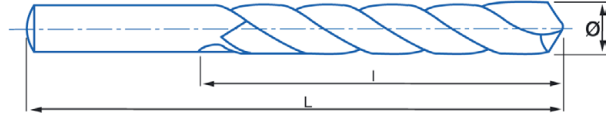
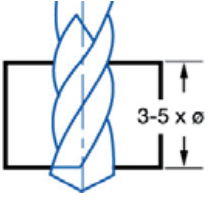
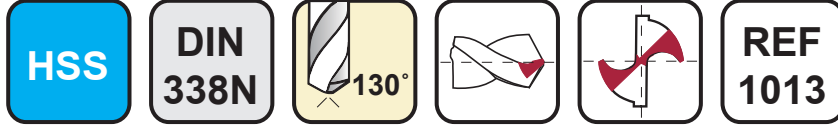


Ø (mm) h8	L (mm)	I (mm)		FİYAT EUR
0,30	19	3	10	
0,40	20	5	10	
0,50	22	6	10	
0,60	24	7	10	
0,70	28	9	10	
0,80	30	10	10	
0,90	32	11	10	
1,00	34	12	10	
1,10	36	14	10	
1,20	38	16	10	
1,30	38	16	10	
1,40	40	18	10	
1,50	40	18	10	
1,60	43	20	10	
1,70	43	20	10	
1,80	46	22	10	
1,90	46	22	10	
2,00	49	24	10	
2,10	49	24	10	
2,20	53	27	10	
2,30	53	27	10	
2,40	57	30	10	
2,50	57	30	10	
2,60	57	30	10	
2,70	61	33	10	
2,80	61	33	10	
2,90	61	33	10	
3,00	61	33	10	
3,10	65	36	10	
3,20	65	36	10	
3,30	65	36	10	
3,40	70	39	10	
3,50	70	39	10	
3,60	70	39	10	
3,70	70	39	10	
3,80	75	43	10	
3,90	75	43	10	
4,00	75	43	10	
4,10	75	43	10	
4,20	75	43	10	
4,30	80	47	10	
4,40	80	47	10	
4,50	80	47	10	
4,60	80	47	10	

Ø (mm) h8	L (mm)	I (mm)		FİYAT EUR
4,70	80	47	10	
4,80	86	52	10	
4,90	86	52	10	
5,00	86	52	10	
5,10	86	52	10	
5,20	86	52	10	
5,30	86	52	10	
5,40	93	57	10	
5,50	93	57	10	
5,60	93	57	10	
5,70	93	57	10	
5,80	93	57	10	
5,90	93	57	10	
6,00	93	57	10	
6,10	101	63	10	
6,20	101	63	10	
6,30	101	63	10	
6,40	101	63	10	
6,50	101	63	10	
6,60	101	63	10	
6,70	101	63	10	
6,80	109	69	10	
6,90	109	69	10	
7,00	109	69	10	
7,10	109	69	10	
7,20	109	69	10	
7,30	109	69	10	
7,40	109	69	10	
7,50	109	69	10	
7,60	117	75	10	
7,70	117	75	10	
7,80	117	75	10	
7,90	117	75	10	
8,00	117	75	10	
8,10	117	75	5	
8,20	117	75	5	
8,30	117	75	5	
8,40	117	75	5	
8,50	117	75	5	
8,60	125	81	5	
8,70	125	81	5	
8,80	125	81	5	
8,90	125	81	5	
9,00	125	81	5	



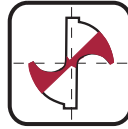
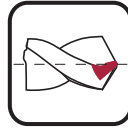
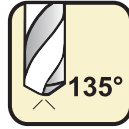


Ø (mm) h8	L (mm)	I (mm)		FİYAT EUR
9,10	125	81	5	
9,20	125	81	5	
9,30	125	81	5	
9,40	125	81	5	
9,50	125	81	5	
9,60	133	87	5	
9,70	133	87	5	
9,80	133	87	5	
9,90	133	87	5	
10,00	133	87	5	
10,10	133	87	5	
10,20	133	87	5	
10,30	133	87	5	
10,40	133	87	5	
10,50	133	87	5	
10,60	133	87	5	
10,70	142	94	5	
10,80	142	94	5	
10,90	142	94	5	
11,00	142	94	5	
11,10	142	94	5	
11,20	142	94	5	
11,30	142	94	5	
11,40	142	94	5	
11,50	142	94	5	
11,60	142	94	5	
11,70	142	94	5	
11,80	142	94	5	
11,90	151	101	5	
12,00	151	101	5	
12,10	151	101	5	
12,20	151	101	5	
12,30	151	101	5	
12,40	151	101	5	
12,50	151	101	5	
12,60	151	101	5	
12,70	151	101	5	
12,80	151	101	5	
12,90	151	101	5	
13,00	151	101	5	
13,10	151	101	1	
13,20	151	101	1	
13,30	160	108	1	
13,40	160	108	1	

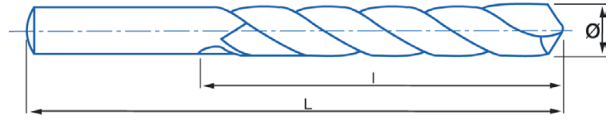
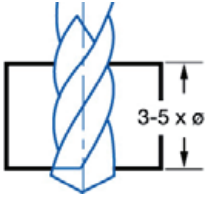
Ø (mm) h8	L (mm)	I (mm)		FİYAT EUR
13,50	160	108	1	
13,60	160	108	1	
13,70	160	108	1	
13,80	160	108	1	
13,90	160	108	1	
14,00	160	108	1	
14,10	169	114	1	
14,20	169	114	1	
14,30	169	114	1	
14,40	169	114	1	
14,50	169	114	1	
14,60	169	114	1	
14,70	169	114	1	
14,80	169	114	1	
14,90	169	114	1	
15,00	169	114	1	
15,20	178	120	1	
15,25	178	120	1	
15,50	178	120	1	
15,60	178	120	1	
15,70	178	120	1	
15,75	178	120	1	
15,80	178	120	1	
15,90	178	120	1	
16,00	178	120	1	
16,20	184	125	1	
16,25	184	125	1	
16,50	184	125	1	
16,75	184	125	1	
16,80	184	125	1	
17,00	184	125	1	
17,25	191	130	1	
17,50	191	130	1	
17,75	191	130	1	
18,00	191	130	1	
18,25	198	135	1	
18,50	198	135	1	
18,75	198	135	1	
19,00	198	135	1	
19,25	205	140	1	
19,50	205	140	1	
19,75	205	140	1	
20,00	205	140	1	

**HSSE  
Co5**

**DIN  
338N**



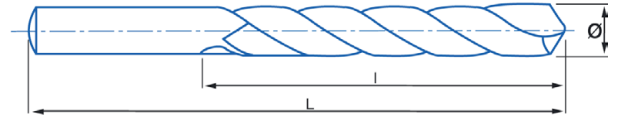
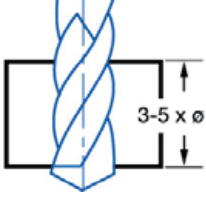
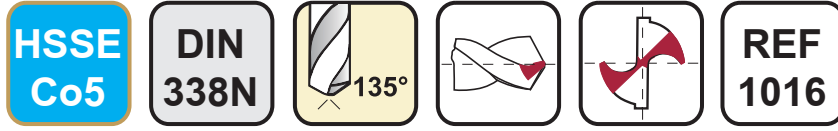
**REF  
1016**



