,5	76	22	9	33.31
13000040	24 - 40	89	30	10	62.57
13000050	36 - 50	97	30	12	114.11
13000060	40 - 61	103	30	12	209.25

KADEMELİ SAC DELME MATKABI

1315

HSS

HSS

format
professional quality



	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DIŞI METALLER				SERT ÇELİK		
	< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit/ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	●	●	-	●	-	-	-	-	-	●	●	●	-	-	-	-

Ürün Kodu	Ölçü	Adım Uzunluğu mm	Tam Boy mm	Şaft Çapı	Fiyat €
13150010	4-12	5	80	6	26.59
13150020	4-20	4	67	8	31.22
13150030	6-30	4	98	10	52.67

90° HAVŞA FREZE

1430 DIN 335/C HSS Çelik ve alüminyum malzemeler için uygundur.

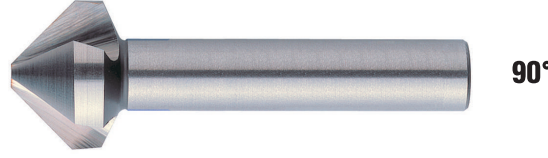
HSS

DIN
335-C

90°

Z
3

format
professional quality



ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
●	●	-	-	-	-	-	-	-	●	●	●	-	-	-	-

Ürün Kodu	Ölçü mm	Küçük Çap	Tam Boy mm	Şaft Çapı	Fiyat €
14300430	4.3	1.3	40	4	7.62
14300500	5.0	1.5	40	4	7.62
14300600	6.0	1.5	45	5	7.62
14300630	6.3	1.5	45	5	7.62
14300730	7.3	1.8	50	6	8.20
14300800	8.0	2.0	50	6	8.20
14300830	8.3	2.0	50	6	8.20
14301000	10.0	2.5	50	6	8.72
14301040	10.4	2.5	50	6	8.72
14301150	11.5	2.8	56	8	9.90
14301240	12.4	2.8	56	8	9.90
14301340	13.4	2.9	56	8	12.45
14301500	15.0	3.2	60	10	12.45
14301650	16.5	3.2	60	10	12.45
14301900	19.0	3.5	63	10	17.45
14302050	20.5	3.5	63	10	17.45
14302300	23.0	3.8	67	10	25.35
14302500	25.0	3.8	67	10	25.35
14303000	30.0	4.2	71	12	31.54
14303100	31.0	4.2	71	12	31.54
14304000	40.0	5.0	80	15	54.91

90° KOBALTLI HAVŞA FREZE

1436 DIN 335/C HSS-E Çelikler ve kısmen paslanmaz çeliklerde kullanılabilir.

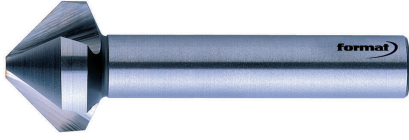
HSS-E

DIN 335-C

90°

Z 3

format
professional quality



KOBALTLI 90°

ÇELİK	PASLANMAZ	DÖKÜM	TİTANYUM	DEMİR DİŞİ METALLER	SERT ÇELİK
< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex
GG/	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.
Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC		

V _c [m/min]	●	●	●	●	●	-	-	-	●	●	●	-	-	-	-
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Ürün Kodu	Ölçü mm	Küçük Çap	Tam Boy mm	Şaft Çapı	Fiyat €
14360630	6.3	1.5	45	5	10.76
14360830	8.3	2.0	50	6	11.18
14361040	10.4	2.5	50	6	11.46
14361240	12.4	2.8	56	8	12.84
14361650	16.5	3.2	60	10	14.37
14362050	20.5	3.5	63	10	19.35
14362500	25.0	3.8	67	10	26.55
14363100	31.0	4.2	71	12	46.26
14364000	40.0	5.0	80	15	63.98

60° HAVŞA FREZE

1456 DIN 334/C 60° HSS

HSS

DIN 334-C

60°

Z 3

format
professional quality



60°

ÇELİK	PASLANMAZ	DÖKÜM	TİTANYUM	DEMİR DİŞİ METALLER	SERT ÇELİK
< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex
GG/	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.
Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC		

V _c [m/min]	●	●	-	-	-	-	-	-	-	-	-	-	-	-	-
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Ürün Kodu	Ölçü mm	Küçük Çap	Tam Boy mm	Şaft Çapı	Fiyat €
14560630	6.3	1.7	45	5	10.37
14560800	8.0	2.1	50	6	10.76
14561000	10.0	2.6	53	6	13.17
14561250	12.5	3.3	56	8	13.93
14561600	16.0	4.1	63	10	17.29
14562000	20.0	5.1	67	10	24.15
14562500	25.0	6.4	71	10	33.36
14563150	31.5	10	76	12	55.73
14564000	40.0	10	91	15	91.42

