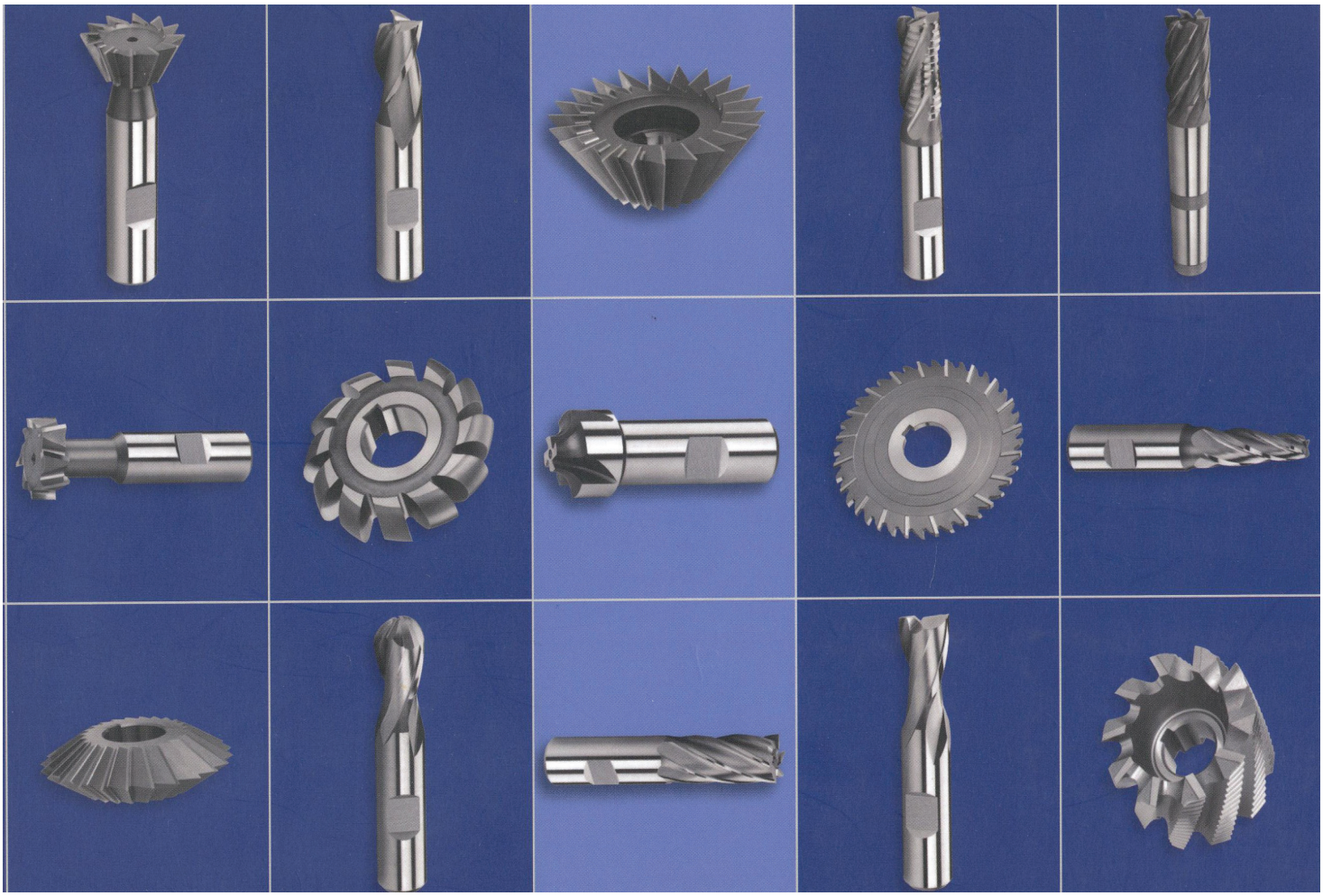
PM - ASP

Pulverstahl +
HSS-E - Co8 - Fräser



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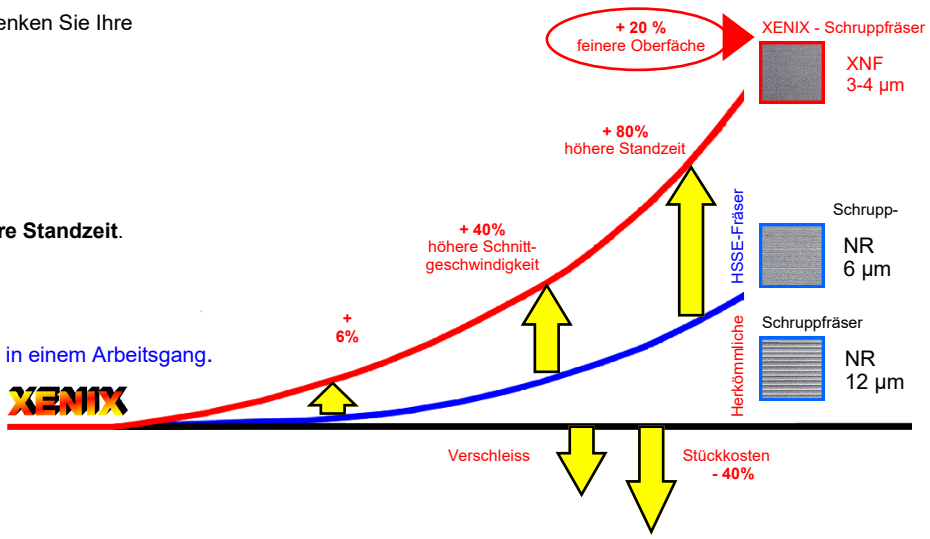
HSS - X - XENIX

Art.-Nr. 7000
Schlichtfräser

Art.-Nr. 7010
Feinschruppfräser

Art.-Nr. 7020
Schruppfräser XNF

- ★ Mit diesen **neuentwickelten** HSS-Fräsern senken Sie Ihre Stückkosten um mindestens **40%**.
- ★ **Extrem zäh** bei 68 HRC.
- ★ **40%** höhere Schnittgeschwindigkeit.
- ★ weniger Verschleiss, daher wesentlich **höhere Standzeit**.
- ★ **40%** tiefere Werkzeugkosten.
- ★ Art. Nr. **7020 schruppen + fertigbearbeiten** in einem Arbeitsgang.



Best.-Nr. 7000b... 7010b... 7020b...	Ø	Schneid-länge	Schaft-Ø	Gesamt-länge	7000	Zähne 7010	7020	7000 B N	7010 B HR	7020 B XNF
..0600	6	13	6	57	4	4	3	23.80	37.80	44.30
..0800	8	19	10	69	4	4	3	25.90	43.20	50.80
..1000	10	22	10	72	4	5	4	30.20	47.50	57.20
..1200	12	26	12	83	4	5	4	36.70	61.60	63.70
..1400	14	26	12	83	4	5	4	50.80	69.10	75.60
..1600	16	32	16	92	6	5	4	62.60	75.60	85.30
..1800	18	32	16	92	6	5	4	74.50	87.50	102.60
..2000	20	38	20	104	6	5	4	83.20	114.50	121.00
..2200	22	38	20	104	4	5	5	113.40	141.50	179.30
..2500	25	45	25	121	6	6	5	160.90	164.20	185.80
..3000	30	45	25	121	6	6	5	173.90	233.30	256.00

Artikel Nr. 7100	Typ N	6 Stk.	Ø 6-8-10-12-16-20 mm		Set	259.20		
Artikel Nr. 7200	Typ HR	6 Stk.	Ø 6-8-10-12-16-20 mm		Set		371.50	
Artikel Nr. 7300	Typ XNF	6 Stk.	Ø 6-8-10-12-16-20 mm		Set			420.10

HSSE-Co 8 Mini-3-Schneiden-Fräser

1281 W Kurz
1291 W Lang

1281 WB Kurz
1291 WB Lang

TiAlN beschichtet

3 Z.

Typ
N

- Universal einsetzbar für sämtliche Werkstoffe. **Höhere Schnittleistung** dank **3 Schneiden**. Zum Fräsen von Keilnuten in Passung P9. **Speziell preisgünstig!**
- Höchstleistung mit **PLUS - FUTURE** - Beschichtung.