Ø (mm) h8	L (mm)	I (mm)		FİYAT EUR
0,50	22	6	10	
0,60	27	7	10	
0,70	28	9	10	
0,80	30	10	10	
0,90	32	11	10	
1,00	34	12	10	
1,10	36	14	10	
1,20	38	16	10	
1,30	38	16	10	
1,40	40	18	10	
1,50	40	18	10	
1,60	43	20	10	
1,70	43	20	10	
1,80	46	22	10	
1,90	46	22	10	
2,00	49	24	10	
2,10	49	24	10	
2,20	53	27	10	
2,30	53	27	10	
2,40	57	30	10	
2,50	57	30	10	
2,60	57	30	10	
2,70	61	33	10	
2,80	61	33	10	
2,90	61	33	10	
3,00	61	33	10	
3,10	65	36	10	
3,20	65	36	10	
3,30	65	36	10	
3,40	70	39	10	
3,50	70	39	10	
3,60	70	39	10	
3,70	70	39	10	
3,80	75	43	10	
3,90	75	43	10	
4,00	75	43	10	
4,10	75	43	10	

Ø (mm) h8	L (mm)	I (mm)		FİYAT EUR
4,20	75	43	10	
4,30	80	47	10	
4,40	80	47	10	
4,50	80	47	10	
4,60	80	47	10	
4,70	80	47	10	
4,80	86	52	10	
4,90	86	52	10	
5,00	86	52	10	
5,10	86	52	10	
5,20	86	52	10	
5,30	86	52	10	
5,40	93	57	10	
5,50	93	57	10	
5,60	93	57	10	
5,70	93	57	10	
5,80	93	57	10	
5,90	93	57	10	
6,00	93	57	10	
6,10	101	63	10	
6,20	101	63	10	
6,30	101	63	10	
6,40	101	63	10	
6,50	101	63	10	
6,60	101	63	10	
6,70	101	63	10	
6,80	109	69	10	
6,90	109	69	10	
7,00	109	69	10	
7,10	109	69	10	
7,20	109	69	10	
7,30	109	69	10	
7,40	109	69	10	
7,50	109	69	10	
7,60	117	75	10	
7,70	117	75	10	
7,80	117	75	10	





Ø (mm) h8	L (mm)	I (mm)		FİYAT EUR
7,90	117	75	10	
8,00	117	75	10	
8,10	117	75	10	
8,20	117	75	10	
8,30	117	75	10	
8,40	117	75	10	
8,50	117	75	10	
8,60	125	81	10	
8,70	125	81	10	
8,80	125	81	10	
8,90	125	81	10	
9,00	125	81	10	
9,10	125	81	10	
9,20	125	81	10	
9,30	125	81	10	
9,40	125	81	10	
9,50	125	81	10	
9,60	133	87	10	
9,70	133	87	10	
9,80	133	87	10	
9,90	133	87	10	
10,00	133	87	10	
10,10	133	87	5	
10,20	133	87	5	
10,30	133	87	5	
10,40	133	87	5	
10,50	133	87	5	
10,60	133	87	5	
10,70	142	94	5	
10,80	142	94	5	
10,90	142	94	5	
11,00	142	94	5	
11,10	142	94	5	
11,20	142	94	5	
11,30	142	94	5	
11,40	142	94	5	

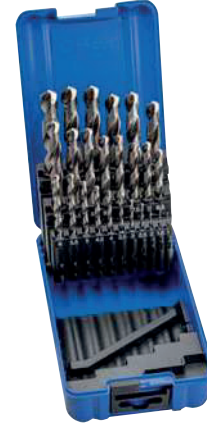
Ø (mm) h8	L (mm)	I (mm)		FİYAT EUR
11,50	142	94	5	
11,60	142	94	5	
11,70	142	94	5	
11,80	142	94	5	
11,90	151	101	5	
12,00	151	101	5	
12,10	151	101	5	
12,20	151	101	5	
12,30	151	101	5	
12,40	151	101	5	
12,50	151	101	5	
12,60	151	101	5	
12,70	151	101	5	
12,80	151	101	5	
12,90	151	101	5	
13,00	151	101	5	
13,25	160	108	1	
13,50	160	108	1	
13,75	160	108	1	
14,00	160	108	1	
14,25	169	114	1	
14,50	169	114	1	
14,75	169	114	1	
15,00	169	114	1	
15,25	178	120	1	
15,50	178	120	1	
15,75	178	120	1	
16,00	178	120	1	
16,50	184	125	1	
17,00	184	125	1	
17,50	191	130	1	
18,00	191	130	1	
18,50	198	135	1	
19,00	198	135	1	
19,50	205	140	1	
20,00	205	140	1	

**MATKAP SETİ 19 PARÇA,1-10mmx0,5**



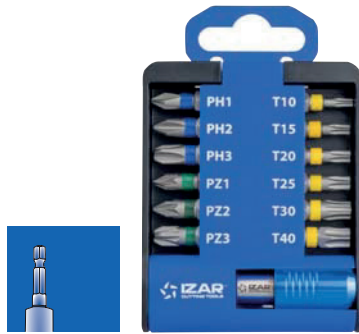
KOD	FİYAT EUR
IZR338S-1466	

**MATKAP SETİ 25 PARÇA,1-13mmx0,5**



KOD	FİYAT EUR
IZR338S-1456	

**BITS UÇ SETİ 13 PARÇA (83769)**

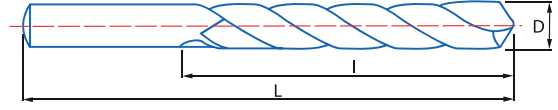
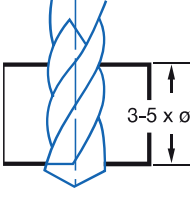
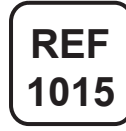
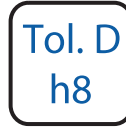
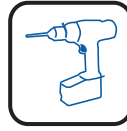


ÖLÇÜ	ADET	FİYAT EUR
PH1	1	
PH2	1	
PH3	1	
PZ1	1	
PZ2	1	
PZ3	1	
T10	1	
T15	1	
T20	1	
T25	1	
T30	1	
T40	1	

**BITS UÇ SETİ 31 PARÇA (67769)**



ÖLÇÜ	ADET	FİYAT EUR
PH1	2	
PH2	3	
PH3	1	
PZ1	2	
PZ2	8	
PZ3	2	
T10	1	
T15	2	
T20	2	
T25	3	
T30	3	
T40	1	



Ø (mm) h8	L (mm)	I (mm)		FİYAT EUR
1,00	34	12	10	
1,10	36	14	10	
1,20	38	16	10	
1,30	38	16	10	
1,40	40	18	10	
1,50	40	18	10	
1,60	43	20	10	
1,70	43	20	10	
1,80	46	22	10	
1,90	46	22	10	
2,00	49	24	10	
2,10	49	24	10	
2,20	53	27	10	
2,30	53	27	10	
2,40	57	30	10	
2,50	57	30	10	
2,60	57	30	10	
2,70	61	33	10	
2,80	61	33	10	
2,90	61	33	10	
3,00	61	33	10	
3,10	65	36	10	
3,20	65	36	10	
3,30	65	36	10	
3,40	70	39	10	
3,50	70	39	10	
3,60	70	39	10	
3,70	70	39	10	
3,80	75	43	10	
3,90	75	43	10	
4,00	75	43	10	
4,10	75	43	10	
4,20	75	43	10	
4,30	80	47	10	
4,40	80	47	10	
4,50	80	47	10	
4,60	80	47	10	
4,70	80	47	10	
4,80	86	52	10	
4,90	86	52	10	
5,00	86	52	10	