120° HAVŞA FREZE

1465 120° HSS

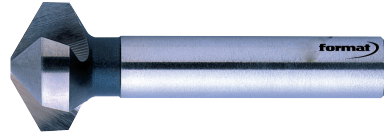
HSS

Fabrika
Standardı

120°

Z
3

format
professional quality



120°

ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DIŞI METALLER				SERT ÇELİK		
< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	●	●	-	-	-	-	-	-	-	-	-	-	-	-	-

Ürün Kodu	Ölçü mm	Küçük Çap	Tam Boy mm	Şaft Çapı	Fiyat €
14650630	6.3	1.7	44	5	14.45
14650830	8.3	2.2	48.5	6	15.05
14651040	10.4	2.7	50	6	17.93
14651240	12.4	3.2	53	8	18.96
14651650	16.5	3.7	56	10	24.13
14652050	20.5	4.2	59	10	34.95
14652500	25.0	5.2	61	10	46.72

90° DELİKLİ ÇAPAK ALMA FREZESİ

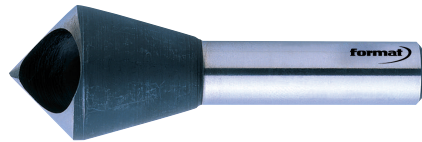
1425 DIN 373 HSS - E

HSS-E

90°

Z
1

format
professional quality



ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DIŞI METALLER				SERT ÇELİK		
< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	20	10	-	5	5	-	-	-	15	15	-	-	-	-	-

Ürün Kodu	Ölçü mm	Tam Boy mm	Şaft Çapı	Çalışma Aralığı mm	Fiyat €
14250100	10	45	6	2 - 5	8.44
14250140	14	48	8	5 - 10	10.87
14250210	21	65	10	10 - 15	18.78
14250275	28	84	12	15 - 20	34.33
14250350	35	102	12	20 - 25	45.91
14250440	44	115	15	25 - 30	59.72

İMBUS / SABİT PİLOTLU HAVŞA FREZE

1400 DIN 373 HSS



HSS

DIN 373

Z 3

format
professional quality

	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
	< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	●	◐	-	◐	-	-	-	-	-	●	●	●	-	-	-	-

Ürün Kodu	Ölçü	Büyük Çap	Pilot Çapı	Şaft Çapı	Tam Boy mm	Fiyat €
14000300	M 3	6	3.2	5.0	71	15.30
14000400	M 4	8	4.3	5.0	71	13.51
14000500	M 5	10	5.3	8.0	80	14.30
14000600	M 6	11	6.4	8.0	80	15.38
14000800	M 8	15	8.4	12.5	100	22.24
14001000	M 10	18	10.5	12.5	100	27.81
14001200	M 12	20	13.0	12.5	100	30.98

ÇAPRAZ DİŞ T YARIK FREZE

2250 DIN 850/D Veldonlu HSS Co5



HSS Co5

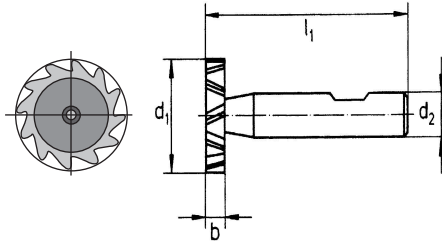
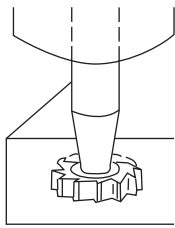
Typ N

DIN 850-D

DIN 1835



format
professional quality



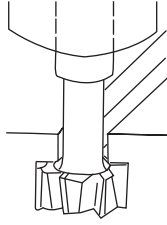
	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DIŞI METALLER				SERT ÇELİK		
	< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit/ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	20	15	10	15	12	-	25	30	-	-	48	28	-	-	-	-

Ürün Kodu	Ölçü mm	Tam Boy mm	Şaft Çapı	Ağız Sayısı	Fiyat €	Ürün Kodu	Ölçü mm	Tam Boy mm	Şaft Çapı	Ağız Sayısı	Fiyat €
22500001	13.5 x 2.0	56	10	6	30.12	22500001	13.5 x 2.0	56	10	6	30.12
22500007	13.5 x 3.0	56	10	6	30.12	22500007	13.5 x 3.0	56	10	6	30.12
22500010	13.5 x 4.0	56	10	6	30.12	22500010	13.5 x 4.0	56	10	6	30.12
22500016	16.5 x 3.0	56	10	6	33.14	22500016	16.5 x 3.0	56	10	6	33.14
22500019	16.5 x 4.0	56	10	6	33.14	22500019	16.5 x 4.0	56	10	6	33.14
22500022	16.5 x 5.0	56	10	6	33.14	22500022	16.5 x 5.0	56	10	6	33.14
22500025	19.5 x 3.0	56	10	8	42.28	22500025	19.5 x 3.0	56	10	8	42.28
22500028	19.5 x 4.0	63	10	8	42.28	22500028	19.5 x 4.0	63	10	8	42.28
22500031	19.5 x 5.0	63	10	8	42.28	22500031	19.5 x 5.0	63	10	8	42.28
22500032	19.5 x 6.0	63	10	8	42.28	22500032	19.5 x 6.0	63	10	8	42.28
22500034	22.5 x 4.0	63	10	8	44.96	22500034	22.5 x 4.0	63	10	8	44.96
22500037	22.5 x 5.0	63	10	8	44.96	22500037	22.5 x 5.0	63	10	8	44.96
22500040	22.5 x 6.0	63	10	8	44.96	22500040	22.5 x 6.0	63	10	8	44.96