1281 W **1281 WB**

1291 W **1291 WB**

	Ther-mo Plast.	Al	Alu Guss > 10% Si	Stahl < 750N	Stahl < 900N	Stahl < 1400N	Stahl < 55HRC	INOX	Ti + Cu	GG (G)	Uni-versal	1281 W Kurz	1281 WB Kurz beschichtet	1291 W Lang	1291 WB Lang beschichtet
			O	●	●	O		O		O	●				
Best.-Nr. 1281w... 1281wb... 1291w... 1291wb...	Ø e_8		Schneid-länge		Schaft-Ø		Gesamt-länge		Z			1281 W	1281 WB	1291 W	1291 WB
..0100	1		2		6		34		3			8.60	13.00	—	—
..0150	1.5		3		6		34		3			8.60	13.00	---	---
..0180	1.8		3		6		34		3			8.60	13.00	—	—
..0200	2		4		6		35		3			8.60	13.00	---	---
..0200	2		7		6		38		3			---	---	9.70	15.10
..0230	2.3		4		6		35		3			8.60	13.00	—	—
..0250	2.5		5		6		36		3			8.60	13.00	---	---
..0250	2.5		8		6		39		3			---	---	9.70	15.10
..0280	2.8		5		6		36		3			8.60	13.00	---	---
..0300	3		5		6		36		3			8.60	13.00	---	---
..0300	3		8		6		39		3			---	---	9.70	15.10
..0330	3.3		6		6		37		3			8.60	13.00	---	—
..0350	3.5		6		6		37		3			8.60	13.00	---	---
..0350	3.5		10		6		41		3			---	---	9.70	15.10
..0380	3.8		7		6		38		3			8.60	13.00	---	---
..0400	4		7		6		38		3			8.60	13.00	---	—
..0400	4		11		6		42		3			---	—	9.70	15.10
..0430	4.3		7		6		38		3			8.60	13.00	—	—
..0450	4.5		7		6		38		3			8.60	13.00	---	---
	4.5		11		6		42		3			---	---	9.70	15.10
..0480	4.8		8		6		39		3			8.60	13.00	—	—
..0500	5		8		6		39		3			8.60	13.00	—	—
..0500	5		13		6		44		3			---	—	9.70	15.10
..0550	5.5		8		6		39		3			8.60	13.00	---	---
..0550	5.5		13		6		44		3			---	---	9.70	15.10
..0575	5.75		8		6		39		3			8.60	13.00	---	---
..0600	6		8		6		39		3			8.60	13.00	—	—
..0600	6		13		6		44		3			---	—	9.70	15.10
..0650	6.5		10		8		42		3			9.70	16.20	—	—
..0650	6.5		16		8		48		3			---	—	10.80	18.40
..0700	7		10		8		42		3			9.70	16.20-	---	---
..0700	7		16		8		48		3			---	---	10.80	18.40
..0750	7.5		10		8		42		3			9.70	16.20	—	—
..0750	7.5		16		8		48		3			---	---	10.80	18.40
..0800	8		11		8		43		3			9.70	16.20	---	---
..0800	8		19		8		51		3			---	---	10.80	18.40
..0850	8.5		11		10		48		3			11.90	19.40	—	—
..0850	8.5		19		10		56		3			---	—	13.00	20.50
..0900	9		11		10		48		3			11.90	19.40	—	—
..0900	9		19		10		56		3			---	---	13.00	20.50
..0950	9.5		11		10		48		3			11.90	19.40	—	—
..1000	10		13		10		50		3			11.90	19.40	—	—
..1000	10		22		10		59		3			---	—	13.00	20.50
..1200	12		16		12		58		3			18.40	25.90	—	—
..1600	16		19		16		64		3			25.90	38.90	---	---
..2000	20		22		20		78		3			42.10	59.40	---	---

HSSE-Co 8 Langlochfräser / Bohrnutenfräser

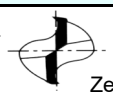
1001 W Kurz
1021 W Lang

DIN 327
M42-Co 8

1001 WB Kurz
1021 WB Lang

TiAlN beschichtet

2 Z.



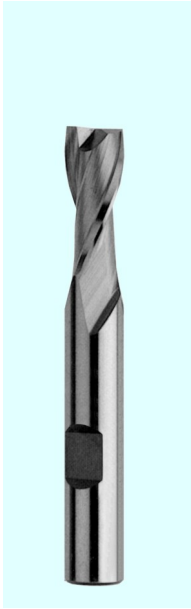
Zentr.

Typ
N

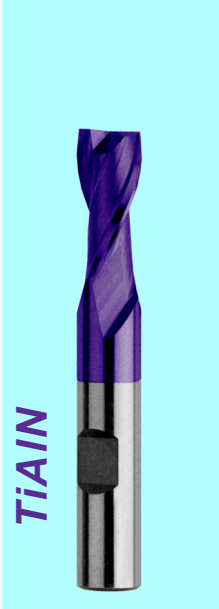
- Universal einsetzbar für sämtliche Werkstoffe sowie zum Fräsen von Keilnuten in Passung P9.

Höchstleistung mit **TiAlN** -Beschichtung.

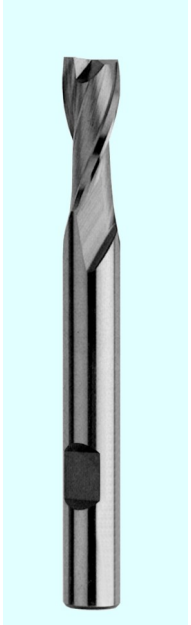
Thermo Plast Alu	Alu	Alu Guss 10% Bl	Stahl < 750N	Stahl < 900N	Stahl < 1400N	Stahl < 55HRC	INOX	Ti + Cu	GG (G)	Uni-ver-sal
		O	●	●	O		O		O	●



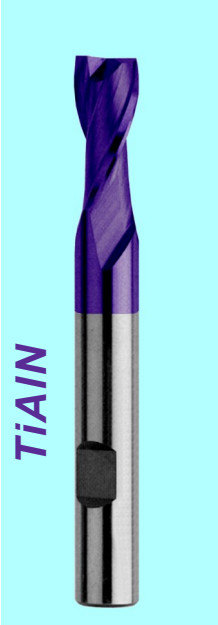
1001 W



1001 WB



1021 W



1021 WB

Best.-Nr. 1001w... 1001wb... 1021w... 1021wb...	Ø e_8	Schneid-länge	Schaft-Ø	Gesamt-länge	Z	1001 W Kurz	1001WB Kurz beschichtet	1021 W Lang	1021WB Lang beschichtet
..0100	1	2.5	6	47	2	15.10	20.50	---	---
..0150	1.5	3	6	47	2	15.10	20.50	---	---
..0200	2	4	6	48	2	11.90	19.40	---	---
..0250	2.5	5	6	49	2	11.90	19.40	16.20	---
..0280	2.8	5	6	49	2	10.80	19.40	---	---
..0300	3	5	6	49	2	11.90	18.40		---
..0300	3	8	6	56	2	---	---	16.20	24.80
..0350	3.5	6	6	50	2	10.80	18.40		---
	3.5	10	6	59	2	---	---	16.20	24.80
..0380	3.8	7	6	51	2	10.80	18.40	---	---
..0400	4	7	6	51	2	10.80	18.40	---	---
..0400	4	11	6	63	2	---	---	16.20	24.80
..0450	4.5	7	6	51	2	10.80	18.40	---	---
..0450	4.5	11	6	63	2	---	---	16.20	24.80
..0480	4.8	8	6	52	2	10.80	18.40	---	---
..0500	5	8	6	52	2	10.80	18.40	---	---
..0500	5	13	6	68	2	---	---	16.2	24.80
..0550	5.5	8	6	52	2	10.80	18.40	---	---
..0550	5.5	13	6	68	2	---	---	16.20	24.80
..0575	5.75	8	6	52	2	10.80	18.40	---	---
..0600	6	8	6	52	2	10.80	18.40	---	---
..0600	6	13	6	68	2	---	---	16.20	23.80
..0650	6.5	10	10	60	2	15.10	21.60-	---	---
..0650	6.5	16	10	80	2	---	---	24.80	34.60
..0675	6.75	10	10	60	2	15.10	21.60	---	---
..0700	7	10	10	60	2	15.10	21.60	---	---
..0700	7	16	10	80	2	---	----	24.80	34.60
..0750	7.5	10	10	60	2	15.10	21.60	---	---
..0775	7.75	11	10	61	2	15.10	21.60	---	---
..0800	8	11	10	61	2	15.10	21.60	---	---
..0800	8	19	10	88	2	---	----	23.80	32.40
..0850	8.5	11	10	61	2	16.20	22.70	---	---
..0850	8.5	19	10	88	2	---	---	28.10	35.60
..0900	9	11	10	61	2	16.20	21.60	---	---
..0900	9	19	10	88	2	---	----	28.10	35.60
..0950	9.5	11	10	61	2	16.20	21.60	---	---
..1000	10	13	10	63	2	16.20	21.60	---	---
..1000	10	22	10	95	2	---	---	24.80	33.50
..1100	11	13	12	70	2	20.50	30.20	---	---
..1200	12	16	12	73	2	20.50	30.20	---	---
..1200	12	26	12	110	2	---	---	30.20	42.10
..1300	13	16	12	73	2	22.70	33.50	---	---
..1400	14	16	12	73	2	22.70	33.50	---	---
..1400	14	26	12	110	2	---	---	45.40	58.30
..1500	15	16	12	73	2	30.20	43.20	---	---
..1600	16	19	16	79	2	30.20	43.20	---	---
..1600	16	32	16	123	2	---	---	47.50	63.70
..1700	17	19	16	79	2	34.60	51.80	---	---
..1800	18	19	16	79	2	34.60	51.80	---	---
..1800	18	32	16	123	2	---	---	61.60	82.10
..1900	19	19	16	79	2	43.20	63.70	---	---
..2000	20	22	20	88	2	43.20	63.70	---	---
..2000	20	38	20	141	2	---	---	68.00	87.50
..2200	22	22	20	88	2	69.10	90.70	---	---
..2200	22	38	20	141	2	---	---	99.40	130.70
..2400	24	26	25	102	2	71.30	101.50	---	---
..2500	25	26	25	102	2	74.50	109.10	---	---
..2500	25	45	25	166	2	---	---	113.40	152.30
..2600	26	26	25	102	2	87.50	132.80	---	---
..2800	28	26	25	102	2	89.60	139.30	---	---
..3000	30	26	25	102	2	111.20	163.10	---	---
..3200	32	32	32	112	2	116.60	186.40	---	---

HSSE-Co 8 3-Schneiden-Schlichtfräser

1041 W Kurz
1051 W Lang

DIN 844
M42-Co 8

1041 WB Kurz
1051 WB Lang

TiAlN beschichtet

1041 W **1041 WB**

1051 W **1051 WB**

Typ
N

- Universal einsetzbar für sämtliche Werkstoffe, auch für Keilbahn P9 verwendbar. Höhere Schnittleistung dank 3 Schneiden.
- Höchstleistung mit **TiAlN** - Beschichtung.

