

DSAS

HRSA MALZEMELER İÇİN YEKPARE KARBÜR
MATKAP UÇLARI



DSAS

UYGULAMA

Aşağıdakiler havacılık uygulamalarında HRSA malzemelerin başarılı delme işlemlerinin önemli kriterleridir:

- **Güvenilirlik**
- **Proses dengesi**
- **Delik kalitesi**
- **Boyutsal sabitlik**

Kobalt Krom, Inconel, Nikel ve Titanyum alaşımları gibi HRSA malzemelerde yüksek kaliteli delikler elde etmek için DSAS karbür matkaplar müşteri ihtiyaçlarını karşılar.

DSAS matkap uçları jet motoru, gaz türbini, roket, uçak ve yanma odası parçalarını delmek için kullanılabilir.



ÖZELLİKLER

ISIYA DİRENÇLİ ALAŞIMLARI İŞLEMEK İÇİN DP9020 KALİTESİ

Tok karbür kalite, yüksek aşınma ve kırılma direnci sağlar ve bunun sonucu takım ömrü uzar.

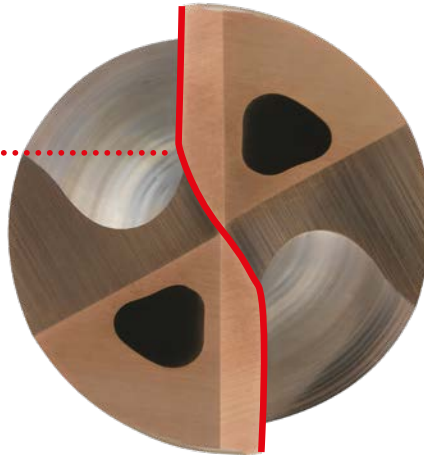


ÖZEL ZIRH BOŞLUĞU

İnce zırh temas alanını azaltır ve ısıya dirençli alaşımların işlenmesinde sert tabakalar oluşmasını engeller.

ÖZEL HONLANMIŞ DÜZ KESME KENARI

Tok düz kesme kenarındaki özel honlama , dengeli talaş şekli sağlar ve kesme kenarında ufalanma oluşmasını engeller.



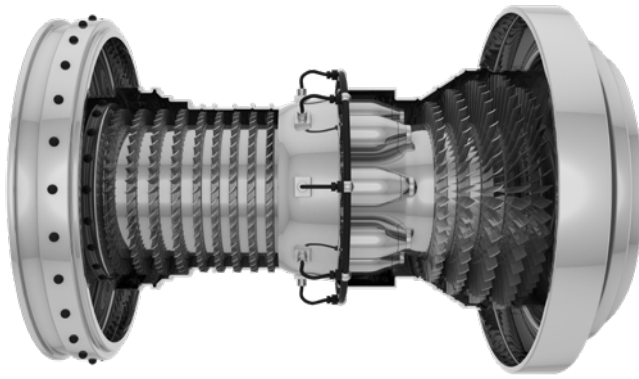
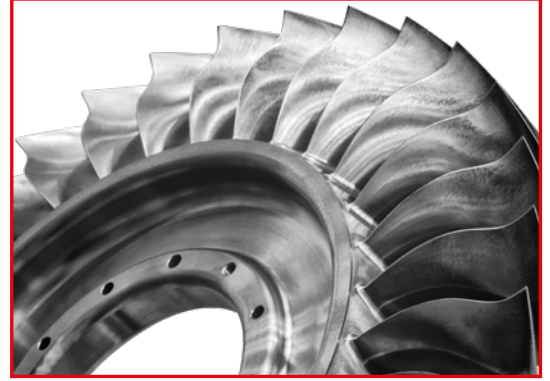
AVANTAJLAR

DEĞİŞMEYEN DELİK KALİTESİ

YÜKSEK TEKRARLANABİLİRLİK

PROSES GÜVENLİĞİ

DELME HASSASİYETİ



ÜRÜN ARALIĞI

MATKAP	DC	L / D	ŞAFT GEOMETRİSİ	S	
DSAS	Ø 3 mm – 12 mm	3	DIN6535HA	©	✓

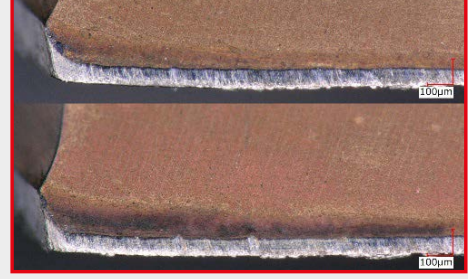
1. İnç cinsinden çaplar mevcuttur.



DSAS

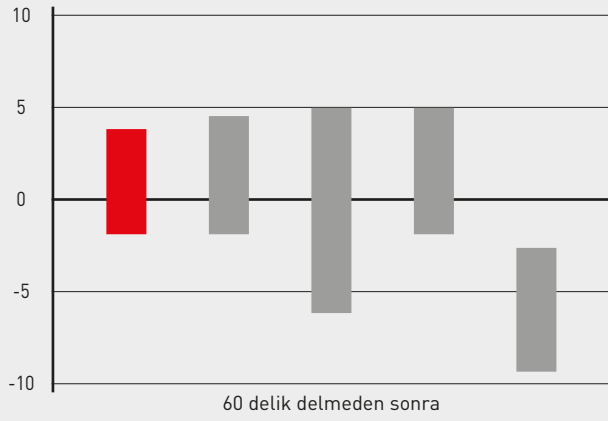
PERFORMANS KARŞILAŞTIRMASI

Malzeme	Inconel 718
Takım	DSAS0700X03S080
ap (mm)	12
Vc (m/dk)	15
f (mm/dev)	0.10
Soğutma	Emülsiyon (%10), içten soğutma
Makine	Dikey MC