Ø (mm) h8	L (mm)	I (mm)		FİYAT EUR
5,10	86	52	10	
5,20	86	52	10	
5,30	86	52	10	
5,40	93	57	10	
5,50	93	57	10	
5,60	93	57	10	
5,70	93	57	10	
5,80	93	57	10	
5,90	93	57	10	
6,00	93	57	10	
6,10	101	63	10	
6,20	101	63	10	
6,30	101	63	10	
6,40	101	63	10	
6,50	101	63	10	
6,60	101	63	10	
6,70	101	63	10	
6,80	109	69	10	
6,90	109	69	10	
7,00	109	69	10	
7,10	109	69	10	
7,20	109	69	10	
7,30	109	69	10	
7,40	109	69	10	
7,50	109	69	10	
7,60	117	75	10	
7,70	117	75	10	
7,80	117	75	10	
7,90	117	75	10	
8,00	117	75	10	
8,10	117	75	5	
8,20	117	75	5	
8,30	117	75	5	
8,40	117	75	5	
8,50	117	75	5	
8,60	125	81	5	
8,70	125	81	5	
8,80	125	81	5	
8,90	125	81	5	
9,00	125	81	5	
9,10	125	81	5	

Ø (mm) h8	L (mm)	I (mm)		FİYAT EUR
9,20	125	81	5	
9,30	125	81	5	
9,40	125	81	5	
9,50	125	81	5	
9,60	133	87	5	
9,70	133	87	5	
9,80	133	87	5	
9,90	133	87	5	
10,00	133	87	5	
10,10	133	87	5	
10,20	133	87	5	
10,30	133	87	5	
10,40	133	87	5	
10,50	133	87	5	
10,60	133	87	5	
10,70	142	94	5	
10,80	142	94	5	
10,90	142	94	5	
11,00	142	94	5	
11,10	142	94	5	
11,20	142	94	5	
11,30	142	94	5	
11,40	142	94	5	
11,50	142	94	5	
11,60	142	94	5	
11,70	142	94	5	
11,80	142	94	5	
11,90	151	101	5	
12,00	151	101	5	
12,10	151	101	5	
12,20	151	101	5	
12,30	151	101	5	
12,40	151	101	5	
12,50	151	101	5	
12,60	151	101	5	
12,70	151	101	5	
12,80	151	101	5	
12,90	151	101	5	
13,00	151	101	5	

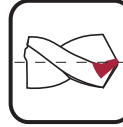
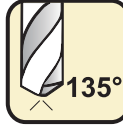
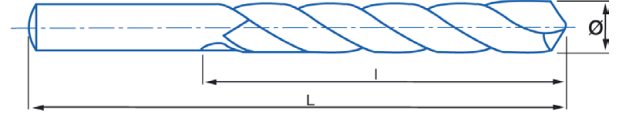
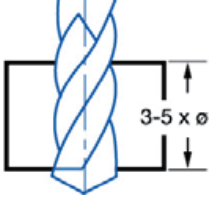


**130° Uç Açısı**

- Otomatik merkezleme
- El matkapları için de uygundur
- Kesme kuvvetini azaltmak için özel dizayn edilmiş geometri



- Yeni nesil PVD Zirkonyum kaplamadır
- Sürtünme katsayısını düşürür
- Korozyon direncini artırır
- Demir dışı metaller için uygundur
- Kesici ağızlar talaş birikintisini önlemek için özel olarak dizayn edilmiştir

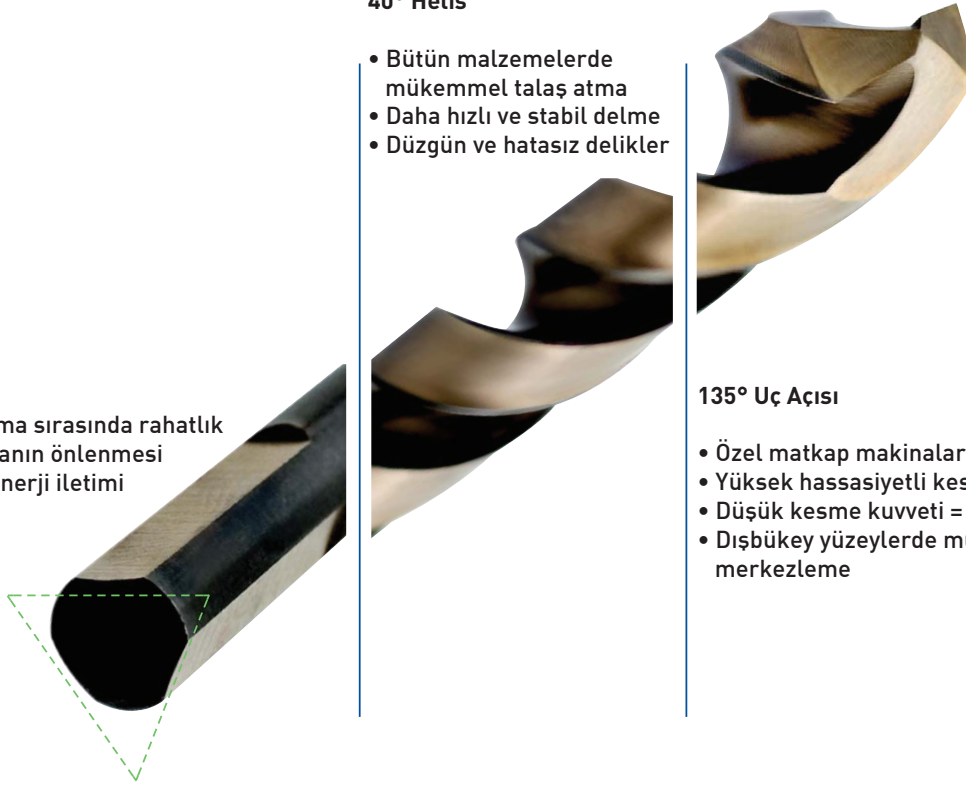
**HSSE  
Co5**
**DIN  
338N**
**Type  
W**

**REF  
1021**


#### 40° Helis

- Bütün malzemelerde mükemmel talaş atma
- Daha hızlı ve stabil delme
- Düzgün ve hatasız delikler


#### 3-Köşe Saplı


- Optimum sıkma
- Bağlantı sökme-takma sırasında rahatlık
- Mandrende kaydırmanın önlenmesi
- Delme ucuna ideal enerji iletimi



#### 135° Uç Açısı

- Özel matkap makinalarına uygunluk
- Yüksek hassasiyetli kesici uç
- Düşük kesme kuvveti = Enerji tasarrufu
- Dışbükey yüzeylerde mükemmel merkezleme

Ø (mm) h8	L (mm)	l (mm)		FİYAT EUR
2,00	49	24	10	
2,50	57	30	10	
3,00	61	33	10	
3,20	65	36	10	
3,30	65	36	10	
3,50	70	39	10	
4,00	75	43	10	
4,20	75	43	10	
4,50	80	47	10	
5,00	86	52	10	
5,20	86	52	10	
5,50	93	57	10	
6,00	93	57	10	
6,50	101	63	10	
6,80	109	69	10	

Ø (mm) h8	L (mm)	l (mm)		FİYAT EUR
7,00	109	69	10	
7,50	109	69	10	
8,00	117	75	10	
8,50	117	75	5	
9,00	125	81	5	
9,50	125	81	5	
10,00	133	87	5	
10,20	133	87	1	
10,50	133	87	1	
11,00	142	94	1	
11,50	142	94	1	
12,00	151	101	1	
12,50	151	101	1	
13,00	151	101	1	

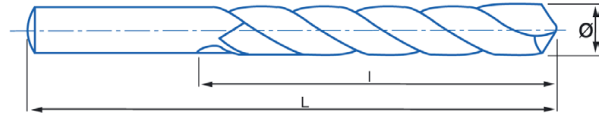
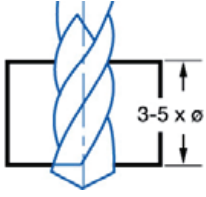
HSSE  
Co5