ÇAPRAZ DIŞLİ T KANAL FREZE

2253

DIN 851 /AB
Veldonlu HSS Co5



HSS
Co5

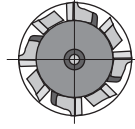
Typ
N

DIN
851-AB

DIN
1835-B



format
professional quality



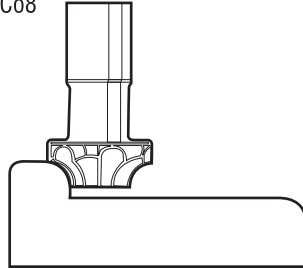
	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DIŞI METALLER				SERT ÇELİK		
	< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit/ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	35	17	-	15	12	-	25	30	-	-	48	28	-	-	-	-

Ürün Kodu	Ölçü mm	Tam Boy mm	Şaft Çapı	Ağız Sayısı	Fiyat €
22530001	12.5 x 6.0	57	10	6	30.12
22530004	16.0 x 8.0	62	10	6	38.11
22530007	18.0 x 8.0	70	12	6	40.01
22530010	21.0 x 9.0	74	12	8	51.80
22530013	25.0 x 11.0	82	16	8	65.50
22530016	28.0 x 12.0	83	16	8	73.12
22530019	32.0 x 14.0	90	16	8	78.43
22530022	36.0 x 16.0	103	25	8	111.96
22530025	40.0 x 18.0	108	25	10	142.06

KÖŞE YUVARLAMA FREZESİ

2262

DIN 6518/B HSS Co8



HSS
Co8

Typ
N

DIN
6518-B

DIN
1835-B



format
professional quality



	ÇELİK			PASLANMAZ			DÖKÜM	TİTANYUM	DEMİR DIŞI METALLER				SERT ÇELİK			
	< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	32	13	-	14	12	-	24	30	-	-	45	28	-	-	-	-

Ürün Kodu	Radyüs	Büyük Çap	Küçük Çap	Tam Boy mm	Şaft Çapı	Ağız Sayısı	Fiyat €
22620100	1.0	8	6	60	10	4	41.92
22620150	1.5	9	6	60	10	4	41.92
22620200	2.0	10	6	60	10	4	41.92
22620250	2.5	11	6	60	10	4	41.92
22620300	3.0	12	6	60	12	4	48.37
22620400	4.0	14	6	60	12	4	51.43
22620500	5.0	16	6	60	12	4	55.98
22620600	6.0	20	8	67	16	4	61.31
22620800	8.0	24	8	71	16	4	80.71
22621000	10.0	28	8	85	25	4	103.98
22621200	12.0	34	10	90	25	4	138.26
22621600	16.0	48	16	100	25	6	199.17

KIRLANGIÇ FREZE FORM C

2256 45° DIN 1833-C HSS Co5
2257 60° DIN 1833-C HSS Co5



HSS
Co5

Typ
N

DIN
1833 C

DIN
1835-B

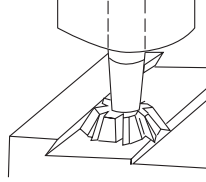
45-60°

45-60°

0°



format
professional quality



	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DIŞI METALLER				SERT ÇELİK		
	< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit/ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	30	12	-	13	11	-	20	26	-	-	-	25	-	-	-	-
	30	12	-	13	11	-	20	26	-	-	-	25	-	-	-	-

Ürün Kodu	45°	Ölçü Çap	Kesme Boyu mm	Tam Boy mm	Şaft Çapı	Ağız Sayısı	Fiyat €	Ürün Kodu	60°	Ölçü Çap	Kesme Boyu mm	Tam Boy mm	Şaft Çapı	Ağız Sayısı	Fiyat €
22560160		16.0	4.0	60	12	10	31.23	22570160		16.0	4.0	60	12	10	31.23
22560200		20.0	5.0	63	12	10	39.65	22570200		20.0	5.0	63	12	10	39.65
22560250		25.0	6.3	67	12	10	59.04	22570250		25.0	6.3	67	12	10	59.04
22560320		32.0	8.0	80	16	12	71.98	22570320		32.0	8.0	80	16	12	71.98
22560400		40.0	10.0	80	16	12	119.14	22570400		40.0	10.0	80	16	12	119.14