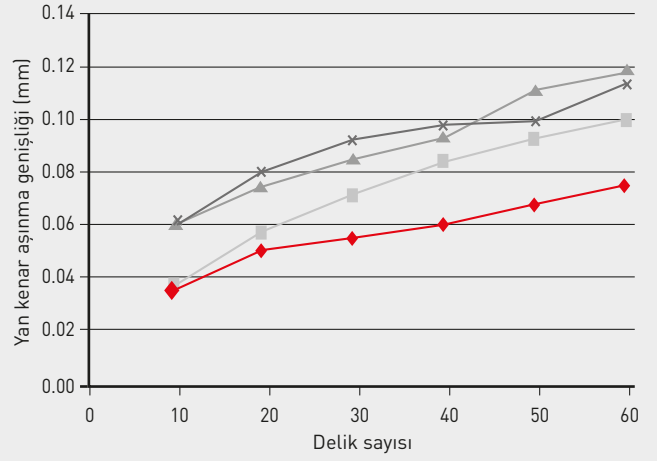


60 delik delmeden sonra yan kenar aşınma genişliği

Ø DELİK ÖLÇÜ BÜYÜKLÜĞÜ (µm)

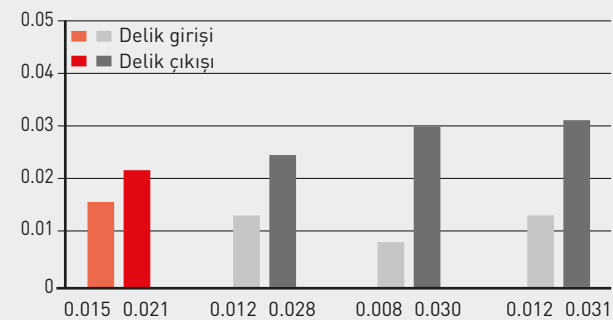


TAKIM ÖMRÜ

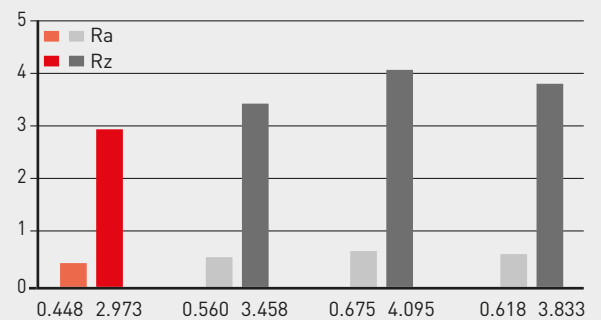


Malzeme	Inconel 718
Takım	DSAS0700X03S080
ap (mm)	10
Vc (m/dk)	15
f (mm/dev)	0.10
Soğutma	Emülsiyon (%10), içten soğutma
Makine	Dikey MC

DAİRESELLİK



DUVAR YÜZEY PÜRÜZLÜLÜĞÜ (µm)



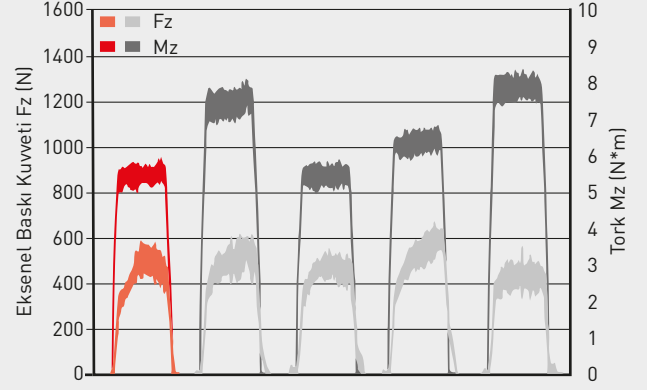
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KESME KUVVETİ KARŞILAŞTIRMASI

KESKİN KESME KENARLARI, DÜŞÜK EKSENEL BASKI KUVVETİ

Geleneksel ürünlere kıyasla keskin kesme kenarları sayesinde, DSAS matkab titanyum'un delme işlemi sırasında daha düşük itme kuvveti elde etti.

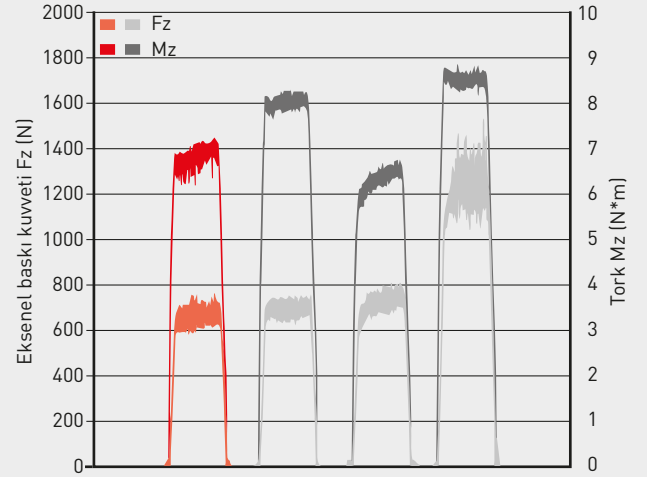
Malzeme	Titanyum alaşım (Ti-6Al-4V)
Takım	DSAS0700X03S080
ap (mm)	10
Vc (m/dk)	40
f (mm/dev)	0.15
Soğutma	Emülsiyon (%10), içten soğutma
Makine	Dikey MC



DÜŞÜK KESME KUVVETİ, YÜKSEK KALİTE

RENE 41'in işlenmesinde oluşan kesme direnci karşılaştırması.
Klasik ürünlere kıyasla, DSAS en düşük kesme kuvvetini korumuştur.