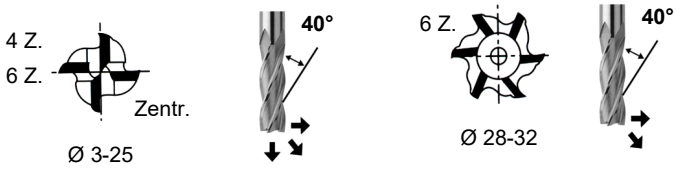
Thermo Plast Alu	Alu	Alu Guss 10% Bl	Stahl < 750N	Stahl < 900N	Stahl < 1400N	Stahl < 55HRC	INOX	Ti + Cu	GG (G)	Uni-versal
		O	●	●	O		O		O	●

Best.-Nr. 1041w... 1041wb... 1051w... 1051wb...	Ø e_8	Schneid-länge	Schaft-Ø	Gesamt-länge	Z	1041 W Kurz	1041 WB Kurz beschichtet	1051 W Lang	1051 WB Lang beschichtet
						1041 W	1041 WB	1051 W	1051 WB
..0150	1.5	7	6	51	3	15.10	21.60	---	---
..0200	2	7	6	51	3	15.10	21.60	---	---
..0250	2.5	8	6	52	3	15.10	23.80	---	---
..0300	3	8	6	52	3	15.10	21.60	---	---
..0300	3	12	6	56	3	---	---	18.40	23.80
..0350	3.5	10	6	54	3	15.10	23.80	---	---
..0400	4	11	6	55	3	11.80	19.40	---	---
..0400	4	19	6	63	3	---	---	18.40	23.80
..0450	4.5	11	6	55	3	11.80	22.70	---	---
..0500	5	13	6	57	3	11.80	19.40	---	---
..0500	5	24	6	68	3	---	---	18.40	23.80
..0550	5.5	13	6	57	3	11.80	22.70	---	---
..0600	6	13	6	57	3	11.80	19.40	---	---
..0600	6	24	6	68	3	---	---	18.40	23.80
..0650	6.5	16	10	66	3	21.60	30.20	---	---
..0700	7	16	10	66	3	19.40	23.80	24.80	---
..0700	7	30	10	80	3	---	---		35.60
..0750	7.5	16	10	66	3	21.60	32.40	---	---
..0800	8	19	10	69	3	19.40	23.80	---	---
..0800	8	38	10	88	3	---	---	24.80	35.60
..0850	8.5	19	10	69	3	23.80	32.40	---	---
..0900	9	19	10	69	3	21.60	24.80	---	---
..0900	9	38	10	88	3	---	---	24.80	35.60
..1000	10	22	10	72	3	21.60	24.80	---	---
..1000	10	45	10	95	3	---	---	24.80	35.60
..1200	12	26	12	83	3	21.60	32.40	---	---
..1200	12	53	12	110	3	---	---	34.60	47.50
..1400	14	26	12	83	3	30.20	42.20	---	---
..1400	14	53	12	110	3	---	---	49.70	63.70
..1600	16	32	16	92	3	34.60	49.70	---	---
..1600	16	63	16	123	3	---	---	51.80	71.30
..1800	18	32	16	92	3	47.50	62.60	---	---
..1800	18	63	16	123	3	---	---	69.10	90.70
..2000	20	38	20	104	3	49.70	73.40	---	---
..2000	20	75	20	141	3	---	---	74.50	98.30
..2200	22	38	20	104	3	83.20	109.10	---	---
..2200	22	75	20	141	3	---	---	111.20	145.80
..2500	25	45	25	121	3	75.60	115.60	---	---
..2500	25	90	25	166	3	---	---	126.40	168.50
..2800	28	45	25	121	3	167.40	225.70	---	---

EUROPA TOOL

HSSE-Co 8 Schlichtfräser

1071 W	**Kurz**	DIN 844 M42-Co 8	**1071 WB**	**Kurz**	***TiAlN*** beschichtet
1081 W	**Lang**		**1081 WB**	**Lang**	



Typ
N

- Universal einsetzbar für sämtliche Werkstoffe.
- Höchstleistung mit **TiAlN** - Beschichtung.

1071 W **1071 WB**

1081 W **1081 WB**

Thermo Plast Alu	Alu	Alu Guss 10% Bl	Stahl < 750N	Stahl < 900N	Stahl < 1400N	Stahl < 55HRC	INOX	Ti + Cu	GG (G)	Universal
		O	●	●	O		O		O	●

Best.-Nr. 1071w... 1071wb... 1081w... 1081wb...	Ø e_8	Schneid-länge	Schaft-Ø	Gesamt-länge	Z	1071 W Kurz	1071 WB Kurz beschichtet	1081 W Lang	1081 WB Lang beschichtet
..0300	3	8	6	52	4	13.00	18.40	---	---
..0300	3	12	6	56	4	---	---	16.20	21.60
..0350	3.5	10	6	54	4	13.00	18.40	---	---
..0350	3.5	15	6	59	4	---	---	16.20	21.60
..0400	4	11	6	55	4	13.00	18.40	---	---
..0400	4	19	6	63	4	---	---	16.20	21.60
..0450	4.5	19	6	63	4	---	---	16.20	21.60
..0500	5	13	6	57	4	13.00	18.40	—	---
..0500	5	24	6	68	4	---	---	16.20-	21.60
..0600	6	13	6	57	4	13.00	18.40	---	---
..0600	6	24	6	68	4	---	---	16.20	21.60
..0700	7	16	10	66	4	18.40	22.70	---	---
..0700	7	30	10	80	4	---	---	22.70	32.40
..0800	8	19	10	69	4	18.40	21.60	---	---
..0800	8	38	10	88	4	---	---	22.70	32.40
..0900	9	19	10	69	4	18.40	22.70	---	---
..0900	9	38	10	88	4	---	---	22.70-	32.40
..1000	10	22	10	72	4	18.40	21.60	---	---
..1000	10	45	10	95	4	---	---	22.70	32.40
..1100	11	22	12	79	4	23.80	30.20	——	---
..1100	11	45	12	102	4	---	---	31.30	43.20
..1200	12	26	12	83	4	22.70	30.20	---	---
..1200	12	53	12	110	4	---	---	31.30	43.20
..1300	13	26	12	83	4	30.20	36.70	---	---
..1400	14	26	12	83	4	34.60	43.20	---	---
..1400	14	53	12	110	4	---	---	45.40	58.30
..1600	16	32	16	92	4	33.50	43.20	---	---
..1600	16	63	16	123	4	---	---	47.50	63.70
..1800	18	32	16	92	4	46.40	58.30	---	---
..1800	18	63	16	123	4	---	---	61.60	80.10
..2000	20	38	20	104	4	51.80	63.70	---	---
..2000	20	75	20	141	4	---	---	63.70	86.40
..2200	22	38	20	104	6	65.90	91.80	---	---
..2200	22	75	20	141	6	---	---	99.40	129.60
..2400	24	90	25	166	6	---	---	111.20	150.10
..2500	25	45	25	121	6	84.20	115.60	---	---
..2500	25	90	25	166	6	---	---	111.20	151.20
..2800	28	45	25	121	6	123.10	167.40	---	---
..3000	30	45	25	121	6	128.50	182.50	---	---
..3200	32	53	32	133	6	146.90	225.70	---	---

EUROPA TOOL

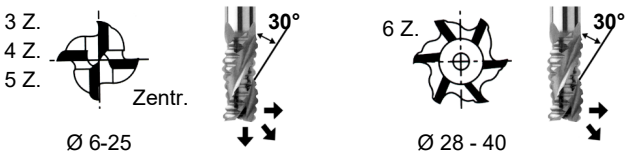
HSSE-Co 8 Feinschruppfräser

1211 W Kurz
1221 W Lang

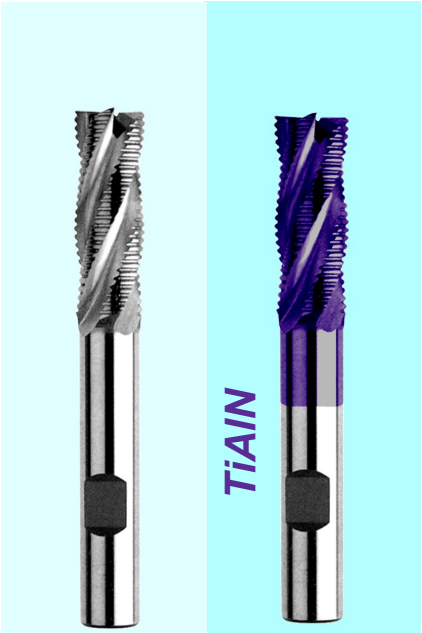
DIN 844
M42-Co 8

1211 WB Kurz
1221 WB Lang

TiAlN beschichtet



Typ
HR



1211 W **1211**

1221 W **1221 WB**

- Universal einsetzbar für sämtliche Werkstoffe.
- Höchstleistung mit **TiAlN** - Beschichtung.