KIRLANGIÇ FREZE FORM D

2258 45° DIN 1833-D HSS Co5
2259 60° DIN 1833-D HSS Co5



HSS
Co5

Typ
N

DIN
1833 D

DIN
1835-B

45-60°

45-60°

0°



format
professional quality



	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DIŞI METALLER				SERT ÇELİK		
	< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit/ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	30	12	-	13	11	-	20	26	-	-	-	25	-	-	-	-
	30	12	-	13	11	-	20	26	-	-	-	25	-	-	-	-

Ürün Kodu	45°	Ölçü Çap	Kesme Boyu mm	Tam Boy mm	Şaft Çapı	Ağız Sayısı	Fiyat €	Ürün Kodu	60°	Ölçü Çap	Kesme Boyu mm	Tam Boy mm	Şaft Çapı	Ağız Sayısı	Fiyat €
22580160		16.0	4.0	60	12	10	31.23	22590160		16.0	4.0	60	12	10	31.23
22580200		20.0	5.0	63	12	10	39.65	22590200		20.0	5.0	63	12	10	39.65
22580250		25.0	6.3	67	12	10	59.04	22590250		25.0	6.3	67	12	10	59.04
22580320		32.0	8.0	80	16	12	71.98	22590320		32.0	8.0	80	16	12	71.98

DIN 212 SİLİNDİRİK SAPLI MAKİNE RAYBASI KOBALTLI

1531 DIN 212 HSS-E H7 Toleranslı

HSS-E

DIN
212-B/D

H7

ca. 7°

format
professional quality



	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DIŞI METALLER				SERT ÇELİK		
	< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit/ martens.	austenit- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	10	8	8	4	2	4	6	5	4	20	18	-	-	-	-	-

Ürün Kodu	Ölçü mm	Tam Boy mm	Helis Boyu mm	Şaft Çapı	Fiyat €
15310100	1.0*	34	5.5	1.0	20.35
15310150	1.5*	40	8.0	1.5	15.88
15310200	2.0*	49	11.0	2.0	14.86
15310250	2.5*	57	14.0	2.5	14.86
15310300	3.0*	61	15.0	3.0	13.21
15310350	3.5*	70	18.0	3.5	15.51
15310400	4.0	75	19.0	4.0	14.86
15310450	4.5	80	21.0	4.5	15.51
15310500	5.0	86	23.0	5.0	15.88
15310550	5.5	93	26.0	5.6	18.03
15310600	6.0	93	26.0	5.6	16.11
15310650	6.5	101	28.0	6.3	19.12
15310700	7.0	109	31.0	7.1	19.12
15310750	7.5	109	31.0	7.1	21.22
15310800	8.0	117	33.0	8.0	19.81
15310850	8.5	117	33.0	8.0	25.17
15310900	9.0	125	36.0	9.0	25.17
15310950	9.5	125	36.0	9.0	25.30
15311000	10.0	133	38.0	10.0	23.53
15311100	11.0	142	41.0	10.0	34.61
15311200	12.0	151	44.0	10.0	35.95
15311300	13.0	151	44.0	10.0	39.99
15311400	14.0	160	47.0	12.5	41.41
15311500	15.0	162	50.0	12.5	42.69
15311600	16.0	170	52.0	12.5	44.78
15311700	17.0	175	54.0	14.0	52.21
15311800	18.0	182	56.0	14.0	53.65
15311900	19.0	189	58.0	16.0	63.13
15312000	20.0	195	60.0	16.0	58.20

* - Form B

DIN 206 EL RAYBASI HSS

1500

DIN 206-B HSS H7 Tolerans

HSS

DIN 206-B

H7



format
professional quality



ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
< 700 N/mm ²	< 1000 N/mm ²	< 1400 N/mm ²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm ²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
●	●	○	○	○	○	○	○	○	○	○	○	-	-	-	-

V_c [m/min]