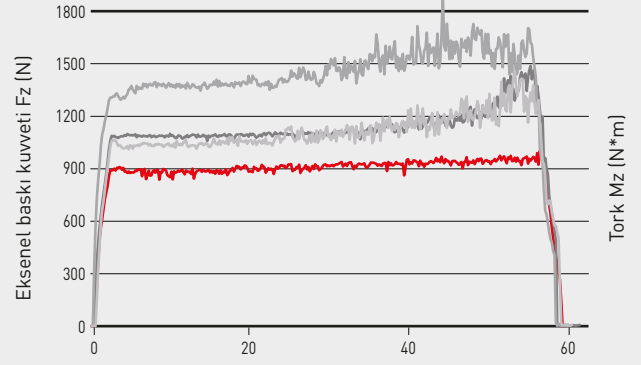
Malzeme	RENE41
Takım	DSAS0700X03S080
ap (mm)	10
Vc (m/dk)	15
f (mm/dev)	0.10
Soğutma	Emülsiyon (%10), içten soğutma
Makine	Dikey MC



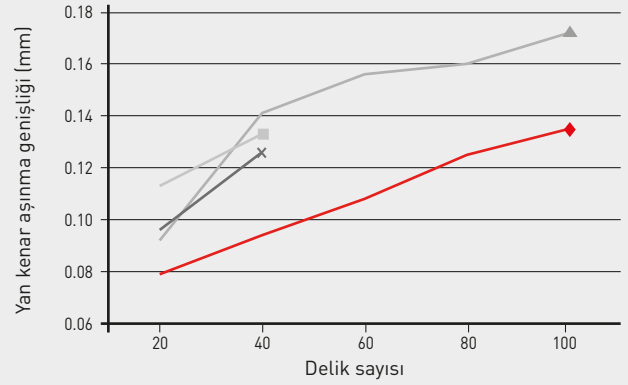
DSAS

KESME KUVVETİ KARŞILAŞTIRMASI

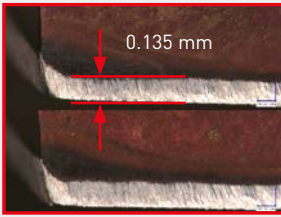
Malzeme	Inconel 718
Takım	DSAS0600X05S060
DC (mm)	6
ap (mm)	30
Vc (m/dk)	20
f (mm/dev)	0.16
Soğutma	Emülsiyon (%10), İçten soğutma
Makine	Dikey MC



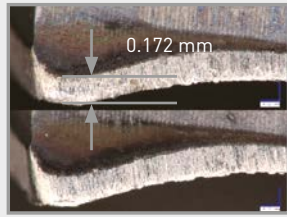
Malzeme	Inconel 718
Takım	DSAS0600X05S060
DC (mm)	6
ap (mm)	30
Vc (m/dk)	20
f (mm/dev)	0.10
Soğutma	Emülsiyon (%10), İçten soğutma
Makine	Dikey MC



100 DELİK SONRA



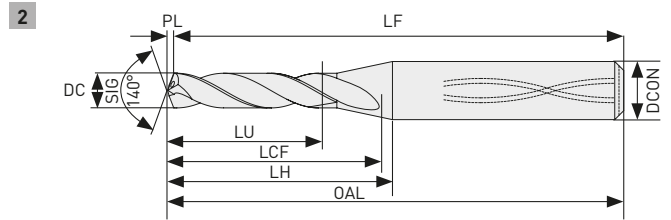
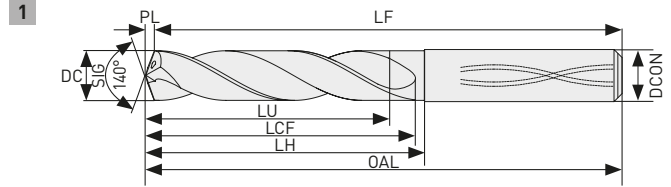
DSAS



Geleneksel

İÇTEN SOĞUTMALI YEKPARE KARBÜR MATKAP UCU

S



DC=3	3<DC≤6	6<DC≤10	10<DC≤12
0	0	0	0
-0.018	-0.018	-0.022	-0.027



DC=3	3<DC≤6	6<DC≤10	10<DC≤12
0	0	0	0
-0.008	-0.008	-0.009	-0.011

Sipariş Numarası	DP9020	DC	DCON	L / D	OAL	LU	LCF	LH	LF	PL	Şekil
DSAS0300X03S060	●	3.00	6	3	70.5	9.5	21.5	23.5	70	0.5	1
NEW DSAS0300X05S060	●	3.00	6	5	78.5	15.5	28.5	31.5	78	0.5	1
DSAS0310X03S060	●	3.10	6	3	70.6	9.9	21.6	23.6	70	0.6	1
NEW DSAS0310X05S060	●	3.10	6	5	78.6	16.1	28.6	31.6	78	0.6	1
DSAS0318X03S060	●	3.18	6	3	70.6	10.1	21.6	23.6	70	0.6	1
NEW DSAS0318X05S060	●	3.18	6	5	78.6	16.5	28.6	31.6	78	0.6	1
DSAS0320X03S060	●	3.20	6	3	70.6	10.2	21.6	23.6	70	0.6	1
NEW DSAS0320X05S060	●	3.20	6	5	78.6	16.6	28.6	31.6	78	0.6	1
DSAS0326X03S060	●	3.26	6	3	70.6	10.4	21.6	23.6	70	0.6	1
NEW DSAS0326X05S060	●	3.26	6	5	78.6	16.9	28.6	31.6	78	0.6	1
DSAS0330X03S060	●	3.30	6	3	70.6	10.5	21.6	23.6	70	0.6	1
NEW DSAS0330X05S060	●	3.30	6	5	78.6	17.1	28.6	31.6	78	0.6	1
DSAS0340X03S060	●	3.40	6	3	70.6	10.8	21.6	23.6	70	0.6	1
NEW DSAS0340X05S060	●	3.40	6	5	78.6	17.6	28.6	31.6	78	0.6	1
DSAS0350X03S060	●	3.50	6	3	70.6	11.1	21.6	23.6	70	0.6	1
NEW DSAS0350X05S060	●	3.50	6	5	78.6	18.1	28.6	31.6	78	0.6	1
DSAS0357X03S060	●	3.57	6	3	70.7	11.4	22.7	23.7	70	0.7	1
NEW DSAS0357X05S060	●	3.57	6	5	78.7	18.6	30.7	31.7	78	0.7	1
DSAS0360X03S060	●	3.60	6	3	70.7	11.5	22.7	23.7	70	0.7	1
NEW DSAS0360X05S060	●	3.60	6	5	78.7	18.7	30.7	31.7	78	0.7	1