Thermo Plast Alu	Alu	Alu Guss 10% Bl	Stahl < 750N	Stahl < 900N	Stahl < 1400N	Stahl < 55HRC	INOX	Ti + Cu	GG (G)	Uni-ver-sal	1211 W Kurz	1211 WB Kurz beschichtet	1221 W Lang	1221 WB Lang beschichtet
		O	●	●	O		O		O	●				

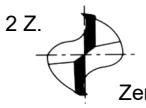
Best.-Nr. 1211w... 1211wb... 1221w... 1221wb...	Ø e_8	Schneid-länge	Schaft-Ø	Gesamt-länge	Z	1211W	1211 WB	1221 W	1221 WB
..0600	6	13	6	57	4	31.30	36.70	---	---
..0600	6	24	6	68	3	---	---	43.20	46.40
..0700	7	30	10	80	3	---	---	59.40	69.10
..0800	8	19	10	69	4	34.60	42.10	---	---
..0800	8	38	10	88	4	---	---	50.80	58.30
..0900	9	38	10	88	3	---	---	60.50	70.20
..1000	10	22	10	72	4	34.60	42.10	---	---
..1000	10	45	10	95	4	---	---	50.80	58.30
..1100	11	45	12	102	4	---	---	62.60	75.60
..1200	12	26	12	83	4	47.50	55.10	---	---
..1200	12	53	12	110	4	---	---	62.60	75.60
..1300	13	53	12	110	4	---	---	74.50	87.50
..1400	14	26	12	83	4	55.10	62.60	---	---
..1400	14	53	12	110	4	---	---	69.10	82.10
..1600	16	32	16	92	4	59.40	69.10	---	---
..1600	16	63	16	123	4	---	---	72.40	87.50
..1800	18	32	16	92	4	70.20	82.10	---	---
..1800	18	63	16	123	4	---	---	89.60	110.20
..2000	20	38	20	104	4	77.80	94.00	---	---
..2000	20	75	20	141	4	---	---	114.50	135.00
..2200	22	75	20	141	5	---	---	130.70	162.00
..2500	25	45	25	121	5	139.30	165.20	---	---
..2500	25	90	25	166	5	---	---	155.50	191.20
..2800	28	90	25	166	6	---	---	225.70	264.60
..3000	30	45	25	121	6	173.90	225.70	---	---
..3000	30	90	25	166	6	---	---	233.30	280.80
..3200	32	53	32	133	6	202.00	253.80	---	---
..3200	32	106	32	186	6	---	---	253.80	330.50
..4000	40	125	32	217	6	---	---	411.50	481.70

EUROPA TOOL

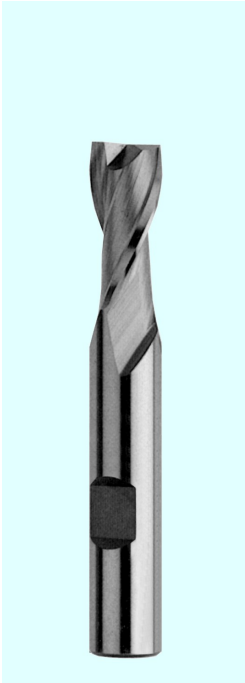
Pulverstahl – Bohrnutenfräser

ASP

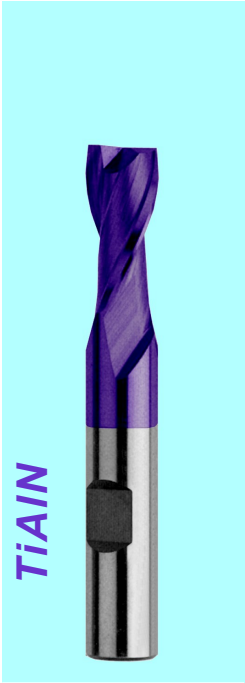
1900 W	DIN 327 M42-Co 8	1900 WB	*TiAlN* beschichtet



Typ
N



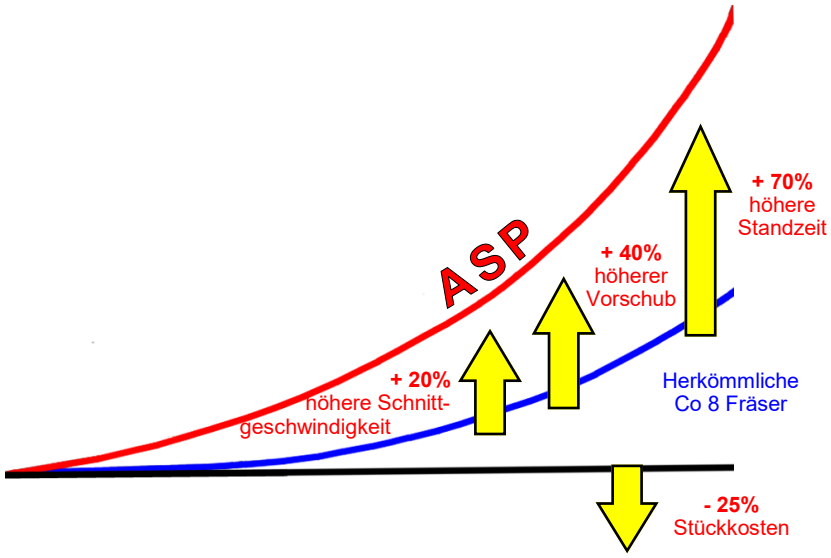
1900 W



1900 WB

- Universal einsetzbar für sämtliche Werkstoffe sowie zum Fräsen von Keilnuten in Passung P9.
- Höchstleistung mit **TiAlN** - Beschichtung.

	Alu	Alu Guss > 10% Si	Stahl < 750N	Stahl < 900N	Stahl < 1400N	Stahl < 55HRC	Stahl < 60HRC	Stahl < 67HRC	INOX	Ti + Cu	GG (G)	Uni-versal	1900 W	1900 WB
		○	●	●	○				●		○	●		
Best.-Nr. 1900w... 1900wb...	Ø e_8	Schneid-länge	Schaft-Ø	Gesamt-länge	Z								1900 W	1900 WB
..0300	3	5	6	49	2								19.40	25.90
..0400	4	7	6	51	2								19.40	25.90
..0500	5	8	6	52	2								19.40	25.90
..0600	6	8	6	52	2								19.40	25.90
..0700	7	10	10	60	2								23.80	32.40
..0800	8	11	10	61	2								23.80	32.40
..0900	9	11	10	61	2								28.10	35.60
..1000	10	13	10	63	2								28.10	35.60
..1100	11	13	12	70	2								32.40	43.20
..1200	12	16	12	73	2								32.40	43.20
..1300	13	16	12	73	2								37.80	49.70
..1400	14	16	12	73	2								37.80	49.70
..1500	15	16	12	73	2								50.80	68.00
..1600	16	19	16	79	2								50.80	68.00
..1800	18	19	16	79	2								50.80	84.20
..2000	20	22	20	88	2								69.10	91.80



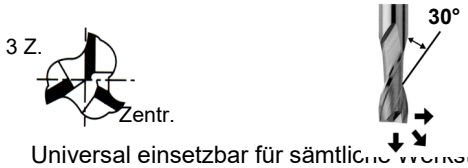
EUROPA TOOL

Pulverstahl - 3-Schneiden-Fräser

ASP

1910 W | 1910 WB

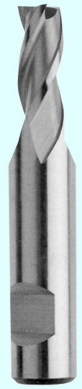
TiAlN beschichtet



Typ
N

- Universal einsetzbar für sämtliche Werkstoffe.
  Höhere Schnittleistung dank **3 Schneiden**.
  Zum Fräsen von Keilnuten in Passung P9.
  Speziell preisgünstig!
- Höchstleistung mit **TiAlN** - Beschichtung.

High - Flyer

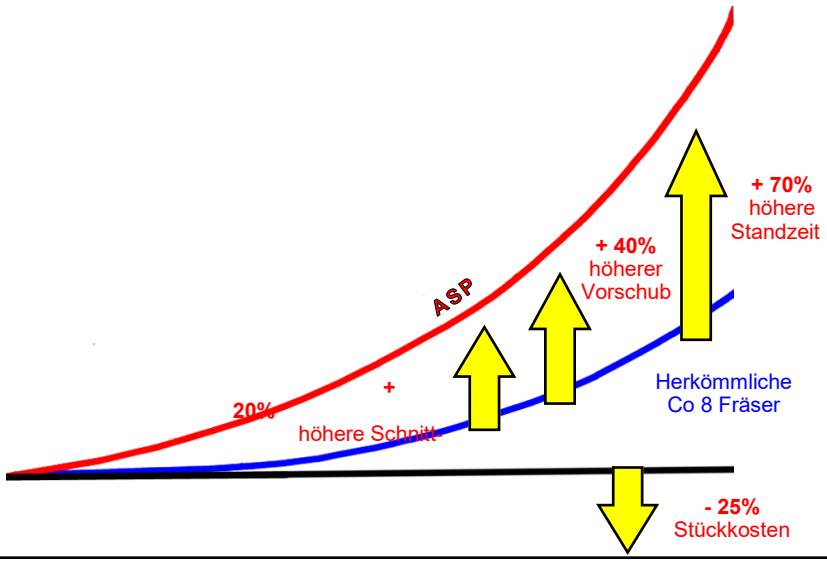


1910 W

TiAlN

1910 WB

	Alu	Alu Guss > 10% Si	Stahl < 750N	Stahl < 900N	Stahl < 1400N	Stahl < 55HRC	Stahl < 60HRC	Stahl < 67HRC	INOX	Ti + Cu	GG (G)	Uni-versal	1910 W	1910 WB
		○	●	●	○				●		○	●		
Best.-Nr. 1910w... 1910wb...	Ø e8		Schneid-länge		Schaft-Ø		Gesamt-länge				Z		1910 W	1910 WB
..0200	2		7		6		38				3		15.10	20.50
..0250	2,5		8		6		39				3		15.10	20.50
..0300	3		8		6		39				3		15.10	20.50
..0350	3,5		10		6		41				3		15.10	20.50
..0400	4		11		6		42				3		15.10	20.50
..0450	4,5		11		6		42				3		15.10	20.50
..0500	5		13		6		44				3		15.10	20.50
..0550	5,5		13		6		44				3		15.10	20.50
..0600	6		13		6		44				3		15.10	20.50
..0650	6,5		16		8		48				3		18.40	24.80
..0700	7		16		8		48				3		18.40	24.80
..0750	7,5		16		8		48				3		18.40	24.80
..0800	8		19		8		51				3		18.40	24.80
..0850	8,5		19		10		56				3		22.70	31.30
..0900	9		19		10		56				3		22.70	31.30
..0950	9,5		20		10		56				3		22.70	31.30
..1000	10		22		10		59				3		22.70	31.30



Pulverstahl - Schlichtfräser

ASP

2000 W ASP — DIN 844 M42-Co 8 — 2000 WB ASP — *TiAlN* beschichtet

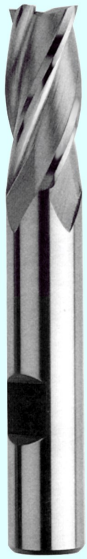
4 Z.
6 Z.