DIN  
338

Type  
W



REF  
1020

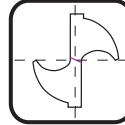
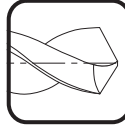
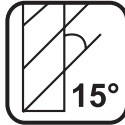
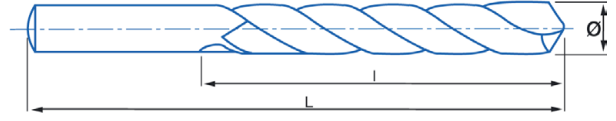
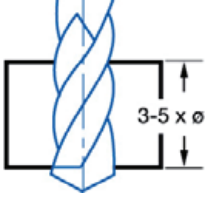



Ø (mm) h8	L (mm)	l (mm)		FİYAT EUR
1,00	34	12	10	
1,50	40	18	10	
2,00	49	24	10	
2,50	57	30	10	
2,80	61	33	10	
3,00	61	33	10	
3,10	65	36	10	
3,20	65	36	10	
3,30	65	36	10	
3,50	70	39	10	
3,60	70	39	10	
3,70	70	39	10	
3,80	75	43	10	
4,00	75	43	10	
4,10	75	43	10	
4,20	75	43	10	
4,30	80	47	10	
4,50	80	47	10	
4,60	80	47	10	
4,80	86	52	10	
5,00	86	52	10	
5,10	86	52	10	
5,20	86	52	10	
5,50	93	57	10	

Ø (mm) h8	L (mm)	l (mm)		FİYAT EUR
5,70	93	57	10	
5,90	93	57	10	
6,00	93	57	10	
6,50	101	63	10	
6,80	109	69	10	
7,00	109	69	10	
7,40	109	69	10	
7,50	109	69	10	
8,00	117	75	10	
8,50	117	75	5	
8,80	125	81	5	
9,00	125	81	5	
9,10	125	81	5	
9,50	125	81	5	
10,00	133	87	5	
10,20	133	87	5	
10,50	133	87	5	
11,00	142	94	5	
11,10	142	94	5	
11,50	142	94	5	
11,80	142	94	5	
12,00	151	101	5	
12,50	151	101	5	
13,00	151	101	5	



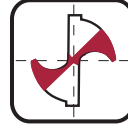
HSS

DIN  
338HREF  
1012

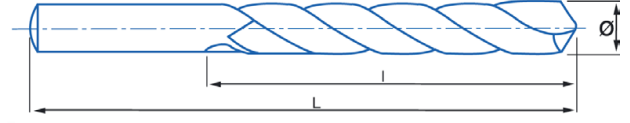
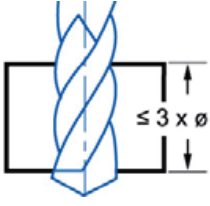
Ø (mm) h8	L (mm)	l (mm)		FİYAT EUR
1,00	34	12	10	
1,50	40	18	10	
2,00	49	24	10	
2,50	57	30	10	
3,00	61	33	10	
3,50	70	39	10	
4,00	75	43	10	
4,50	80	47	10	
5,00	86	52	10	
5,50	93	57	10	
6,00	93	57	10	
6,50	101	63	10	
7,00	109	69	10	
7,50	109	69	10	
8,00	117	75	10	
8,50	117	75	10	
9,00	125	81	10	
9,50	125	81	10	
10,00	133	87	10	
10,50	133	87	5	
11,00	142	94	5	
11,50	142	94	5	
12,00	151	101	5	
12,50	151	101	5	
13,00	151	101	5	

HSSE  
Co5

DIN  
1897N

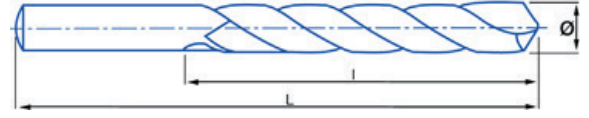
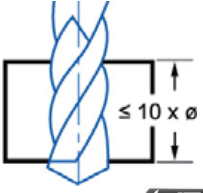
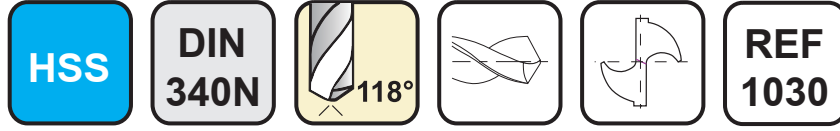


REF  
1056



Ø (mm) h8	L (mm)	l (mm)		FİYAT EUR
1,00	26	6	10	
1,50	32	9	10	
1,60	34	10	10	
1,80	36	11	10	
2,00	38	12	10	
2,10	38	12	10	
2,20	40	13	10	
2,30	40	13	10	
2,40	43	14	10	
2,50	43	14	10	
2,60	43	14	10	
2,70	46	16	10	
2,80	46	16	10	
2,90	46	16	10	
3,00	46	16	10	
3,10	49	18	10	
3,20	49	18	10	
3,30	49	18	10	
3,40	52	20	10	
3,50	52	20	10	
3,60	52	20	10	
3,70	52	20	10	
3,80	55	22	10	
3,90	55	22	10	
4,00	55	22	10	
4,10	55	22	10	
4,20	55	22	10	
4,30	58	24	10	
4,40	58	24	10	
4,50	58	24	10	
4,60	58	24	10	
4,70	58	24	10	
4,80	62	26	10	
4,90	62	26	10	
5,00	62	26	10	
5,10	62	26	10	
5,20	62	26	10	
5,30	62	26	10	
5,40	66	28	10	
5,50	66	28	10	
5,60	66	28	10	
5,70	66	28	10	

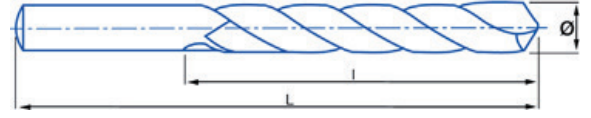
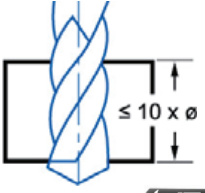
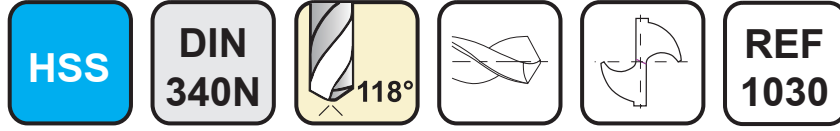
Ø (mm) h8	L (mm)	l (mm)		FİYAT EUR
5,80	66	28	10	
5,90	66	28	10	
6,00	66	28	10	
6,10	70	31	10	
6,20	70	31	10	
6,30	70	31	10	
6,40	70	31	10	
6,50	70	31	10	
6,60	70	31	10	
6,70	70	31	10	
6,80	74	34	10	
7,00	74	34	10	
7,50	74	34	10	
7,80	79	37	10	
8,00	79	37	10	
8,50	79	37	10	
9,00	84	40	10	
9,50	84	40	10	
10,00	89	43	10	
10,20	89	43	1	
10,30	89	43	1	
10,50	89	43	1	
11,00	95	47	1	
11,50	95	47	1	
12,00	102	51	1	
12,50	102	51	1	
12,70	102	51	1	
13,00	102	51	1	
13,50	107	54	1	
14,00	107	54	1	
14,50	111	56	1	
15,00	111	56	1	
15,50	115	58	1	
16,00	115	58	1	
16,50	119	60	1	
17,00	119	60	1	
17,50	123	62	1	
18,00	123	62	1	
18,50	127	64	1	
19,00	127	64	1	
19,50	131	66	1	
20,00	131	66	1	