DSAS

Sipariş Numarası	DP9020	DC	DCON	L / D	OAL	LU	LCF	LH	LF	PL	Şekil
DSAS0370X03S060	●	3.70	6	3	70.7	11.8	22.7	23.7	70	0.7	1
NEW DSAS0370X05S060	●	3.70	6	5	78.7	19.2	30.7	31.7	78	0.7	1
DSAS0380X03S060	●	3.80	6	3	70.7	12.1	22.7	23.7	70	0.7	1
NEW DSAS0380X05S060	●	3.80	6	5	78.7	19.7	30.7	31.7	78	0.7	1
DSAS0390X03S060	●	3.90	6	3	70.7	12.4	22.7	23.7	70	0.7	1
NEW DSAS0390X05S060	●	3.90	6	5	78.7	20.2	30.7	31.7	78	0.7	1
DSAS0397X03S060	●	3.97	6	3	70.7	12.6	22.7	23.7	70	0.7	1
NEW DSAS0397X05S060	●	3.97	6	5	78.7	20.5	30.7	31.7	78	0.7	1
DSAS0400X03S060	●	4.00	6	3	70.7	12.7	22.7	23.7	70	0.7	1
NEW DSAS0400X05S060	●	4.00	6	5	78.7	20.7	30.7	31.7	78	0.7	1
DSAS0410X03S060	●	4.10	6	3	73.7	13.0	24.7	26.7	73	0.7	1
NEW DSAS0410X05S060	●	4.10	6	5	82.7	21.2	33.7	35.7	82	0.7	1
DSAS0420X03S060	●	4.20	6	3	73.8	13.4	24.8	26.8	73	0.8	1
NEW DSAS0420X05S060	●	4.20	6	5	82.8	21.8	33.8	35.8	82	0.8	1
DSAS0430X03S060	●	4.30	6	3	73.8	13.7	24.8	26.8	73	0.8	1
NEW DSAS0430X05S060	●	4.30	6	5	82.8	22.3	33.8	35.8	82	0.8	1
DSAS0437X03S060	●	4.37	6	3	73.8	13.9	24.8	26.8	73	0.8	1
NEW DSAS0437X05S060	●	4.37	6	5	82.8	22.6	33.8	35.8	82	0.8	1
DSAS0440X03S060	●	4.40	6	3	73.8	14.0	24.8	26.8	73	0.8	1
NEW DSAS0440X05S060	●	4.40	6	5	82.8	22.8	33.8	35.8	82	0.8	1
DSAS0450X03S060	●	4.50	6	3	73.8	14.3	24.8	26.8	73	0.8	1
NEW DSAS0450X05S060	●	4.50	6	5	82.8	23.3	33.8	35.8	82	0.8	1
DSAS0460X03S060	●	4.60	6	3	75.8	14.6	25.8	28.8	75	0.8	1
NEW DSAS0460X05S060	●	4.60	6	5	85.8	23.8	35.8	38.8	85	0.8	1
DSAS0470X03S060	●	4.70	6	3	75.9	15.0	25.9	28.9	75	0.9	1
NEW DSAS0470X05S060	●	4.70	6	5	85.9	24.4	35.9	38.9	85	0.9	1
DSAS0476X03S060	●	4.76	6	3	75.9	15.2	25.9	28.9	75	0.9	1
NEW DSAS0476X05S060	●	4.76	6	5	85.9	24.7	35.9	38.9	85	0.9	1
DSAS0480X03S060	●	4.80	6	3	75.9	15.3	25.9	28.9	75	0.9	1
NEW DSAS0480X05S060	●	4.80	6	5	85.9	24.9	35.9	38.9	85	0.9	1
DSAS0486X03S060	●	4.86	6	3	75.9	15.5	25.9	28.9	75	0.9	1
NEW DSAS0486X05S060	●	4.86	6	5	85.9	25.2	35.9	38.9	85	0.9	1
DSAS0490X03S060	●	4.90	6	3	75.9	15.6	25.9	28.9	75	0.9	1
NEW DSAS0490X05S060	●	4.90	6	5	85.9	25.4	35.9	38.9	85	0.9	1
DSAS0500X03S060	●	5.00	6	3	81.9	15.9	28.9	29.9	81	0.9	2
NEW DSAS0500X05S060	●	5.00	6	5	89.9	25.9	39.9	42.9	89	0.9	2
DSAS0510X03S060	●	5.10	6	3	81.9	16.2	28.9	29.9	81	0.9	2
NEW DSAS0510X05S060	●	5.10	6	5	89.9	26.4	39.9	42.9	89	0.9	2
DSAS0516X03S060	●	5.16	6	3	82.0	16.5	29.0	30.0	81	1.0	2
NEW DSAS0516X05S060	●	5.16	6	5	90.0	26.8	40.0	43.0	89	1.0	2
DSAS0520X03S060	●	5.20	6	3	82.0	16.6	29.0	30.0	81	1.0	2
NEW DSAS0520X05S060	●	5.20	6	5	90.0	27.0	40.0	43.0	89	1.0	2
DSAS0530X03S060	●	5.30	6	3	82.0	16.9	29.0	30.0	81	1.0	2
NEW DSAS0530X05S060	●	5.30	6	5	90.0	27.5	40.0	43.0	89	1.0	2
DSAS0540X03S060	●	5.40	6	3	82.0	17.2	29.0	30.0	81	1.0	2
NEW DSAS0540X05S060	●	5.40	6	5	90.0	28.0	40.0	43.0	89	1.0	2
DSAS0550X03S060	●	5.50	6	3	82.0	17.5	29.0	30.0	81	1.0	2
NEW DSAS0550X05S060	●	5.50	6	5	90.0	28.5	40.0	43.0	89	1.0	2
DSAS0556X03S060	●	5.56	6	3	82.1	17.8	31.1	31.1	81	1.1	2
NEW DSAS0556X05S060	●	5.56	6	5	90.1	28.9	43.1	43.1	89	1.1	2

1. Ø 5 mm ve altındaki çaplarda soğutucu deliği yuvarlak şekilli olacaktır.