Zentr.

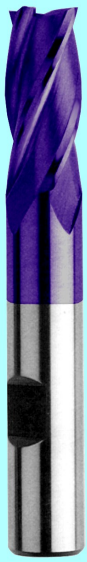
Typ
N

- Mit diesem **Pulverstahl-Hochleistungswerkzeug** senken Sie Ihre Stückkosten um **mindestens 25 %**. Besonders geeignet für hochlegierte sowie rostfreie Stähle, aber auch zum Trockenfräsen. Die Schnittgeschwindigkeit kann wesentlich erhöht werden (siehe Grafik unten).
- Höchstleistung mit **TiAlN** - Beschichtung.

High - Flyer



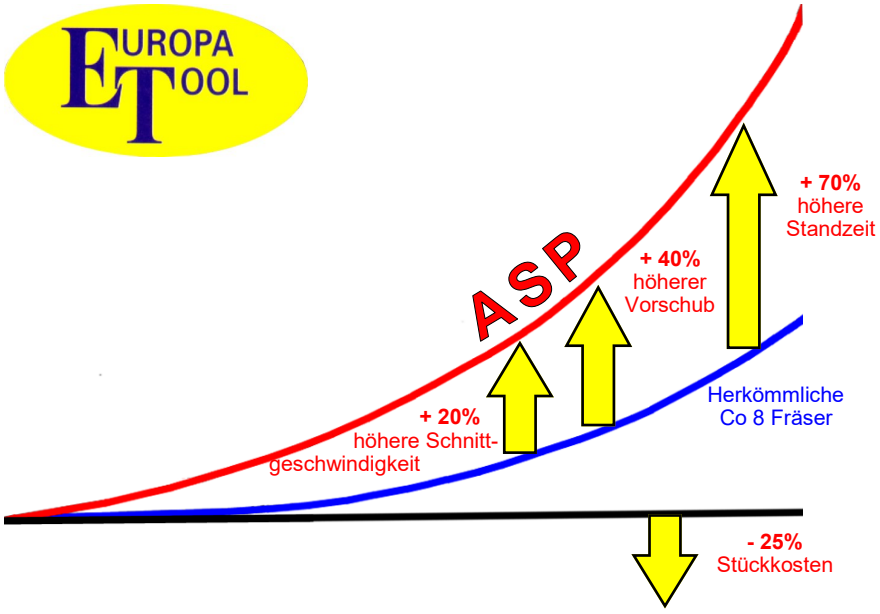
2000 W



2000 WB

	Thermo Plast. Alu	Alu	Alu Guss > 10% Si	Stahl < 750N	Stahl < 900N	Stahl < 1400N	Stahl < 55HRC	INOX	Ti + Cu	GG (G)	Uni-versal	2000 W	2000 WB
			○	●	●	○		○		○	●		
Best.-Nr. 2000w... 2000wb...	Ø k_{10}		Schneid-länge		Schaft-Ø		Gesamt-länge			Z		2000 W	2000 WB
..0300	3		8		6		52			4		18.40	22.70
..0400	4		11		6		55			4		18.40	22.70
..0500	5		13		6		57			4		18.40	22.70
..0600	6		13		6		57			4		18.40	22.70
..0800	8		19		10		69			4		21.60	25.90
..1000	10		22		10		72			4		23.80	30.20
..1200	12		26		12		83			4		32.40	37.80
..1400	14		26		12		83			4		47.50	57.20
..1600	16		32		16		92			6		49.70	60.50
..1800	18		32		16		92			6		62.60	75.60
..2000	20		38		20		104			6		62.60	88.60
..2500	25		45		25		121			6		128.50	164.20

EUROPA TOOL



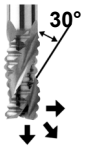
Pulverstahl - Feinschruppfräser

ASP

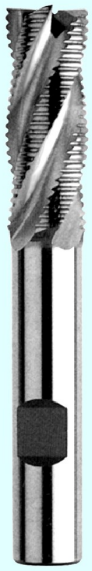
2010 W ASP | 2010 WB ASP

AlTiN beschichtet

4 Z.
5 Z.
6 Z.



Typ
HR

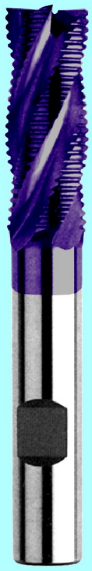


2010 W

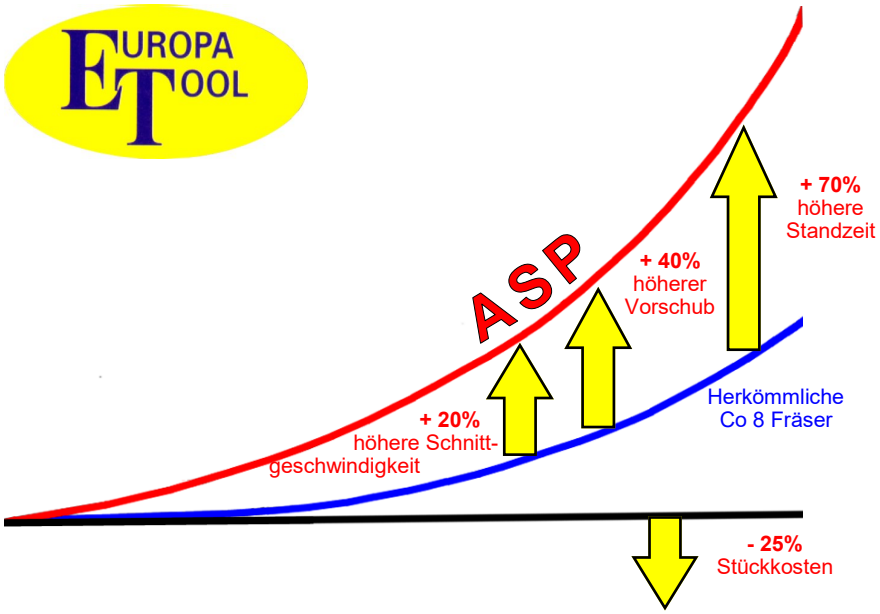
- Mit diesem **Pulverstahl-Hochleistungswerkzeug** senken Sie Ihre Stückkosten um **mindestens 25 %**. Besonders geeignet für hochlegierte sowie rostfreie Stähle, aber auch zum Trockenfräsen. Die Schnittgeschwindigkeit kann wesentlich erhöht werden (siehe Grafik unten).
- Höchstleistung mit **AlTiN** - Beschichtung.

High - Flyer

	Alu	Alu Guss > 10% Si	Stahl < 750N	Stahl < 900N	Stahl < 1400N	Stahl < 55HRC	Stahl < 60HRC	Stahl < 67HRC	INOX	Ti > 850N	GG (G)	Uni-versal	2010 W	2010 WB
		o	●	●	o				●		o	●		
Best.-Nr. 2010w... 2010wb...	Ø js12		Schneid-länge		Schaft-Ø		Gesamt-länge			Z			2010 W	2010 WB
..0600	6		13		6		57			4			34.60	42.10
..0800	8		19		10		69			4			38.90	46.40
..1000	10		22		10		72			5			42.10	47.50
..1200	12		26		12		83			5			55.10	61.60
..1400	14		26		12		83			5			61.60	71.30
..1600	16		32		16		92			5			73.40	84.20
..1800	18		32		16		92			5			77.80	90.70
..2000	20		38		20		104			5			98.30	115.60
..2200	22		38		20		104			5			115.60	141.50
..2500	25		45		25		121			6			145.80	173.90
..3000	30		45		25		121			6			206.30	259.20



2010 WB



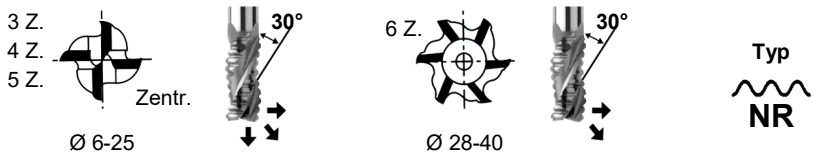
HSSE-Co 8 Schruppfräser

1181 W Kurz
1191 W Lang

DIN 844
M42-Co 8

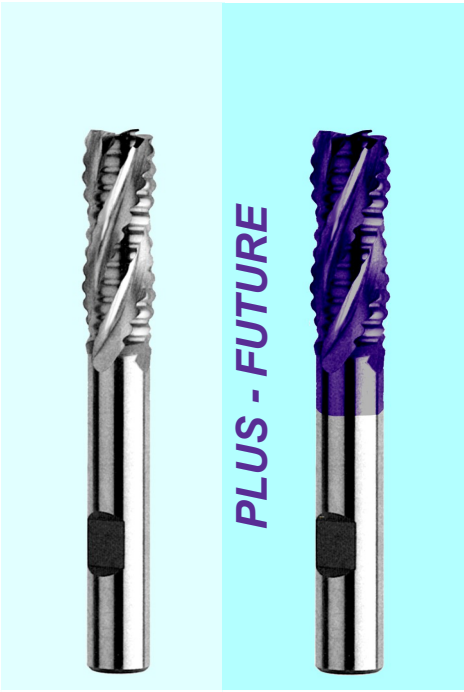
1181 WB Kurz
1191 WB Lang

PLUS - FUTURE
beschichtet

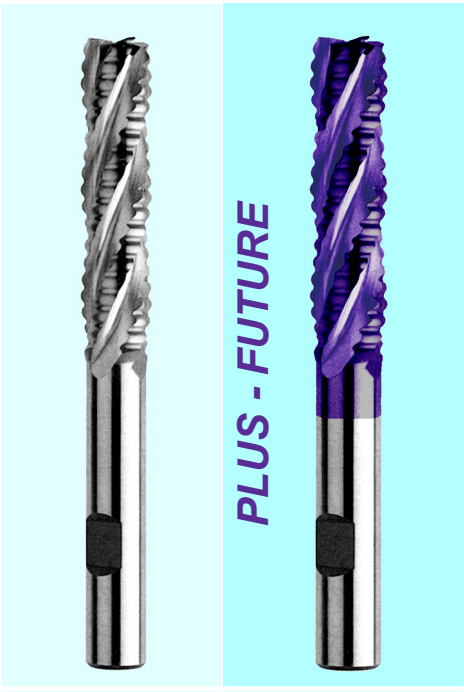


Ø 6-25 Ø 28-40

- Universal einsetzbar für sämtliche Werkstoffe.
- Höchstleistung mit **PLUS - FUTURE** - Beschichtung.