Ø (mm) h8	L (mm)	I (mm)		FİYAT EUR
0,50	32	12	10	
0,60	35	15	10	
0,70	42	21	10	
0,80	46	25	10	
0,90	51	29	10	
1,00	56	33	10	
1,10	60	37	10	
1,20	65	41	10	
1,30	65	41	10	
1,40	70	45	10	
1,50	70	45	10	
1,60	76	50	10	
1,70	76	50	10	
1,80	80	53	10	
1,90	80	53	10	
2,00	85	56	10	
2,10	85	56	10	
2,20	90	59	10	
2,30	90	59	10	
2,40	95	62	10	
2,50	95	62	10	
2,60	95	62	10	
2,70	100	66	10	
2,80	100	66	10	
2,90	100	66	10	
3,00	100	66	10	
3,10	106	69	10	
3,20	106	69	10	
3,30	106	69	10	
3,40	112	73	10	
3,50	112	73	10	
3,60	112	73	10	
3,70	112	73	10	
3,80	119	78	10	

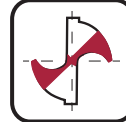
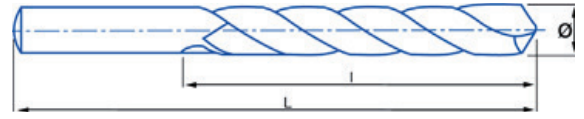
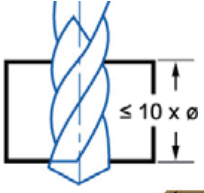
Ø (mm) h8	L (mm)	I (mm)		FİYAT EUR
3,90	119	78	10	
4,00	119	78	10	
4,10	119	78	10	
4,20	119	78	10	
4,30	126	82	10	
4,40	126	82	10	
4,50	126	82	10	
4,60	126	82	10	
4,70	126	82	10	
4,80	132	87	10	
4,90	132	87	10	
5,00	132	87	10	
5,10	132	87	10	
5,20	132	87	10	
5,30	132	87	10	
5,40	139	91	10	
5,50	139	91	10	
5,60	139	91	10	
5,70	139	91	10	
5,80	139	91	10	
5,90	139	91	10	
6,00	139	91	10	
6,10	148	97	10	
6,20	148	97	10	
6,30	148	97	10	
6,40	148	97	10	
6,50	148	97	10	
6,60	148	97	10	
6,70	148	97	10	
6,80	156	102	10	
6,90	156	102	10	
7,00	156	102	10	
7,10	156	102	10	
7,20	156	102	10	






Ø (mm) h8	L (mm)	I (mm)		FİYAT EUR
7,30	156	102	10	
7,40	156	102	10	
7,50	156	102	10	
7,60	165	109	10	
7,70	165	109	10	
7,80	165	109	10	
7,90	165	109	10	
8,00	165	109	10	
8,10	165	109	5	
8,20	165	109	5	
8,30	165	109	5	
8,40	165	109	5	
8,50	165	109	5	
8,60	175	115	5	
8,70	175	115	5	
8,80	175	115	5	
8,90	175	115	5	
9,00	175	115	5	
9,10	175	115	5	
9,20	175	115	5	
9,30	175	115	5	
9,40	175	115	5	
9,50	175	115	5	
9,60	184	121	5	
9,70	184	121	5	
9,80	184	121	5	
9,90	184	121	5	
10,00	184	121	5	
10,20	184	121	1	
10,50	184	121	1	
10,80	195	128	1	
11,00	195	128	1	
11,10	195	128	1	
11,50	195	128	1	

Ø (mm) h8	L (mm)	I (mm)		FİYAT EUR
11,80	195	128	1	
11,90	205	134	1	
12,00	205	134	1	
12,20	205	134	1	
12,30	205	134	1	
12,50	205	134	1	
12,75	205	134	1	
13,00	205	134	1	
13,25	214	140	1	
13,50	214	140	1	
13,75	214	140	1	
14,00	214	140	1	
14,25	220	144	1	
14,50	220	144	1	
14,75	220	144	1	
15,00	220	144	1	
15,25	227	149	1	
15,50	227	149	1	
15,75	227	149	1	
16,00	227	149	1	
16,25	235	154	1	
16,50	235	154	1	
16,75	235	154	1	
17,00	235	154	1	
17,25	241	158	1	
17,50	241	158	1	
17,75	241	158	1	
18,00	241	158	1	
18,25	241	158	1	
18,50	247	162	1	
19,00	247	162	1	
19,50	254	166	1	
19,75	254	166	1	
20,00	254	166	1	

**HSSE  
Co5**
**DIN  
340N**

**REF  
1036**


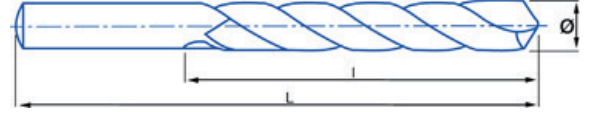
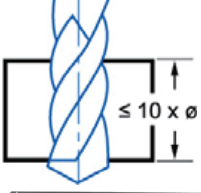
Ø (mm) h8	L (mm)	l (mm)		FİYAT EUR
2,00	85	56	10	
2,50	95	62	10	
3,00	100	66	10	
3,10	106	69	10	
3,20	106	69	10	
3,30	106	69	10	
3,50	112	73	10	
3,70	112	73	10	
4,00	119	78	10	
4,20	119	78	10	
4,50	126	82	10	
5,00	132	87	10	
5,50	139	91	10	
6,00	139	91	10	
6,50	148	97	5	
6,80	156	102	5	
7,00	156	102	5	
7,50	156	102	5	
8,00	165	109	5	
8,50	165	109	5	
8,60	175	115	5	
9,00	175	115	5	
9,50	175	115	5	
10,00	184	121	5	
10,20	184	121	1	
10,50	184	121	1	
11,00	195	128	1	
11,50	195	128	1	
12,00	205	134	1	
12,50	205	134	1	
13,00	205	134	1	

HSS

DIN  
1869N

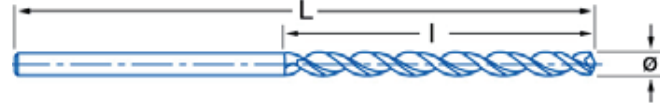
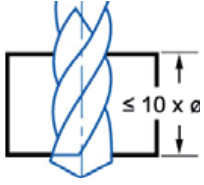


REF  
1040



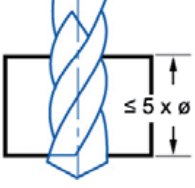
Ø (mm) h8	L (mm)	I (mm)		FİYAT EUR
2,00	125	85	1	
2,50	140	95	1	
3,00	150	100	1	
3,00	190	130	1	
3,50	165	115	1	
3,50	210	145	1	
3,50	265	180	1	
4,00	175	120	1	
4,00	220	150	1	
4,00	280	190	1	
4,50	185	125	1	
4,50	235	160	1	
4,50	295	220	1	
5,00	195	135	1	
5,00	245	170	1	
5,00	295	195	1	
5,00	315	210	1	
5,50	205	140	1	
5,50	260	180	1	
5,50	330	225	1	
6,00	205	140	1	
6,00	260	180	1	
6,00	330	225	1	
6,50	215	150	1	
6,50	275	190	1	
6,50	350	235	1	
7,00	225	155	1	
7,00	290	200	1	
7,00	370	250	1	
7,50	225	155	1	
7,50	290	200	1	
7,50	370	250	1	
8,00	240	165	1	
8,00	305	210	1	
8,00	390	265	1	
8,50	240	165	1	
8,50	305	210	1	
8,50	390	265	1	
9,00	250	175	1	