DSAS

	Sipariş Numarası	DP9020	DC	DCON	L / D	OAL	LU	LCF	LH	LF	PL	Şekil
	DSAS0560X03S060	●	5.60	6	3	82.1	17.9	31.1	31.1	81	1.1	2
NEW	DSAS0560X05S060	●	5.60	6	5	90.1	29.1	43.1	43.1	89	1.1	2
	DSAS0570X03S060	●	5.70	6	3	82.1	18.2	31.1	31.1	81	1.1	2
NEW	DSAS0570X05S060	●	5.70	6	5	90.1	29.6	43.1	43.1	89	1.1	2
	DSAS0580X03S060	●	5.80	6	3	82.1	18.5	31.1	31.1	81	1.1	2
NEW	DSAS0580X05S060	●	5.80	6	5	90.1	30.1	43.1	43.1	89	1.1	2
	DSAS0590X03S060	●	5.90	6	3	82.1	18.8	31.1	31.1	81	1.1	2
NEW	DSAS0590X05S060	●	5.90	6	5	90.1	30.6	43.1	43.1	89	1.1	2
	DSAS0595X03S060	●	5.95	6	3	82.1	19.0	31.1	31.1	81	1.1	2
NEW	DSAS0595X05S060	●	5.95	6	5	90.1	30.9	43.1	43.1	89	1.1	2
	DSAS0600X03S060	●	6.00	6	3	82.1	19.1	31.1	31.1	81	1.1	2
NEW	DSAS0600X05S060	●	6.00	6	5	90.1	31.1	43.1	43.1	89	1.1	2
	DSAS0610X03S080	●	6.10	8	3	87.2	19.5	34.2	37.2	86	1.2	2
NEW	DSAS0610X05S080	●	6.10	8	5	96.2	31.7	47.2	49.2	95	1.2	2
	DSAS0620X03S080	●	6.20	8	3	87.2	19.8	34.2	37.2	86	1.2	2
NEW	DSAS0620X05S080	●	6.20	8	5	96.2	32.2	47.2	49.2	95	1.2	2
	DSAS0630X03S080	●	6.30	8	3	87.2	20.1	34.2	37.2	86	1.2	2
NEW	DSAS0630X05S080	●	6.30	8	5	96.2	32.7	47.2	49.2	95	1.2	2
	DSAS0635X03S080	●	6.35	8	3	87.2	20.3	34.2	37.2	86	1.2	2
NEW	DSAS0635X05S080	●	6.35	8	5	96.2	33.0	47.2	49.2	95	1.2	2
	DSAS0640X03S080	●	6.40	8	3	87.2	20.4	34.2	37.2	86	1.2	2
NEW	DSAS0640X05S080	●	6.40	8	5	96.2	33.2	47.2	49.2	95	1.2	2
	DSAS0650X03S080	●	6.50	8	3	87.2	20.7	34.2	37.2	86	1.2	2
NEW	DSAS0650X05S080	●	6.50	8	5	96.2	33.7	47.2	49.2	95	1.2	2
	DSAS0660X03S080	●	6.60	8	3	91.3	21.1	36.3	38.3	90	1.3	2
NEW	DSAS0660X05S080	●	6.60	8	5	99.3	34.3	50.3	52.3	98	1.3	2
	DSAS0670X03S080	●	6.70	8	3	91.3	21.4	36.3	38.3	90	1.3	2
NEW	DSAS0670X05S080	●	6.70	8	5	99.3	34.8	50.3	52.3	98	1.3	2
	DSAS0675X03S080	●	6.75	8	3	91.3	21.5	36.3	38.3	90	1.3	2
NEW	DSAS0675X05S080	●	6.75	8	5	99.3	35.0	50.3	52.3	98	1.3	2
	DSAS0680X03S080	●	6.80	8	3	91.3	21.7	36.3	38.3	90	1.3	2
NEW	DSAS0680X05S080	●	6.80	8	5	99.3	35.3	50.3	52.3	98	1.3	2
	DSAS0690X03S080	●	6.90	8	3	91.3	22.0	36.3	38.3	90	1.3	2
NEW	DSAS0690X05S080	●	6.90	8	5	99.3	35.8	50.3	52.3	98	1.3	2
	DSAS0695X03S080	●	6.95	8	3	91.3	22.2	36.3	38.3	90	1.3	2
NEW	DSAS0695X05S080	●	6.95	8	5	99.3	36.1	50.3	52.3	98	1.3	2
	DSAS0700X03S080	●	7.00	8	3	91.3	22.3	36.3	38.3	90	1.3	2
NEW	DSAS0700X05S080	●	7.00	8	5	99.3	36.3	50.3	52.3	98	1.3	2
	DSAS0710X03S080	●	7.10	8	3	91.4	22.7	39.4	40.4	90	1.4	2
NEW	DSAS0710X05S080	●	7.10	8	5	104.4	36.9	54.4	57.4	103	1.4	2
	DSAS0714X03S080	●	7.14	8	3	91.4	22.8	39.4	40.4	90	1.4	2
NEW	DSAS0714X05S080	●	7.14	8	5	104.4	37.1	54.4	57.4	103	1.4	2
	DSAS0720X03S080	●	7.20	8	3	91.4	23.0	39.4	40.4	90	1.4	2
NEW	DSAS0720X05S080	●	7.20	8	5	104.4	37.4	54.4	57.4	103	1.4	2
	DSAS0730X03S080	●	7.30	8	3	91.4	23.3	39.4	40.4	90	1.4	2
NEW	DSAS0730X05S080	●	7.30	8	5	104.4	37.9	54.4	57.4	103	1.4	2
	DSAS0740X03S080	●	7.40	8	3	91.4	23.6	39.4	40.4	90	1.4	2
NEW	DSAS0740X05S080	●	7.40	8	5	104.4	38.4	54.4	57.4	103	1.4	2
	DSAS0750X03S080	●	7.50	8	3	91.4	23.9	39.4	40.4	90	1.4	2

1. Ø 5 mm ve altındaki çaplarda soğutucu deliği yuvarlak şekilli olacaktır.