Ürün Kodu	Ölçü	Tam Boy mm	Helis Boyu mm	Karesi mm	Fiyat €
15000200	2.0	50	25	1.6	18.27
15000250	2.5	58	29	2.1	18.55
15000300	3.0	62	31	2.1	18.27
15000350	3.5	71	35	2.7	21.49
15000400	4.0	76	38	3.0	16.64
15000450	4.5	81	41	3.4	19.85
15000500	5.0	87	44	3.8	19.30
15000550	5.5	93	47	4.3	21.30
15000600	6.0	93	47	4.3	19.01
15000650	6.5	100	50	4.9	21.80
15000700	7.0	107	54	5.5	20.88
15000750	7.5	107	54	5.5	23.80
15000800	8.0	115	58	6.2	21.49
15000850	8.5	115	58	6.2	25.81
15000900	9.0	124	62	7.0	24.43
15000950	9.5	124	62	7.0	26.38
15001000	10.0	133	66	8.0	25.42
15001100	11.0	142	71	9.0	28.35
15001200	12.0	152	76	10.0	30.49
15001300	13.0	152	76	10.0	44.87
15001400	14.0	163	81	11.0	48.78
15001500	15.0	163	81	11.0	51.44
15001600	16.0	175	87	12.0	53.51
15001700	17.0	175	87	12.0	56.90
15001800	18.0	188	93	14.5	62.78
15001900	19.0	188	93	14.5	67.42
15002000	20.0	201	100	16.0	66.07
15002200	22.0	215	107	18.0	76.60
15002400	24.0	231	115	20.0	88.51
15002500	25.0	231	115	20.0	90.53
15002600	26.0	231	115	20.0	96.46
15002800	28.0	247	124	22.0	123.57
15003000	30.0	247	124	22.0	130.17
15003200	32.0	265	133	24.0	143.98

DIN 208 KONİK MAKİNE RAYBASI KOBALTLI

1537 DIN 208/B HSS-E H7 Toleranslı

HSS-E

DIN 208-B

H7

ca. 7°

MK 1-4

format
professional quality



	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DİŞİ METALLER				SERT ÇELİK		
	< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit/ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	10	8	8	4	2	4	6	5	4	20	18	-	-	-	-	-

Ürün Kodu	Ölçü	Helis Boy mm	Tam Boy mm	Mors mm	Fiyat €
15371000	10	38	168	1	34.48
15371100	11	41	175	1	37.76
15371200	12	44	182	1	37.07
15371300	13	44	182	1	38.93
15371400	14	47	189	1	39.61
15371500	15	50	204	2	48.15
15371600	16	52	210	2	48.78
15371700	17	54	214	2	52.22
15371800	18	56	219	2	54.16
15371900	19	58	223	2	57.49
15372000	20	60	228	2	57.49
15372200	22	64	237	2	64.65
15372400	24	68	268	3	76.60
15372500	25	68	268	3	78.59
15372600	26	70	273	3	84.57
15372800	28	71	277	3	93.12
15373000	30	73	281	3	96.46
15373200	32	77	317	4	126.78

DIN 9 PİM RAYBASI 1/50 KONİK

1508 DIN 9 HSS 1/50 Konik



	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DIŞI METALLER				SERT ÇELİK		
	< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	●	◐	○	○	○	-	◐	◐	○	◐	◐	◐	-	-	-	-

Ürün Kodu	Ölçü	Küçük/Büyük Çap	Tam Boy mm	Helis Boyu mm	Karesi mm	Fiyat €
15080300	3	2.90/ 4.06	80	58	3.0	22.55
15080400	4	3.90/ 5.26	93	68	3.8	25.68
15080500	5	4.90/ 6.36	100	73	4.9	26.93
15080600	6	5.90/ 8.00	135	105	6.2	32.49
15080800	8	7.90/10.80	180	145	8.0	50.45
15081000	10	9.90/13.40	215	175	10.0	71.28
15081200	12	11.80/16.00	255	210	11.0	90.67
15081300	13	12.80/17.00	255	210	12.0	105.53
15081400	14	13.80/18.00	255	210	12.0	111.44
15081600	16	15.80/20.40	280	230	14.5	125.92
15082000	20	19.80/24.80	310	250	18.0	163.37

DIN 311 PERÇİN DELİK RAYBASI

1512 DIN 311 HSS



	ÇELİK			PASLANMAZ			DÖKÜM		TİTANYUM	DEMİR DIŞI METALLER				SERT ÇELİK		
	< 700 N/mm²	< 1000 N/mm²	< 1400 N/mm²	ferrit./ martens.	austeni- tisch	Duplex	GG/ GTS	GGG	Titan > 850 N/mm²	Alu < 8% Si	Alu > 8% Si	Kupfer/ Kupfer- Leg.	Graphit/ GFK/CFK/ Duropl.	< 55 HRC	< 60 HRC	> 60 HRC
V _c [m/min]	●	◐	◑	◑	◐	-	◐	◐	◑	◐	◐	◐	-	-	-	-