Ø (mm) h8	L (mm)	I (mm)		FİYAT EUR
9,00	320	220	1	
9,00	410	280	1	
9,50	250	175	1	
9,50	320	220	1	
9,50	410	280	1	
10,00	265	185	1	
10,00	340	235	1	
10,00	430	295	1	
10,50	265	185	1	
10,50	340	235	1	
10,50	430	295	1	
11,00	280	195	1	
11,00	365	250	1	
11,00	455	310	1	
11,50	280	195	1	
11,50	365	250	1	
11,50	455	310	1	
12,00	295	205	1	
12,00	375	260	1	
12,00	480	330	1	
12,50	295	205	1	
12,50	375	260	1	
12,50	480	330	1	
13,00	295	205	1	
13,00	375	260	1	
13,00	480	330	1	
14,00	375	260	1	
14,00	480	330	1	
15,00	650	550	1	
16,00	650	550	1	
16,50	650	550	1	
17,00	650	550	1	
17,50	650	550	1	
18,00	650	550	1	
18,50	650	550	1	
19,00	650	550	1	
19,50	650	550	1	
20,00	650	550	1	



Ø (mm) h8	L (mm)	I (mm)		FİYAT EUR
2,00	125	85	1	
2,50	140	95	1	
3,00	150	100	1	
3,00	190	130	1	
3,50	165	115	1	
3,50	210	145	1	
3,50	265	180	1	
4,00	175	120	1	
4,00	220	150	1	
4,00	280	190	1	
4,50	185	125	1	
4,50	235	160	1	
4,50	295	220	1	
5,00	195	135	1	
5,00	245	170	1	
5,00	315	210	1	
5,50	205	140	1	
5,50	260	180	1	
5,50	330	225	1	
6,00	205	140	1	
6,00	260	180	1	
6,00	330	225	1	
6,50	215	150	1	
6,50	275	190	1	
6,50	350	235	1	
7,00	225	155	1	
7,00	290	200	1	
7,00	370	250	1	
7,50	225	155	1	
7,50	290	200	1	
7,50	370	250	1	
8,00	240	165	1	

Ø (mm) h8	L (mm)	I (mm)		FİYAT EUR
8,00	305	210	1	
8,00	390	265	1	
8,50	240	165	1	
8,50	305	210	1	
8,50	390	265	1	
9,00	250	175	1	
9,00	320	220	1	
9,00	410	280	1	
9,50	250	175	1	
9,50	320	220	1	
9,50	410	280	1	
10,00	265	185	1	
10,00	340	235	1	
10,00	430	295	1	
10,50	265	185	1	
10,50	340	235	1	
10,50	430	295	1	
11,00	280	195	1	
11,00	365	250	1	
11,00	455	310	1	
11,50	280	195	1	
11,50	365	250	1	
11,50	455	310	1	
12,00	295	205	1	
12,00	375	260	1	
12,00	480	330	1	
12,50	295	205	1	
12,50	375	260	1	
12,50	480	330	1	
13,00	295	205	1	
13,00	375	260	1	
13,00	480	330	1	

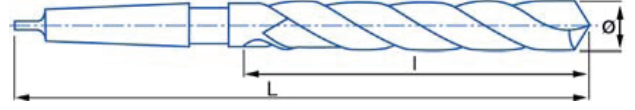
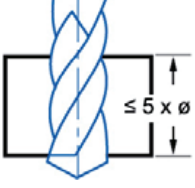


Ø (mm) h8	L (mm)	I (mm)	MK	FİYAT EUR
5,00	133	52	1	
5,25	133	52	1	
5,50	138	57	1	
5,75	138	57	1	
6,00	138	57	1	
6,25	144	63	1	
6,50	144	63	1	
6,75	150	69	1	
7,00	150	69	1	
7,25	150	69	1	
7,50	150	69	1	
7,75	156	75	1	
8,00	156	75	1	
8,25	156	75	1	
8,50	156	75	1	
8,75	162	81	1	
9,00	162	81	1	
9,25	162	81	1	
9,50	162	81	1	
9,75	168	87	1	
10,00	168	87	1	
10,25	168	87	1	
10,50	168	87	1	
10,75	175	94	1	
11,00	175	94	1	
11,25	175	94	1	
11,50	175	94	1	
11,75	175	94	1	
12,00	182	101	1	
12,25	182	101	1	
12,50	182	101	1	
12,75	182	101	1	
13,00	182	101	1	
13,25	189	108	1	
13,50	189	108	1	
13,75	189	108	1	
14,00	189	108	1	
14,25	212	114	2	
14,50	212	114	2	
14,75	212	114	2	
15,00	212	114	2	
15,25	218	120	2	
15,50	218	120	2	
15,75	218	120	2	
16,00	218	120	2	
16,25	223	125	2	
16,50	223	125	2	
16,75	223	125	2	
17,00	223	125	2	

Ø (mm) h8	L (mm)	I (mm)	MK	FİYAT EUR
17,25	228	130	2	
17,50	228	130	2	
17,75	228	130	2	
18,00	228	130	2	
18,25	233	135	2	
18,50	233	135	2	
18,75	233	135	2	
19,00	233	135	2	
19,25	238	140	2	
19,50	238	140	2	
19,75	238	140	2	
20,00	238	140	2	
20,25	243	145	2	
20,50	243	145	2	
20,75	243	145	2	
21,00	243	145	2	
21,25	248	150	2	
21,50	248	150	2	
21,75	248	150	2	
22,00	248	150	2	
22,25	248	150	2	
22,50	253	155	2	
22,75	253	155	2	
23,00	253	155	2	
23,25	276	155	3	
23,50	276	155	3	
23,75	281	160	3	
24,00	281	160	3	
24,25	281	160	3	
24,50	281	160	3	
24,75	281	160	3	
25,00	281	160	3	
25,25	286	165	3	
25,50	286	165	3	
25,75	286	165	3	
26,00	286	165	3	
26,25	286	165	3	
26,50	286	165	3	
26,75	291	170	3	
27,00	291	170	3	
27,25	291	170	3	
27,50	291	170	3	
27,75	291	170	3	
28,00	291	170	3	
28,25	296	175	3	
28,50	296	175	3	
28,75	296	175	3	
29,00	296	175	3	
29,25	296	175	3	



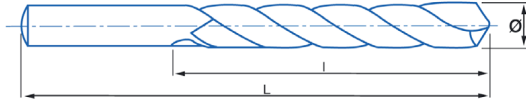
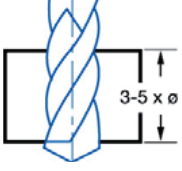




Ø (mm) h8	L (mm)	I (mm)	MK	FİYAT EUR
29,50	296	175	3	
29,75	296	175	3	
30,00	296	175	3	
30,25	301	180	3	
30,50	301	180	3	
30,75	301	180	3	
31,00	301	180	3	
31,25	301	180	3	
31,50	301	180	3	
31,75	306	185	3	
32,00	334	185	4	
32,50	334	185	4	
33,00	334	185	4	
33,50	334	185	4	
34,00	339	190	4	
34,50	339	190	4	
35,00	339	190	4	
35,50	339	190	4	
36,00	344	195	4	
36,50	344	195	4	
37,00	344	195	4	
37,50	344	195	4	
38,00	349	200	4	
38,50	349	200	4	
39,00	349	200	4	
39,50	349	200	4	
40,00	349	200	4	
40,50	354	205	4	
41,00	354	205	4	
41,50	354	205	4	
42,00	354	205	4	
42,50	354	205	4	
43,00	359	210	4	
43,50	359	210	4	
44,00	359	210	4	
44,50	359	210	4	
45,00	359	210	4	
45,50	364	215	4	
46,00	364	215	4	
46,50	364	215	4	
47,00	364	215	4	
47,50	364	215	4	
48,00	369	220	4	
48,50	369	220	4	
49,00	369	220	4	
49,50	369	220	4	
50,00	369	220	4	
51,00	412	225	5	
52,00	412	225	5	