1181 W **1181 WB**



1191 W **1191 WB**

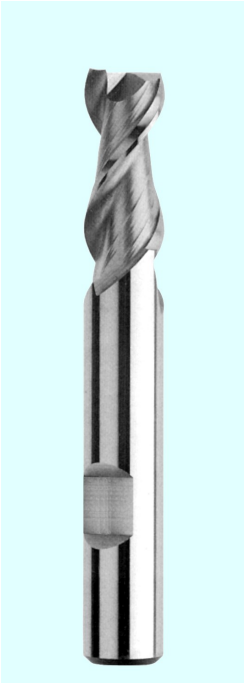
Thermo Plast Alu	Alu	Alu Guss 10% Bl	Stahl <	Stahl < 900N	Stahl < 1400	Stahl < 55HRC	INOX	Ti + Cu	GG (G)	Uni-ver-sal	1181 W Kurz	1181 WB Kurz beschichtet	1191 W Lang	1191 WB Lang beschichtet
		O	●	●	O		O		O	●				

Best.-Nr. 1181w... 1181wb... 1191w... 1191wb...	Ø e_8	Schneid-länge	Schaft-Ø	Gesamt-länge	Z	1181W	1181WB	1191W	1191WB
..0600	6	13	6	57	4	30.20	35.60	---	---
..0600	6	24	6	68	3	---	---	37.80	45.40
..0700	7	16	10	66	4	36.70	45.40	---	---
..0700	7	30	10	80	3	---	---	58.30	69.10
..0800	8	19	10	69	4	34.60	42.10	---	---
..0800	8	38	10	88	3	---	---	49.70	58.30
..0900	9	19	10	69	4	42.10	47.50	---	---
..0900	9	38	10	88	3	---	---	61.60	72.40
..1000	10	22	10	72	4	36.70	44.30	---	---
..1000	10	45	10	95	4	---	---	50.80	59.40
..1100	11	22	12	79	4	49.70	60.50-	---	---
..1100	11	45	12	102	4	---	---	63.70	77.80
..1200	12	26	12	83	4	45.40	51.80	---	---
..1200	12	53	12	110	4	---	---	60.50	73.40
..1300	13	26	12	83	4	47.50	58.30	---	---
..1300	13	53	12	110	4	---	---	84.20	98.30
..1400	14	26	12	83	4	50.80	60.50	---	---
..1400	14	53	12	110	4	---	---	69.10	83.20
..1500	15	26	12	83	4	60.50	73.40	---	---
..1500	15	53	12	110	4	---	---	90.70	109.10
..1600	16	32	16	92	4	60.50	73.40	---	---
..1600	16	63	16	123	4	---	---	71.30	91.80
..1700	17	32	16	92	4	71.30	86.40	---	---
..1700	17	63	16	123	4	---	---	103.70	122.00
..1800	18	32	16	92	4	63.70	81.00	---	---
..1800	18	63	16	123	4	---	---	90.70	113.40
..1900	19	32	16	92	4	82.10	98.30	---	---
..1900	19	63	16	123	4	---	---	129.60	153.40
..2000	20	38	20	104	4	77.80	95.00	---	---
..2000	20	75	20	141	4	---	---	110.20	133.90
..2200	22	38	20	104	5	95.00	122.00	---	---
..2200	22	75	20	141	5	---	---	129.60	164.20
..2400	24	45	25	121	5	116.60	151.20	---	---
..2400	24	90	25	166	5	---	---	167.40	206.30
..2500	25	45	25	121	5	116.60	151.20	---	---
..2500	25	90	25	166	5	---	---	154.40	193.30
..2600	26	90	25	166	6	---	---	225.70	277.60
..2800	28	45	25	121	6	150.10	189.00	---	---
..2800	28	90	25	166	6	---	---	214.90	267.80
..3000	30	45	25	121	6	168.50	213.80	---	---
..3000	30	90	25	166	6	---	---	225.70	272.20
..3200	32	53	32	133	6	193.30	248.40	---	---
..3200	32	106	32	186	6	---	---	238.70	304.60
..3600	36	53	32	133	6	253.80	319.70	---	---
..3600	36	106	32	186	6	---	---	293.80	358.60
..3800	38	63	32	155	6	295.90	371.50	---	---
..3800	38	125	32	217	6	---	---	389.90	467.60
..4000	40	63	32	155	6	304.60	379.10	---	---
..4000	40	125	32	217	6	---	---	413.60	491.40

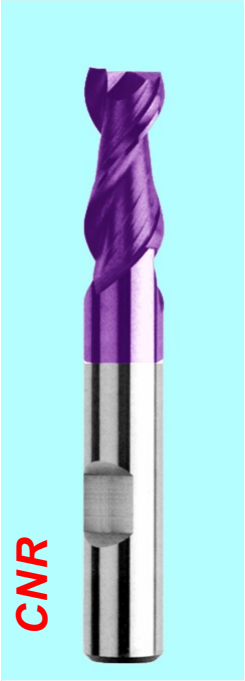
EUROPA TOOL

HSSE-Co 8 ALU-Schlichtfräser

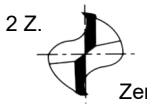
1311 W	DIN 844 M42-Co 8	1311 WB	CNR beschichtet



1311 W



1311 WB



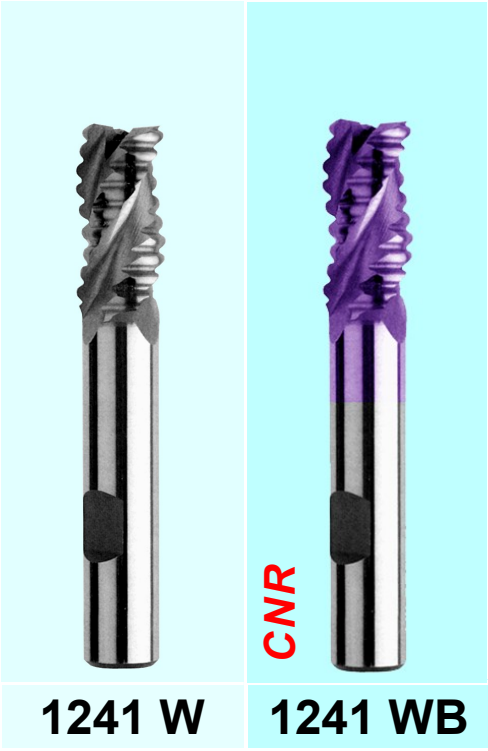
Typ
N

- Eintauchen und Längsfräsen von Keilnuten P9 sowie für sämtliche ALU- und NE -Metalle.
- Höchstleistung mit **CNR** - Beschichtung.

	Thermo Plast. Alu	Alu	Alu Guss > 10% Si	Stahl < 750N	Stahl < 900N	Stahl < 1400N	Stahl < 55HRC	INOX	Ti + Cu	GG (G)	Uni-versal	1311 W	1311 WB
	○	●	●						●				
Best-Nr. 1311w... 1311wb...	Ø e_8	Schneid-länge		Schaft-Ø		Gesamt-länge				Z		1311 W	1311 WB
..0400	4	11		6		55				2		19.40	22.70
..0450	4,5	11		6		55				2		19.40	22.70
..0500	5	13		6		57				2		19.40	22.70
..0550	5,5	13		6		57				2		19.40	22.70
..0600	6	13		6		57				2		19.40	22.70
..0650	6,5	16		10		66				2		28.10	33.50
..0700	7	16		10		66				2		30.20	34.60
..0750	7,5	16		10		66				2		32.40	36.70
..0800	8	19		10		69				2		24.80	31.30
..0850	8,5	19		10		69				2		32.40	36.70
..0900	9	19		10		69				2		32.40	36.70
..1000	10	22		10		72				2		24.80	31.30
..1100	11	22		12		79				2		36.70	44.30
..1200	12	26		12		83				2		32.40	36.70
..1300	13	26		12		83				2		43.20	49.70
..1400	14	26		12		83				2		43.20	49.70
..1500	15	26		12		83				2		49.70	62.60
..1600	16	32		16		92				2		45.40	58.30
..1700	17	32		16		92				2		62.40	78.80
..1800	18	32		16		92				2		62.40	78.80
..1900	19	32		16		92				2		77.80	101.50
..2000	20	38		20		104				2		77.80	101.50
..2100	21	38		20		104				2		110.20	137.20
..2200	22	38		20		104				2		110.20	139.30
..2300	23	38		20		104				2		113.40	141.50
..2400	24	45		25		121				2		113.40	143.60
..2500	25	45		25		121				2		115.60	155.50

HSSE-Co 8 ALU-Schruppfräser

1241 W | DIN 844 M42-Co 8 | **1241 WB** | ***CRN*** beschichtet



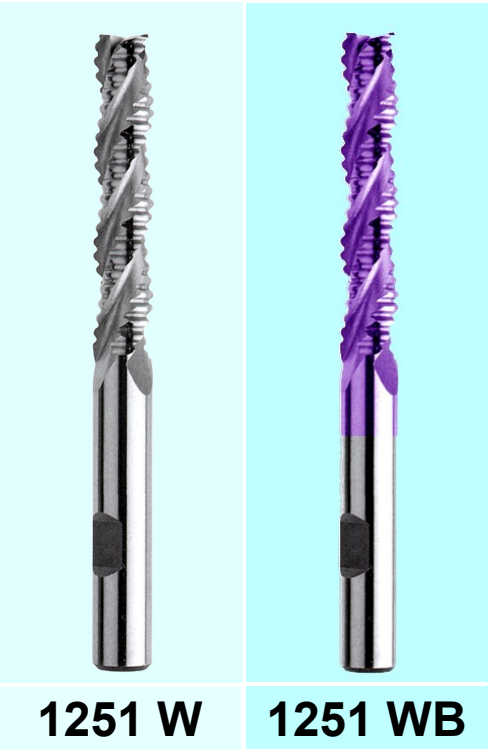
Typ
NR

- Hohe Zerspanungsleistung mit grossen Spanräumen; für alle ALU- und NE-Metalle.
- Höchstleistung mit **CNR** - Beschichtung.