DSAS

	Sipariş Numarası	DP9020	DC	DCON	L / D	OAL	LU	LCF	LH	LF	PL	Şekil
NEW	DSAS0750X05S080	●	7.50	8	5	104.4	38.9	54.4	57.4	103	1.4	2
	DSAS0754X03S080	●	7.54	8	3	91.5	24.1	41.5	41.5	90	1.5	2
NEW	DSAS0754X05S080	●	7.54	8	5	104.5	39.2	57.5	57.5	103	1.5	2
	DSAS0760X03S080	●	7.60	8	3	91.5	24.3	41.5	41.5	90	1.5	2
NEW	DSAS0760X05S080	●	7.60	8	5	104.5	39.5	57.5	57.5	103	1.5	2
	DSAS0770X03S080	●	7.70	8	3	91.5	24.6	41.5	41.5	90	1.5	2
NEW	DSAS0770X05S080	●	7.70	8	5	104.5	40.0	57.5	57.5	103	1.5	2
	DSAS0780X03S080	●	7.80	8	3	91.5	24.9	41.5	41.5	90	1.5	2
NEW	DSAS0780X05S080	●	7.80	8	5	104.5	40.5	57.5	57.5	103	1.5	2
	DSAS0790X03S080	●	7.90	8	3	91.5	25.2	41.5	41.5	90	1.5	2
NEW	DSAS0790X05S080	●	7.90	8	5	104.5	41.0	57.5	57.5	103	1.5	2
	DSAS0794X03S080	●	7.94	8	3	91.5	25.3	41.5	41.5	90	1.5	2
NEW	DSAS0794X05S080	●	7.94	8	5	104.5	41.2	57.5	57.5	103	1.5	2
	DSAS0800X03S080	●	8.00	8	3	91.5	25.5	41.5	41.5	90	1.5	2
NEW	DSAS0800X05S080	●	8.00	8	5	104.5	41.5	57.5	57.5	103	1.5	2
	DSAS0810X03S100	●	8.10	10	3	97.5	25.8	44.5	47.5	96	1.5	2
NEW	DSAS0810X05S100	●	8.10	10	5	114.5	42.0	61.5	63.5	113	1.5	2
	DSAS0820X03S100	●	8.20	10	3	97.5	26.1	44.5	47.5	96	1.5	2
NEW	DSAS0820X05S100	●	8.20	10	5	114.5	42.5	61.5	63.5	113	1.5	2
	DSAS0830X03S100	●	8.30	10	3	97.5	26.4	44.5	47.5	96	1.5	2
NEW	DSAS0830X05S100	●	8.30	10	5	114.5	43.0	61.5	63.5	113	1.5	2
	DSAS0833X03S100	●	8.33	10	3	97.5	26.5	44.5	47.5	96	1.5	2
NEW	DSAS0833X05S100	●	8.33	10	5	114.5	43.2	61.5	63.5	113	1.5	2
	DSAS0840X03S100	●	8.40	10	3	97.5	26.7	44.5	47.5	96	1.5	2
NEW	DSAS0840X05S100	●	8.40	10	5	114.5	43.5	61.5	63.5	113	1.5	2
	DSAS0850X03S100	●	8.50	10	3	97.5	27.0	44.5	47.5	96	1.5	2
NEW	DSAS0850X05S100	●	8.50	10	5	114.5	44.0	61.5	63.5	113	1.5	2
	DSAS0860X03S100	●	8.60	10	3	102.6	27.4	46.6	48.6	101	1.6	2
NEW	DSAS0860X05S100	●	8.60	10	5	117.6	44.6	64.6	66.6	116	1.6	2
	DSAS0870X03S100	●	8.70	10	3	102.6	27.7	46.6	48.6	101	1.6	2
NEW	DSAS0870X05S100	●	8.70	10	5	117.6	45.1	64.6	66.6	116	1.6	2
	DSAS0873X03S100	●	8.73	10	3	102.6	27.8	46.6	48.6	101	1.6	2
NEW	DSAS0873X05S100	●	8.73	10	5	117.6	45.3	64.6	66.6	116	1.6	2
	DSAS0880X03S100	●	8.80	10	3	102.6	28.0	46.6	48.6	101	1.6	2
NEW	DSAS0880X05S100	●	8.80	10	5	117.6	45.6	64.6	66.6	116	1.6	2
	DSAS0890X03S100	●	8.90	10	3	102.6	28.3	46.6	48.6	101	1.6	2
NEW	DSAS0890X05S100	●	8.90	10	5	117.6	46.1	64.6	66.6	116	1.6	2
	DSAS0900X03S100	●	9.00	10	3	102.6	28.6	46.6	48.6	101	1.6	2
NEW	DSAS0900X05S100	●	9.00	10	5	117.6	46.6	64.6	66.6	116	1.6	2
	DSAS0910X03S100	●	9.10	10	3	102.8	29.1	49.8	50.8	101	1.8	2
NEW	DSAS0910X05S100	●	9.10	10	5	122.8	47.3	68.8	71.8	121	1.8	2
	DSAS0920X03S100	●	9.20	10	3	102.8	29.4	49.8	50.8	101	1.8	2
NEW	DSAS0920X05S100	●	9.20	10	5	122.8	47.8	68.8	71.8	121	1.8	2
	DSAS0930X03S100	●	9.30	10	3	102.8	29.7	49.8	50.8	101	1.8	2
NEW	DSAS0930X05S100	●	9.30	10	5	122.8	48.3	68.8	71.8	121	1.8	2
	DSAS0940X03S100	●	9.40	10	3	102.8	30.0	49.8	50.8	101	1.8	2
NEW	DSAS0940X05S100	●	9.40	10	5	122.8	48.8	68.8	71.8	121	1.8	2
	DSAS0950X03S100	●	9.50	10	3	102.8	30.3	49.8	50.8	101	1.8	2
NEW	DSAS0950X05S100	●	9.50	10	5	122.8	49.3	68.8	71.8	121	1.8	2
	DSAS0953X03S100	●	9.53	10	3	102.8	30.4	49.8	50.8	101	1.8	2

1. Ø 5 mm ve altındaki çaplarda soğutucu deliği yuvarlak şekilli olacaktır.