Ø (mm) h8	L (mm)	I (mm)	MK	FİYAT EUR
53,00	412	225	5	
54,00	417	230	5	
55,00	417	230	5	
56,00	417	230	5	
57,00	422	235	5	
58,00	422	235	5	
59,00	422	235	5	
60,00	422	235	5	
61,00	427	240	5	
62,00	427	240	5	
63,00	427	240	5	
64,00	432	245	5	
65,00	432	245	5	
66,00	432	245	5	
67,00	432	245	5	
68,00	437	250	5	
69,00	437	250	5	
70,00	437	250	5	
71,00	437	250	5	
72,00	442	255	5	
73,00	442	255	5	
74,00	442	255	5	
75,00	442	255	5	
76,00	447	260	5	
77,00	514	260	6	
78,00	514	260	6	
79,00	514	260	6	
80,00	514	260	6	
81,00	519	265	6	
82,00	519	265	6	
83,00	519	265	6	
84,00	519	265	6	
85,00	519	265	6	
86,00	524	270	6	
87,00	524	270	6	
88,00	524	270	6	
89,00	524	270	6	
90,00	524	270	6	
91,00	529	275	6	
92,00	529	275	6	
93,00	529	275	6	
94,00	529	275	6	
95,00	529	275	6	
96,00	534	280	6	
97,00	534	280	6	
98,00	534	280	6	
99,00	534	280	6	
100,00	534	280	6	

## SİLİNDİRİK SAPLI MATKAP UCU (HARDOX İÇİN)



Ø (mm) h8	L (mm)	I (mm)		FİYAT EUR
2,00	38	12	1	
2,50	43	14	1	
3,00	46	16	1	
3,30	49	18	1	
3,50	52	20	1	
4,00	55	22	1	
4,20	55	22	1	
4,50	58	24	1	
5,00	62	26	1	
5,50	66	28	1	
6,00	66	28	1	
6,50	70	31	1	
6,80	74	34	1	
7,00	74	34	1	
7,50	74	34	1	
8,00	79	37	1	

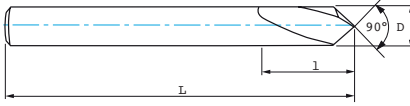
Ø (mm) h8	L (mm)	I (mm)		FİYAT EUR
8,50	79	37	1	
9,00	84	40	1	
9,50	84	40	1	
10,00	89	43	1	
10,20	89	43	1	
10,50	89	43	1	
11,00	95	47	1	
11,50	95	47	1	
12,00	102	51	1	
12,50	102	51	1	
13,00	102	51	1	
14,00	107	54	1	
15,00	111	56	1	
16,00	115	58	1	
18,00	123	62	1	

## MORS KONİK SAPLI MATKAP UCU (HARDOX İÇİN)



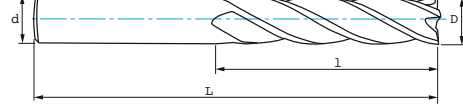
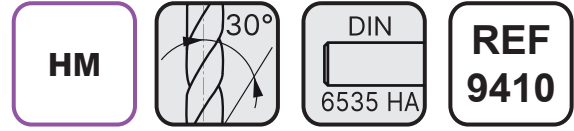
Ø (mm) h8	L (mm)	I (mm)	MK		FİYAT EUR
18,00	175	77	2	1	
19,00	201	80	2	1	
20,00	204	83	2	1	
21,00	208	87	2	1	
22,00	211	90	2	1	
23,00	215	94	2	1	
24,00	219	98	3	1	
25,00	219	98	3	1	
26,00	224	103	3	1	
27,00	256	107	3	1	
28,00	256	107	3	1	
30,00	261	112	3	1	

## NC PUNTA MATKABI



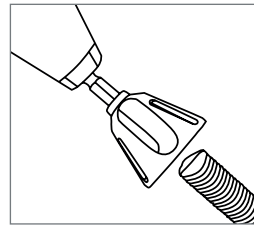
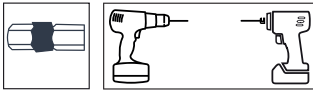
D (mm)	L (mm)	l (mm)		FİYAT EUR
3	50	10	1	
4	52	12	1	
5	60	15	1	
6	66	20	1	
8	79	25	1	
10	89	25	1	
12	102	30	1	
16	115	35	1	
20	131	40	1	
25	138	45	1	

## STANDART UZUN KARBÜR PARMAK FREZE



D (mm)	d (mm)	L (mm)	l (mm)	Z	FİYAT EUR
12	12	150	50	4	
14	14	150	50	4	
16	16	150	50	4	
18	18	150	55	4	
20	20	150	55	4	

## DIŞ PAH FREZESİ (8352)



ÇELİK

DÖKÜM

BAKIR

PİRİNÇ

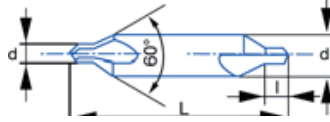
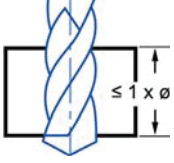
ALÜMİNYUM



KOD	ÖLÇÜ	FİYAT EUR
IZR8352-25381	6-25mm	

**KISA PUNTA MATKABI**

**HSS** **DIN 333A** **118°** **REF 1310**

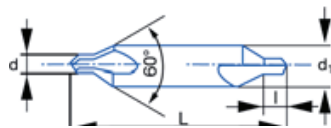
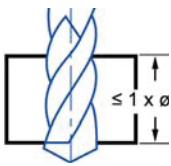


Ø d (mm)	Ø d1 (mm)	L (mm)	l (mm)	FİYAT EUR
1,00	3,15	31,50	1,30	
1,25	3,15	31,50	1,60	
1,25	4,00	35,50	1,60	
1,60	4,00	35,50	2,00	
1,60	5,00	40,00	2,00	
2,00	5,00	40,00	2,50	
2,00	6,30	45,00	2,50	
2,50	6,30	45,00	3,10	
2,50	8,00	50,00	3,10	
3,15	8,00	50,00	3,90	

Ø d (mm)	Ø d1 (mm)	L (mm)	l (mm)	FİYAT EUR
3,15	10,00	56,00	3,90	
4,00	10,00	56,00	5,00	
4,00	12,50	63,00	5,00	
5,00	12,50	63,00	6,30	
5,00	16,00	71,00	6,30	
6,30	16,00	71,00	8,00	
6,30	20,00	80,00	8,00	
10,00	25,00	100,00	12,80	
12,50	31,50	125,00	16,50	

**UZUN PUNTA MATKABI**

**HSS** **DIN 333A** **118°** **REF 9315**



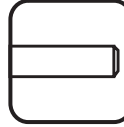
Ø d (mm)	Ø d1 (mm)	L (mm)	l (mm)	FİYAT EUR
1,00	4	60	1,30	
1,00	4	120	1,30	
1,50	5	60	2,00	
1,50	5	120	2,00	
2,00	6	80	2,50	
2,00	6	120	2,50	
2,50	8	80	3,10	
2,50	8	120	3,10	
3,00	8	80	3,90	

Ø d (mm)	Ø d1 (mm)	L (mm)	l (mm)	FİYAT EUR
3,00	8	120	3,90	
3,00	10	100	3,90	
3,00	10	120	3,90	
4,00	10	100	5,00	
4,00	10	120	5,00	
4,00	12	100	5,00	
4,00	12	120	5,00	
5,00	14	120	6,30	

HSSE  
Co5

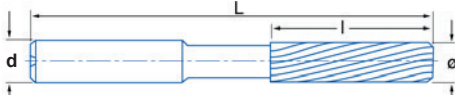
H7

DIN  
212D

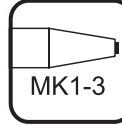
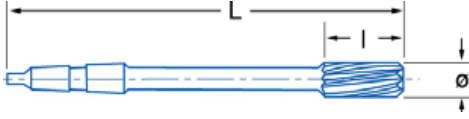