Ürün Kodu	Çap mm	Tam Boy mm	MK mm	Fiyat €	Ürün Kodu	Çap mm	Tam Boy mm	MK mm	Fiyat €
15121000	10	171	1	58.54	15121800	18	261	3	91.87
15121200	12	199	2	63.60	15122000	20	271	3	100.98
15121300	13	199	2	63.60	15122100	21	271	3	105.20
15121400	14	209	2	64.99	15122200	22	281	3	111.48
15121500	15	219	2	68.56	15122500	25	296	3	127.89
15121600	16	229	2	72.00	15122800	28	311	3	155.40
15121700	17	251	3	84.71	15123000	30	311	3	177.90

ŞERİT SENTİL 5 MT

4489 Sertleştirilmiş yay çeliği, çapaksız kenarlar, düzenli aralıklarla mm ve inch olarak markalanmış. 12.7 mm genişlik, 5 metre uzunluk.

format
professional quality

Ürün Kodu	Kalınlık mm	Fiyat €	Ürün Kodu	Kalınlık mm	Fiyat €
44890000	0.005	163.74	44890018	0.18	18.37
44890001	0.01	67.46	44890020	0.20	14.25
44890002	0.02	51.68	44890025	0.25	14.25
44890003	0.03	19.50	44890030	0.30	14.28
44890004	0.04	19.50	44890035	0.35	16.51
44890005	0.05	16.51	44890040	0.40	16.50
44890006	0.06	14.91	44890045	0.45	17.60
44890007	0.07	14.91	44890050	0.50	16.50
44890008	0.08	16.01	44890060	0.60	23.32
44890009	0.09	14.91	44890070	0.70	23.32
44890010	0.10	16.17	44890080	0.80	23.32
44890012	0.12	16.72	44890090	0.90	24.77
44890015	0.15	14.25	44890100	1.00	24.77

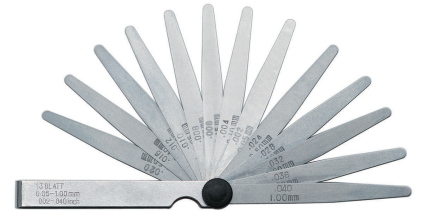


ÇELİK SENTİL (10 CM)

4483 Yay çeliğinden sertleştirilmiş, 100 mm Nikel kaplamalı.

format
professional quality

Ürün Kodu	Yaprak Sayısı	Set İçeriği mm	Tam Boy mm	Fiyat €
44830008	8 Yaprak	0.05 - 0.5	100	2.29
44830013	13 Yaprak	0.05 - 1.00	100	2.94
44830020	20 Yaprak	0.05 - 1.00	100	4.81
44830021	21 Yaprak	0.05 - 2.00	100	8.72
44830032	32 Yaprak	0.03 - 1.00	100	12.66

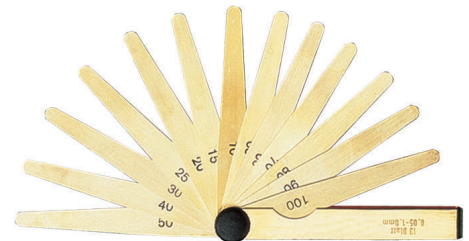


PİRİNÇ SENTİL

4485 Non manyetik sentil piring malzemeden üretilmiştir.

format
professional quality

Ürün Kodu	Yaprak Sayısı	Set İçeriği mm	Tam Boy mm	Fiyat €
44850020	20 Yaprak	0.05 - 1.00	100	21.07



KIL MASTAR, DIN 874 / 00

4452 DIN 874 / 00 Çok hassas, el ısısını iletmeyi önleyen özel izolasyon ile kaplanmış, sertleştirilmiş paslanmaz. Ultra hassas taşlanmış ve leplenmiş ölçme kenarı. Işık geçirgenlik testi ile yüzey düzgünlüğünü ölçme. Tolerans 0.004 mm

DIN
874

INOX

format
professional quality

Ürün Kodu	Uzunluk mm	Tolerans	Fiyat €
44520075	75	0,002	17.11
44520100	100	0,002	20.80
44520125	125	0,003	23.89
44520150	150	0,003	27.51
44520200	200	0,003	33.97
44520300	300	0,004	71.14
44520500	500	0,004	153.09



DİŞ TARAĞI

4467 Erkek ve dişi vida ölçümüne uygun. Sıkma vidalı, her yaprak üzerinde ölçü markalı

format
professional quality



Ürün Kodu	Set İçeriği	Ölçü	Fiyat €
44670050	24 Yaprak	Mm	4.85
44670052	52 Yaprak	Mm + İnç	6.61
44670058	58 Yaprak	Mm + İnç + Gaz	9.12