DSAS

	Sipariş Numarası	DP9020	DC	DCON	L / D	OAL	LU	LCF	LH	LF	PL	Şekil
NEW	DSAS0953X05S100	●	9.53	10	5	122.8	49.4	68.8	71.8	121	1.8	2
	DSAS0960X03S100	●	9.60	10	3	102.8	30.6	49.8	50.8	101	1.8	2
NEW	DSAS0960X05S100	●	9.60	10	5	122.8	49.8	68.8	71.8	121	1.8	2
	DSAS0970X03S100	●	9.70	10	3	102.8	30.9	49.8	50.8	101	1.8	2
NEW	DSAS0970X05S100	●	9.70	10	5	122.8	50.3	68.8	71.8	121	1.8	2
	DSAS0980X03S100	●	9.80	10	3	102.8	31.2	51.8	51.8	101	1.8	2
NEW	DSAS0980X05S100	●	9.80	10	5	122.8	50.8	71.8	71.8	121	1.8	2
	DSAS0990X03S100	●	9.90	10	3	102.8	31.5	51.9	51.8	101	1.8	2
NEW	DSAS0990X05S100	●	9.90	10	5	122.8	51.3	71.8	71.8	121	1.8	2
	DSAS0992X03S100	●	9.92	10	3	102.8	31.6	51.8	51.8	101	1.8	2
NEW	DSAS0992X05S100	●	9.92	10	5	122.8	51.4	71.8	71.8	121	1.8	2
	DSAS1000X03S100	●	10.00	10	3	102.8	31.8	51.8	51.8	101	1.8	2
NEW	DSAS1000X05S100	●	10.00	10	5	122.8	51.8	71.8	71.8	121	1.8	2
	DSAS1010X03S120	●	10.10	12	3	112.9	32.2	54.9	57.9	111	1.9	2
NEW	DSAS1010X05S120	●	10.10	12	5	135.9	52.4	75.9	79.9	134	1.9	2
	DSAS1020X03S120	●	10.20	12	3	112.9	32.5	54.9	57.9	111	1.9	2
NEW	DSAS1020X05S120	●	10.20	12	5	135.9	52.9	75.9	79.9	134	1.9	2
	DSAS1030X03S120	●	10.30	12	3	112.9	32.8	54.9	57.9	111	1.9	2
NEW	DSAS1030X05S120	●	10.30	12	5	135.9	53.4	75.9	79.9	134	1.9	2
	DSAS1032X03S120	●	10.32	12	3	112.9	32.9	54.9	57.9	111	1.9	2
NEW	DSAS1032X05S120	●	10.32	12	5	135.9	53.5	75.9	79.9	134	1.9	2
	DSAS1040X03S120	●	10.40	12	3	112.9	33.1	54.9	57.9	111	1.9	2
NEW	DSAS1040X05S120	●	10.40	12	5	135.9	53.9	75.9	79.9	134	1.9	2
	DSAS1050X03S120	●	10.50	12	3	112.9	33.4	54.9	57.9	111	1.9	2
NEW	DSAS1050X05S120	●	10.50	12	5	135.9	54.4	75.9	79.9	134	1.9	2
	DSAS1060X03S120	●	10.60	12	3	112.9	33.7	54.9	57.9	111	1.9	2
NEW	DSAS1060X05S120	●	10.60	12	5	135.9	54.9	75.9	79.9	134	1.9	2
	DSAS1070X03S120	●	10.70	12	3	112.9	34.0	54.9	57.9	111	1.9	2
NEW	DSAS1070X05S120	●	10.70	12	5	135.9	55.4	75.9	79.9	134	1.9	2
	DSAS1072X03S120	●	10.72	12	3	118.0	34.1	57.0	59.0	116	2.0	2
NEW	DSAS1072X05S120	●	10.72	12	5	142.0	55.6	79.0	80.0	140	2.0	2
	DSAS1080X03S120	●	10.80	12	3	118.0	34.4	57.0	59.0	116	2.0	2
NEW	DSAS1080X05S120	●	10.80	12	5	142.0	56.0	79.0	80.0	140	2.0	2
	DSAS1090X03S120	●	10.90	12	3	118.0	34.7	57.0	59.0	116	2.0	2
NEW	DSAS1090X05S120	●	10.90	12	5	142.0	56.5	79.0	80.0	140	2.0	2
	DSAS1100X03S120	●	11.00	12	3	118.0	35.0	57.0	59.0	116	2.0	2
NEW	DSAS1100X05S120	●	11.00	12	5	142.0	57.0	79.0	80.0	140	2.0	2
	DSAS1110X03S120	●	11.10	12	3	118.1	35.4	60.1	61.1	116	2.1	2
NEW	DSAS1110X05S120	●	11.10	12	5	142.1	57.6	83.1	86.1	140	2.1	2
	DSAS1111X03S120	●	11.11	12	3	118.1	35.4	60.1	61.1	116	2.1	2
NEW	DSAS1111X05S120	●	11.11	12	5	142.1	57.7	83.1	86.1	140	2.1	2
	DSAS1120X03S120	●	11.20	12	3	118.1	35.7	60.1	61.1	116	2.1	2
NEW	DSAS1120X05S120	●	11.20	12	5	142.1	58.1	83.1	86.1	140	2.1	2
	DSAS1130X03S120	●	11.30	12	3	118.1	36.0	60.1	61.1	116	2.1	2
NEW	DSAS1130X05S120	●	11.30	12	5	142.1	58.6	83.1	86.1	140	2.1	2
	DSAS1140X03S120	●	11.40	12	3	118.1	36.3	60.1	61.1	116	2.1	2
NEW	DSAS1140X05S120	●	11.40	12	5	142.1	59.1	83.1	86.1	140	2.1	2
	DSAS1150X03S120	●	11.50	12	3	118.1	36.6	60.1	61.1	116	2.1	2
NEW	DSAS1150X05S120	●	11.50	12	5	142.1	59.6	83.1	86.1	140	2.1	2
	DSAS1151X03S120	●	11.51	12	3	118.2	36.7	62.2	62.2	116	2.2	2

1. Ø 5 mm ve altındaki çaplarda soğutucu deliği yuvarlak şekilli olacaktır.