Best.-Nr. 1241w... 1241wb...	Thermo Plast. Alu ●	Alu ●	Alu Guss > 10% Si ●	Stahl < 750N	Stahl < 900N	Stahl < 1400N	Stahl < 55HRC	INOX ○	Ti + Cu ○	GG (G)	Uni-versal	1241 W	1241 WB
	Ø js_{12}	Schneid-länge	Schaft-Ø	Gesamt-länge	Z	1241 W	1241 WB						
..0600	6	13	6	57	3	47.50	50.80						
..0800	8	19	10	69	3	47.50	49.70						
..1000	10	22	10	72	3	47.50	50.80						
..1200	12	26	12	83	3	60.50	68.00						
..1400	14	26	12	83	3	73.40	82.10						
..1600	16	32	16	92	3	73.40	86.40						
..1800	18	32	16	92	3	95.00	106.90						
..2000	20	38	20	104	3	110.20	126.40						
..2200	22	38	20	104	3	154.40	178.20						
..2500	25	45	25	121	3	191.20	214.90						
..3000	30	45	25	121	3	259.20	297.00						

HSSE-Co 8 ALU-Schruppfräser lang

1251 W | DIN 844 M42-Co 8 | **1251 WB** | ***CRN*** beschichtet



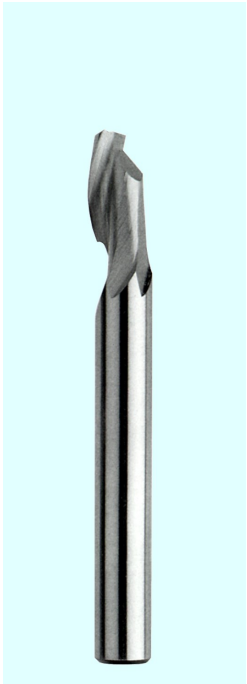
Typ
NR

- Hohe Zerspanungsleistung mit grossen Spanräumen; für alle ALU- und NE-Metalle.
- Höchstleistung mit **CNR** - Beschichtung.

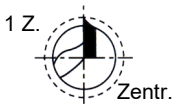
Best.-Nr. 1251w... 1251wb...	Thermo Plast. Alu ●	Alu ●	Alu Guss > 10% Si ●	Stahl < 750N	Stahl < 900N	Stahl < 1400N	Stahl < 55HRC	INOX ○	Ti + Cu ○	GG (G)	Uni-versal	1251 W	1251 WB
	Ø js_{12}	Schneid-länge	Schaft-Ø	Gesamt-länge	Z	1251 W	1251 WB						
..1000	10	45	10	95	3	57.20	61.60						
..1200	12	53	12	110	3	70.20	77.80						
..1400	14	53	12	110	3	96.10	103.70						
..1600	16	63	16	123	3	102.60	113.40						
..1800	18	63	16	123	3	128.50	142.60						
..2000	20	75	20	141	3	141.50	160.90						
..2200	22	75	20	141	3	214.90	233.30						
..2500	25	90	25	166	3	246.20	273.20						
..3000	30	90	25	166	3	344.50	388.80						

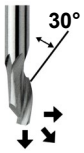
HSSE-Co 5 Einzahnfräser ALU

1353	1363



1353

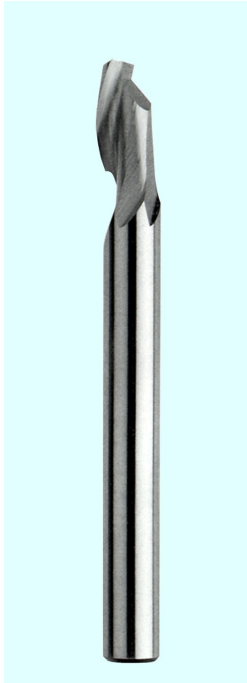




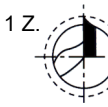
Typ
N

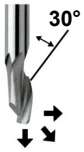
- Zum Fräsen von Schlitzen an Türen und Fenstern aus Aluminium oder Kunststoff.
  Für ELU-, Haffner- und ROTOX-Maschinen.

Best.-Nr. 1353...	Ø js14	Schneid-länge	Schaft-Ø	Gesamt-länge	Zähne	1353 (Thermo Plast. Alu ●, Alu ●, Alu Guss > 10% Si ●)
..0300	3	12	8	60	1	16.20
..0400	4	12	8	60	1	16.20
..0500	5	14	8	60	1	16.20
..0600	6	14	8	60	1	16.20
..0800	8	14	8	80	1	18.40
..1000	10	14	8	80	1	23.80



1363





Typ
N

lange Ausführung

Best.-Nr. 1363...	Ø js14	Schneid-länge	Ø D2 Nutzlänge	Schaft-Ø	Gesamt-länge	Zähne	1363 (Thermo Plast. Alu ●, Alu ●, Alu Guss > 10% Si ●)
..0500080	5	16	4.7 x 45	8	80	1	22.70
..0500080	5	16	4.7 x 84	8	120	1	36.70
..0600090	6	16	5.8 x 45	8	90	1	36.70
..0800100	8	30	7.5 x 70	8	100	1	36.70
..0800120	8	18	7.5 x 70	8	120	1	43.20
..1000120	10	18	9.7 x 80	10	120	1	47.50

ASP + HSS-E Co8 Schaftfräser im Probeset

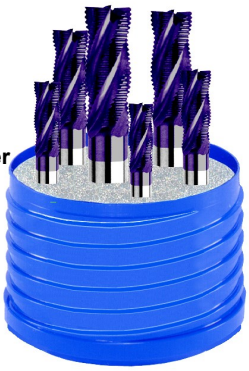
HSSE-Co 8

Mini-3-Schneiden-Fräser,lang

Ø 2 3 4 5 6 8
3 Zähne

Art.-Nr. 1260 Fr. 46.40

PLUS - FUTURE -
beschichtet
Art.-Nr. 1260 B Fr. 73.40



ASP

Pulverstahl - Feinschruppfräser

Ø 6 8 10 12 16 20
4 + 5 Zähne

Art.-Nr. 2910 Fr. 279.70

PLUS - FUTURE-
beschichtet
Art.-Nr. 2910 B Fr. 325.10

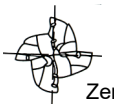
Weitere HSS-E Co8 Schaftfräser - Sets

Set à 6 Stk.	Zähne	Art. – Nr. Preis CHF	TiAlN beschichtet
Alu-Schlichtfräser Ø 6/8/10/12/16/20 **mm**	2	**1262** 221.40	**1262 B** 277.60
Langlochfräser Ø 6/8/10/12/16/20 **mm**	2	**1264** 111.20	**1264 B** 193.30
Schlichtfräser Ø 6/8/10/12/16/20 **mm**	3	**1266** 155.50	**1266 B** 221.40
Schlichtfräser Ø 6/8/10/12/16/20 **mm**	4	**1268** 154.40	**1268 B** 193.30
Feinschruppfräser Ø 6/8/10/12/16/20 **mm**	3 +4	**1270** 281.90	**1270 B** 332.60
Schruppfräser Ø 6/8/10/12/16/20 **mm**	3 +4	**1272** 281.90	**1272 B** 339.10
ASP-Schlichtfräser Ø 6/8/10/12/16/20 **mm**	4 +6	**2002** 206.30	**2002 B** 252.70

HSSE-Co 8 Schrupp-Radiusfräser *TiAlN*

1271 W DIN 844 M42-Co 8 **1271 WB** ***TiAlN*** beschichtet

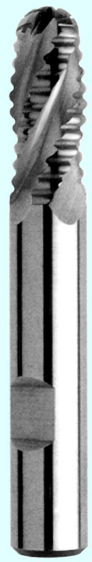
3 Z.
4 Z.



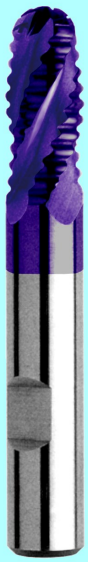
Zentr.