RADYÜS MASTARI

4479 Standart çelik, iç ve dış bükey radyüs. Her parça üzerinde markalanmış ölçü göstergesi.
1 - 3 mm arası, 0.25 mm atlamalı
3.5 - 20 mm arası, 0.50 mm atlamalı
20 - 25 mm arası, 1.00 mm atlamalı

format
professional quality



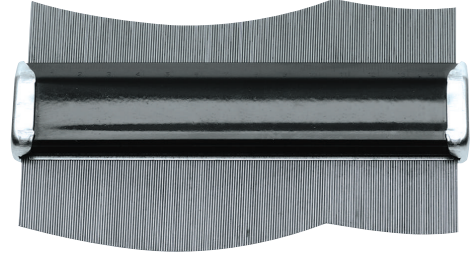
Ürün Kodu	Radyüs mm	Set İçindeki Ölçü Adedi	Fiyat €
44790007	1.0 - 7	17	11.29
44790015	7.5 - 15	16	13.53
44790025	15.5 - 25	15	13.53

PROFİL MASTARI

4476 Soğuk dövme çelik pinler

Ürün Kodu	Boyutlar mm	Fiyat €
44760015	154 x 85	36.81
44760030	350 x 150	113.17

format
professional quality



DÜZ GÖNYE (ATÖLYE TİPİ)

4601 Düz Gönye

Galvaniz kaplı çelik. Genel kullanım için. Atölye tipi

format
professional quality

Ürün Kodu	Boyutlar mm	Genişlik / Kalınlık mm	Fiyat €
46010100	100 x 70	20 x 5	10.53
46010150	150 x 100	20 x 5	11.04
46010200	200 x 130	20 x 5	11.83
46010250	250 x 160	25 x 5	14.42
46010300	300 x 180	25 x 5	15.76
46010400	400 x 230	30 x 5	21.67
46010500	500 x 280	30 x 5	23.98
46010750	750 x 375	30 x 5	34.99
46011000	1000 x 500	30 x 5	45.24



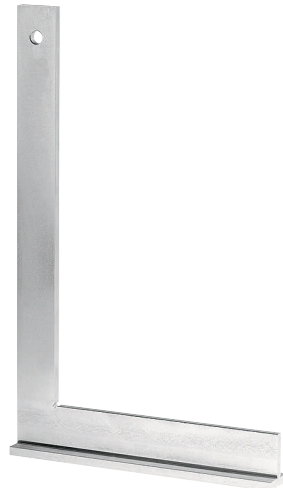
ŞAPKALI GÖNYE (ATÖLYE TİPİ)

4602 Şapkalı Gönye

Galvaniz kaplı çelik. Genel kullanım için. Atölye tipi

format
professional quality

Ürün Kodu	Boyutlar mm	Genişlik / Kalınlık mm	Fiyat €
46020100	100 x 70	20 x 5	14.38
46020150	150 x 100	20 x 5	16.19
46020200	200 x 130	20 x 5	19.51
46020250	250 x 160	25 x 5	23.56
46020300	300 x 180	25 x 5	28.83
46020400	400 x 230	30 x 5	36.31
46020500	500 x 280	30 x 5	48.22
46020750	750 x 375	30 x 5	76.71
46021000	1000 x 500	30 x 5	116.46



DÜZ GÖNYE DIN 875 / II

4603 Form A Düz Gönye

DIN 875 / II'ye uygun. Hassas ölçüm ve ayarlarda, sağ aç, paralellik ve düzlemsellikleri için.

DIN
875/II

format
professional quality

Ürün Kodu	Boyutlar mm	Genişlik / Kalınlık mm	Fiyat €
46030075	75 x 50	15 x 5	12.16
46030100	100 x 70	20 x 5	13.42
46030150	150 x 100	25 x 5	16.44
46030200	200 x 130	30 x 6	21.22
46030250	250 x 165	35 x 7	27.25
46030300	300 x 175	35 x 7	36.71
46030400	400 x 200	35 x 7	58.21
46030500	500 x 250	40 x 8	80.86
46030750	750 x 375	45 x 10	128.78
46031000	1000 x 500	50 x 10	198.68



ŞAPKALI GÖNYE DIN 875 / II

4604 Form B Şapkalı Gönye

DIN 875 / II'ye uygun. Hassas ölçüm ve ayarlarda, sağ aç, paralellik ve düzlemsellikleri için.

DIN
875/II

format
professional quality

Ürün Kodu	Boyutlar mm	Genişlik / Kalınlık mm	Fiyat €
46040075	75 x 50	15 x 5	17.12
46040100	100 x 70	20 x 5	19.18
46040150	150 x 100	25 x 5	25.75
46040200	200 x 130	30 x 6	32.79
46040250	250 x 165	35 x 7	43.82
46040300	300 x 175	35 x 7	54.53
46040400	400 x 200	35 x 7	80.86
46040500	500 x 250	40 x 8	98.64
46040750	750 x 375	45 x 10	164.38
46041000	1000 x 500	50 x 10	239.76



PASLANMAZ ÇELİK CETVEL (ESNEK)

4751 Paslanmaz, sertleştirilmiş yay çeliği. Mat yüzey yuvarlak kenarlı 500 mm ve daha uzun ölçüler EC doğruluk sınıfı II ile işaretlenmiştir. Üst kenar 1/2 mm, alt kenar 1 mm.