DSAS

	Sipariş Numarası	DP9020	DC	DCON	L / D	OAL	LU	LCF	LH	LF	PL	Şekil
NEW	DSAS1151X05S120	●	11.51	12	5	142.2	59.7	86.2	86.2	140	2.2	2
	DSAS1160X03S120	●	11.60	12	3	118.2	37.0	62.2	62.2	116	2.2	2
NEW	DSAS1160X05S120	●	11.60	12	5	142.2	60.2	86.2	86.2	140	2.2	2
	DSAS1170X03S120	●	11.70	12	3	118.2	37.3	62.2	62.2	116	2.2	2
NEW	DSAS1170X05S120	●	11.70	12	5	142.2	60.7	86.2	86.2	140	2.2	2
	DSAS1180X03S120	●	11.80	12	3	118.2	37.6	62.2	62.2	116	2.2	2
NEW	DSAS1180X05S120	●	11.80	12	5	142.2	61.2	86.2	86.2	140	2.2	2
	DSAS1190X03S120	●	11.90	12	3	118.2	37.9	62.2	62.2	116	2.2	2
NEW	DSAS1190X05S120	●	11.90	12	5	142.2	61.7	86.2	86.2	140	2.2	2
	DSAS1200X03S120	●	12.00	12	3	118.2	38.2	62.2	62.2	116	2.2	2
NEW	DSAS1200X05S120	●	12.00	12	5	142.2	62.2	86.2	86.2	140	2.2	2

1. Ø 5 mm ve altındaki çaplarda soğutucu deliği yuvarlak şekilli olacaktır.

DSAS

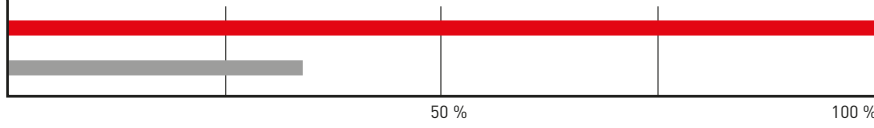
ÖNERİLEN KESİM KOŞULLARI

Malzeme	DC	L / D	Vc	n	f
S	3	≤5	10	1000	0.06 (0.04–0.1)
	4		10	790	0.06 (0.04–0.1)
	5		12	760	0.08 (0.06–0.12)
	6		15	790	0.1 (0.08–0.15)
	8		15	590	0.1 (0.08–0.15)
	10		18	570	0.1 (0.08–0.15)
	12		20	530	0.12 (0.08–0.15)
	3	≤5	40	4200	0.08 (0.06–0.12)
	4		40	3100	0.1 (0.08–0.16)
	5		40	2500	0.12 (0.08–0.2)
	6		40	2100	0.14 (0.1 –0.2)
	8		42	1600	0.18 (0.15–0.25)
	10		42	1300	0.22 (0.18–0.28)
	12		45	1100	0.24 (0.2 –0.3)
	Isıya dirençli alaşım				
	Titanyum alaşım				

1. Fener mili içinden ve yüksek basınçlı soğutma sistemi önerilir.
2. Sıvı çözelti suda çözünür soğutucu tavsiye edilir.
3. Su bazlı olmayan soğutma sıvısı kullanıldığında kesme hızını %10-20 azaltınız.
4. Harici soğutma sistemi ile kullanılıyorsa, talaş kırımını desteklemek için her talaş kalınlığı x 0.5 derinlikte gagalama veya kademeli ilerlemeli önerilir

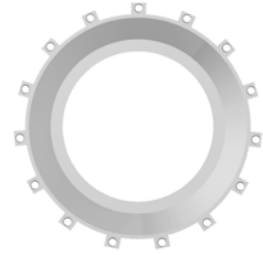
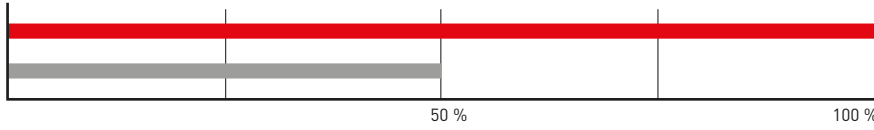
UYGULAMA ÖRNEKLERİ

Takım	DSAS0800X03S080
İş parçası malzemesi	Jet motoru gövdesi – Inconel718
Vc (m/dk)	15
f (mm/dev)	0.10
ap (mm)	5
Soğutma	Emülsiyon içten
Sonuç	12 delik (Delmeyi devam ettirebilir durumda.)

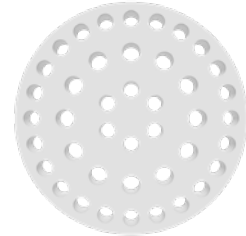
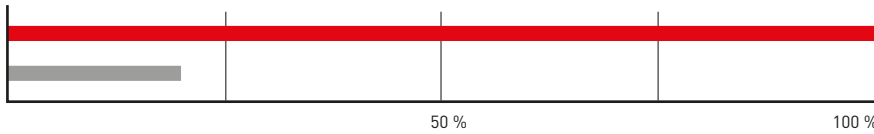


DSAS matkab, 3 kattan daha uzun takım ömrü elde etti ve iyi delik hassasiyeti ile istikrarlı delme sergiledi.

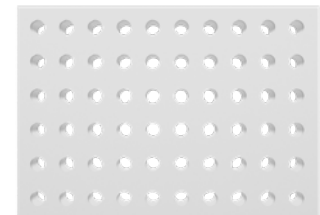
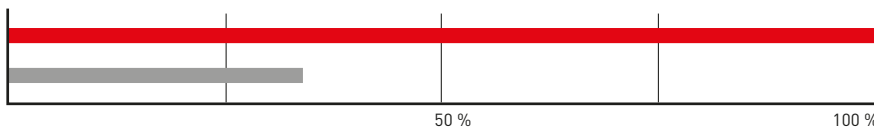
Takım	DSAS0560X03S060
İş parçası malzemesi	İç Conta – HS188
Vc (m/dk)	15
f (mm/dev)	0.035
ap (mm)	5
Soğutma	Emülsiyon içten
Sonuç	64 delik (Delmeyi devam ettirebilir durumda.)



Takım	DSAS0800X03S080
İş parçası malzemesi	K-Monel
Vc (m/dk)	26
f (mm/dev)	0.1
ap (mm)	32
Soğutma	Emülsiyon içten
Sonuç	50 delik



Takım	DSAS0580X03S060
İş parçası malzemesi	Rene 41
Vc (m/dk)	23.6
f (mm/dev)	0.05
ap (mm)	12
Soğutma	Emülsiyon içten
Sonuç	60 delik



Delik toleransı devam ettirilmiştir.

NOTLAR

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Sipariş Kodu: B256TR 

Yayın Tarihi: 2021.10 (0), Basım yeri Almanya