ISO  
521

REF  
2060



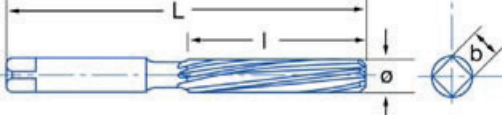
Ø (mm)	L (mm)	l (mm)	d (mm)	FİYAT EUR
2,00	49	11	2,00	
2,50	57	14	2,50	
3,00	61	15	3,00	
3,50	70	18	3,50	
4,00	75	19	4,00	
4,50	80	21	4,50	
5,00	86	23	5,00	
5,50	93	26	5,60	
6,00	93	26	5,60	
6,50	101	28	6,30	
7,00	109	31	7,10	
8,00	117	33	8,00	
9,00	125	36	9,00	
10,00	133	38	10,00	
11,00	142	41	10,00	
12,00	151	41	10,00	
13,00	151	44	10,00	
14,00	160	47	12,50	
15,00	162	50	12,50	
16,00	170	52	12,50	
17,00	175	54	14,00	
18,00	182	56	14,00	
19,00	189	58	16,00	
20,00	195	60	16,00	


**HSSE**  
**Co5**
**H7**
**DIN**  
**208B**

**ISO**  
**521**
**REF**  
**2160**


Ø (mm)	L (mm)	l (mm)	Z	MK	FİYAT EUR
6,00	138	26	6	1	
7,00	150	31	6	1	
8,00	156	33	6	1	
9,00	162	36	6	1	
10,00	168	38	6	1	
11,00	175	41	6	1	
12,00	182	44	6	1	
13,00	182	44	8	1	
14,00	189	47	8	1	
15,00	204	50	8	1	
16,00	210	52	8	2	
17,00	214	54	8	2	
18,00	219	56	8	2	
19,00	223	58	8	2	
20,00	228	60	8	2	
21,00	232	62	8	2	
22,00	237	64	8	2	
23,00	241	66	8	2	
24,00	268	68	10	2	
25,00	268	68	10	2	
26,00	273	70	10	3	
27,00	277	71	10	3	
28,00	277	71	10	3	
30,00	281	73	10	3	

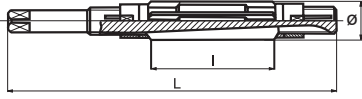
HSS

H7

DIN  
206BISO  
236REF  
2010

Ø (mm)	L (mm)	l (mm)	 b	FİYAT EUR
2,00	50	25	1,60	
2,50	58	29	2,10	
3,00	62	31	2,10	
3,50	71	35	2,70	
4,00	76	38	3,00	
4,50	81	41	3,40	
5,00	87	44	3,80	
5,50	93	47	4,30	
6,00	93	47	4,30	
6,50	100	50	4,90	
7,00	107	54	5,50	
7,50	107	54	5,50	
8,00	115	58	6,20	
8,50	115	58	6,20	
9,00	124	62	7,00	
10,00	133	66	8,00	
11,00	142	71	9,00	
12,00	152	76	10,00	
13,00	152	76	10,00	
14,00	163	81	11,00	
15,00	163	81	11,00	
16,00	175	87	12,00	
17,00	175	87	12,00	
18,00	188	93	14,50	
19,00	188	93	14,50	
20,00	201	100	16,00	
21,00	201	100	16,00	
22,00	215	107	18,00	
23,00	215	107	18,00	
24,00	231	115	20,00	
25,00	231	115	20,00	
26,00	231	115	20,00	
27,00	247	124	22,40	
28,00	247	124	22,40	
30,00	247	124	22,40	
34,00	284	142	28,00	
35,00	284	142	28,00	

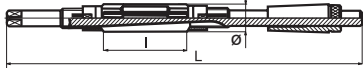
## AYARLI KOVANSIZ EL RAYBASI HSS

REF  
2015

Ø (mm)	I (mm)	L (mm)	Z	FİYAT EUR
6,40 - 7,20	34	85	4	
7,20 - 8,00	35	90	4	
8,00 - 9,00	39	100	5	
9,00 - 10,00	45	120	5	
10,00 - 11,00	45	125	5	
11,00 - 12,00	46	130	5	
12,00 - 13,50	48	135	5	
13,50 - 15,50	58	140	5	
15,50 - 18,00	69	165	5	
18,00 - 21,00	75	185	5	
21,00 - 24,00	80	195	5	
24,00 - 27,50	90	215	6	
27,50 - 31,50	100	240	6	
31,50 - 37,00	110	265	6	
37,00 - 45,00	130	310	6	
45,00 - 55,00	145	380	6	

55,00 - 65,00 \_ 65,00 - 80,00 \_ 80,00 - 95,00 \_ 95,00 - 110,00 AYARLI EL RAYBALARI İÇİN LÜTFEN FİYAT VE TESLİM TARİHİ SORUNUZ.

## AYARLI KOVANLI EL RAYBASI HSS

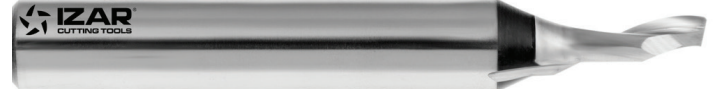
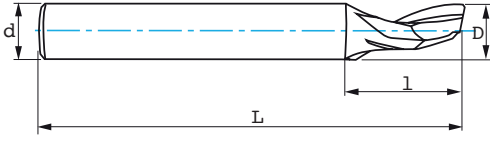
REF  
2016

Ø (mm)	I (mm)	L (mm)	Z	FİYAT EUR
8,00 - 9,00	39	175	5	
9,00 - 10,00	39	185	5	
10,00 - 11,00	45	195	5	
11,00 - 12,00	45	200	5	
12,00 - 13,50	48	220	5	
13,50 - 15,50	58	243	5	
15,50 - 18,00	69	274	5	
18,00 - 21,00	75	300	5	
21,00 - 24,00	80	320	6	
24,00 - 27,50	90	350	6	
27,50 - 31,50	100	385	6	
31,50 - 37,00	110	424	6	
37,00 - 45,00	130	490	6	
45,00 - 55,00	145	600	6	

55,00 - 65,00 \_ 65,00 - 80,00 \_ 80,00 - 95,00 \_ 95,00 - 110,00 AYARLI EL RAYBALARI İÇİN LÜTFEN FİYAT VE TESLİM TARİHİ SORUNUZ.

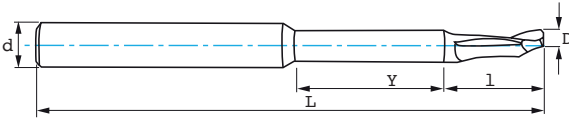


HSS Type W Z 1 REF 4412



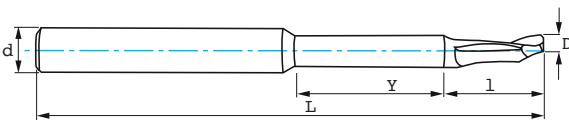
D (mm)	d (mm)	L (mm)	l (mm)	FİYAT EUR
3,00	8	60	12	
4,00	8	60	12	
5,00	8	60	12	
6,00	8	60	14	
8,00	8	80	15	
10,00	10	80	15	

HSS Type W Y Z 1 REF 4414



D (mm)	d (mm)	L (mm)	l (mm)	Y (mm)	FİYAT EUR
4,00	8	80	16	29	
5,00	8	80	16	29	
6,00	8	90	16	29	
8,00	8	100	28	40	

HSS Type W Y Z 1 REF 4417



D (mm)	d (mm)	L (mm)	l (mm)	Y (mm)	FİYAT EUR
5,00	8	100	35	20	