INOX

format
professional quality



Ürün Kodu	Uzunluk mm	Genişlik mm	Kalınlık mm	Fiyat €
47510100	100	13	0.5	2.01
47510150	150	13	0.5	2.19
47510200	200	13	0.5	2.27
47510250	250	13	0.5	2.39
47510300	300	13	0.5	2.76
47510330	300	28	0.8	6.74
47510500	500	18	0.5	5.40
47510530	500	30	1.0	12.22
47511000	1000	18	0.5	9.69
47511001	1000	30	1.0	26.68
47511500	1500	30	1.0	39.89
47512000	2000	30	1.0	52.48

ÇAP VE ÇEVRE ÖLÇER (FİMETRE)

4752 Çap ve çevresel ölçüm için. 0.01 mm okuma aralığı. Sertleştirilmiş yay çeliğinden imal edilmiştir.

format
professional quality



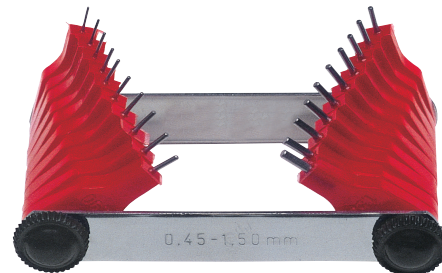
Ürün Kodu	Çap Ölçüm Aralığı mm	Çevre Ölçüm Aralığı mm	Fiyat €
47520001	20- 300	60- 950	70.00
47520004	300- 700	940-2200	85.79
47520007	700-1100	2190-3460	115.91
47520011	1100-1500	3450-4720	143.87
47520013	1500-1900	4710-5980	164.91
47520016	1900-2300	5960-7230	199.94

DELİK MASTARI

4473 Her tür nozul ve küçük deliklerin kontrolüne uygun, çelik

format
professional quality

Ürün Kodu	Ölçüm Aralığı mm	Ölçü Pini Adedi	Fiyat €
44730015	0.45 - 1.5	20	15.82
44730030	1.5 - 3.0	16	15.82



MEKANİK 3D TESTER

3770 IP 67 Sızdırmazlık Koruması

HAIMER.
Qualität gewinnt.



Ürün Kodu	Prob Ucu mm	Şaft mm	Prob Ucu mm	Ekran Doğruluğu mm	Gövde mm	Sapsız Uzunluk mm	Fiyat €
37700005	80.360.00	20	4	0,01	65	113	484.92



3D TESTER MEKANİK YENİ JENERASYON

3777 IP 67 Sızdırmazlık Koruması

HAIMER.
Qualität gewinnt.



Ürün Kodu	HAIMER Kod	Şaft mm	Prob Ucu mm	Ekran Doğruluğu mm	Gövde mm	Sapsız Uzunluk mm	Fiyat €
37770010	80.360.00N6	12	4	0.01	62	101	522.22



3D TASTER PROB UCU

3777 Mekanik ve Dijital 3D Taster İçin Uygundur

HAIMER.
Qualität gewinnt.



Ürün Kodu	HAIMER Kod	Prob Ucu mm	Tam Boy mm	Fiyat €
37770004	80.362.00	4	27	34.63
37770008	80.363.00	8	69	57.02





- Fiyatlarımız uygulamakta olduğumuz T.C.M.B. günlük döviz satış kuru ile çarpılıp, Türk Lirası (₺) cinsinden fatura edilecektir.
- Listemizdeki fiyatlara K.D.V. dahil değildir.
- Firmamız değişen piyasa koşullarında liste fiyatları üzerinden değişiklik yapma hakkına sahiptir.
- Sevkiyatlar anlaşmalı çalıştığımız kargo firması ile yapılacaktır.
- Yurtdışından özel siparişle getirilen ürünler geri alınmaz ve değiştirilmez.
- Promar End. Ltd. Şti. sirkülerde belirtilen şartları müteakip sirkülerde değişiklik yapma hakkına sahiptir.
- Satışlarımız Nakit, Banka Havalesi, Kredi Kart (Mail Order) ve Vadeli çek şeklinde ödemelere göre yapılmaktadır. Başka bir ödeme şekli kabul edilmemektedir.

Banka Adı	IBAN No	Hesap No	Şube Kodu
Yapı ve Kredi	TR50 0006 7010 0000 0084 8058 13	84805813	744
Garanti	TR87 0006 2000 4590 0006 2886 68	6288668	459



İrtibat Bilgilerimiz

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