Typ
NR

- Universal einsetzbar für sämtliche Werkstoffe, vorwiegend für Werkzeug- und Formenbau
- Höchstleistung mit **PLUS - FUTURE** - Beschichtung



1271 W



1271 WB

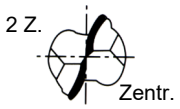
Thermo Plast. Alu	Alu	Alu Guss > 10% Si	Stahl < 750N	Stahl < 900N	Stahl < 1400N	Stahl < 55HRC	INOX	Ti + Cu	GG (G)	Uni-versal
			●	●			●		●	●

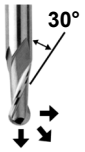
Best.-Nr. 1271w... 1271wb...	Ø js12	Schneid-länge	Schaft-Ø	Gesamt-länge	Zähne	1271 W	1271 WB
..0800	8	19	10	69	3	63.70	68.00
..1000	10	22	10	72	3	63.70	69.10
..1200	12	26	12	83	4	70.20	77.80
..1600	16	32	16	92	4	90.70	99.40
..2000	20	38	20	104	4	113.40	128.50
..2500	25	45	25	121	4	167.40	191.20

EUROPA TOOL

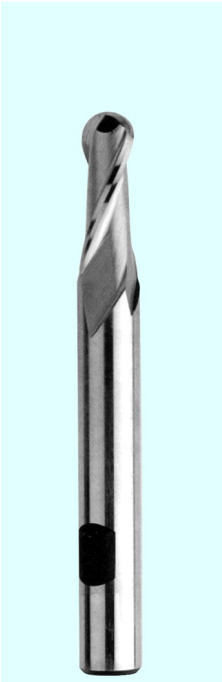
HSSE-Co 8 Radiusfräser

1121 W Kurz **1141 W** Lang	DIN 327 M42-Co 8	**1121 WB** Kurz **1141 WB** Lang	***TiAlN*** beschichtet

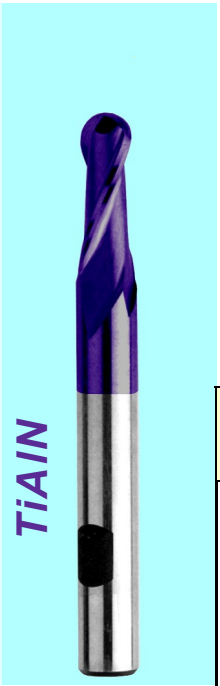




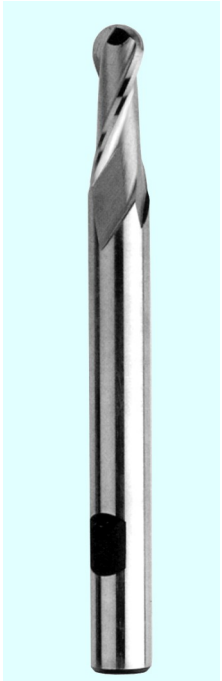
Typ
N



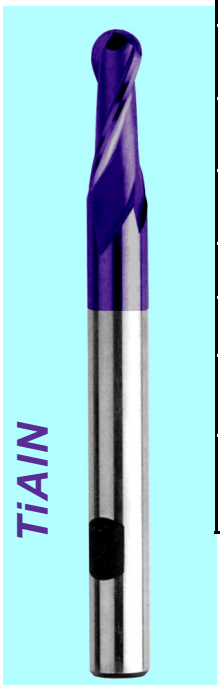
1121 W



1121



1141 W



1141

- Universal einsetzbar für sämtliche Werkstoffe, vorwiegend für Werkzeug- und Formenbau.
- Höchstleistung mit **TiAlN** - Beschichtung.

Thermo Plast Alu	Alu	Alu Guss 10% Bl	Stahl < 750N	Stahl < 900N	Stahl < 1400N	Stahl < 55HRC	INOX	Ti + Cu	GG (G)	Uni-ver-sal	1121 W Kurz	1121 WB Kurz beschichtet	1141 W Lang	1141 WB Lang beschichtet
		O	●	●	O		O		O	●				

Best.-Nr. 1121w... 1121wb... 1141w... 1141wb...	Ø e_8	Schneid-länge	Schaft-Ø	Gesamt-länge	Z	1121W	1121WB	1141W	1141WB
..0300	3	5	6	49	2	19.40	23.80	---	---
..0300	3	8	6	56	2	---	---	24.80	32.40
..0350	3.5	6	6	50	2	19.40	23.80	---	---
..0400	4	7	6	51	2	19.40	23.80	---	---
..0400	4	11	6	63	2	--	—-	24.80	32.40
..0450	4.5	7	6	51	2	19.40	23.80	---	---
..0500	5	8	6	52	2	19.40	23.80	---	---
..0500	5	13	6	68	2	---	---	24.80	32.40
..0550	5.5	8	6	52	2	20.50	24.80	---	---
..0600	6	8	6	52	2	20.50	24.80	---	---
..0600	6	13	6	68	2	---	---	24.80	32.40
..0700	7	10	10	60	2	25.90	34.60	---	---
..0800	8	11	10	61	2	21.60	30.20	---	---
..0800	8	19	10	88	2	---	---	28.10	35.60
..0900	9	11	10	61	2	30.20	36.70	---	---
..1000	10	13	10	63	2	22.70	31.30	---	---
..1000	10	22	10	95	2	---	---	34.60	43.20-
..1200	12	16	12	73	2	28.10	35.60	---	---
..1200	12	26	12	110	2	---	---	37.80	50.80
..1300	13	16	12	73	2	37.80	48.60	---	---
..1300	13	26	12	110	2	---	---	48.60	62.60
..1400	14	16	12	73	2	34.60	45.40	---	---
..1400	14	26	12	110	2	---	---	44.30	58.30
..1500	15	16	12	73	2	47.50	60.50	---	---
..1500	15	26	12	110	2	---	---	56.20	73.40
..1600	16	19	16	79	2	42.10	55.10	---	---
..1600	16	32	16	123	2	---	---	56.20	73.40
..1700	17	19	16	79	2	58.30	73.40	---	---
..1800	18	19	16	79	2	51.80	69.10	---	---
..1800	18	32	16	123	2	---	---	63.70	86.40
..1900	19	19	16	79	2	62.60	82.10	---	---
..2000	20	22	20	88	2	62.60	74.50	---	---
..2000	20	38	20	141	2	---	---	75.60	102.60
..2200	22	22	20	88	2	77.80	108.00	---	---

EUROPA TOOL

HSSE-Co 8 Schlichtfräser extra lang

1091 W M42-Co 8 | **1091 WB** *TiAlN* beschichtet

1091 W **1091 WB**

Typ
N

- Universal einsetzbar für sämtliche Werkstoffe; speziell lange Ausführung für Arbeiten an tiefliegenden und schwer erreichbaren Stellen.
- Höchstleistung mit **PLUS - FUTURE** - Beschichtung.

Thermo Plast. Alu	Alu	Alu Guss > 10% Si	Stahl < 750N	Stahl < 900N	Stahl < 1400N	Stahl < 55HRC	INOX	Ti + Cu	GG (G)	Uni-versal
			●	●			○		○	●

Best.-Nr. 1091w... 1091wb...	Ø k_{10}	Schneid-länge	Schaft-Ø	Gesamt-länge	Z	1091 W	1091 WB
..0600	6	60	6	110	4	90.70	119.90
..0800	8	60	10	110	4	113.40	153.40
..1000	10	70	10	120	4	123.10	158.80
..1200	12	100	12	160	4	139.30	181.40
..1400	14	130	12	190	4	168.50	244.10
..1600	16	150	16	210	4	194.40	257.00
..1800	18	180	16	240	4	339.10	482.80
..2000	20	180	20	240	4	381.20	530.30

HSSE-Co 8 -

Schlicht-Fräser kurz

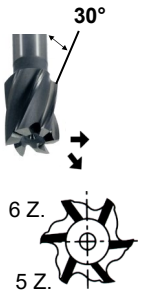
1161 W | **1161 WB** *TiAlN* beschichtet

Schrupp-Fräser kurz

1171 W | **1171 WB** *TiAlN* beschichtet

1161 W **1161 WB**

Typ
N

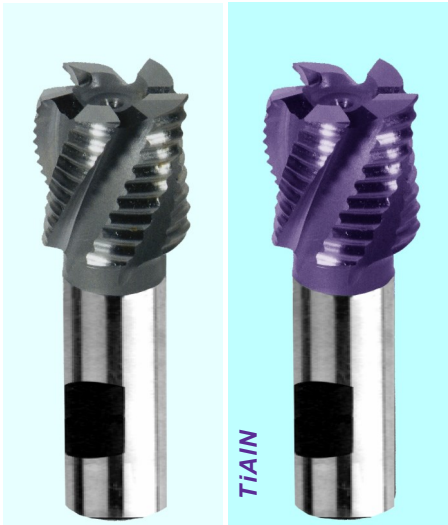


Ø 30-40

Typ
NR

Ø 30-40

- Sehr stabiler HSS-Fräser!
- Durch die kurze Ausladung auch auf älteren Maschinen sehr hohe



1171 W **1171 WB**

Alu Guss > 10% Si	Stahl < 750N	Stahl < 900N	Stahl < 1400N	INOX	Ti + Cu	GG (G)	Uni-versal
●	●	●		○		○	●

Best.-Nr. 1161w... 1161wb...	Ø	SL	Schaft-Ø	Ges.-L	Z	Schlicht 1161 W	Schlicht 1161 WB
..3000	30	30	20	90	6	162.00	205.20
..3500	35	30	20	90	6	176.00	240.80
..4000	40	32	25	95	8	216.00	292.70
..5000	50	36	32	100	8	386.60	464.40

Best.-Nr. 1171w... 1171wb...	Ø	SL	Schaft-Ø	Ges.-L	Z	Schrupp 1171 W	Schrupp 1171 WB
..3000	30	30	20	90	6	200.90	245.0
..3500	35	30	20	90	6	227.90	293.80
..4000	40	32	25	95	8	311.00	387.70
..5000	50	36	32	100	8	454.70	518.40

HSSE-Co 8 Walzenstirnfräser-Schlicht

1421 DIN 1880 M42-Co 8 | **1421 B** *TiAlN* beschichtet

HSSE-Co 8 Walzenstirnfräser CNR

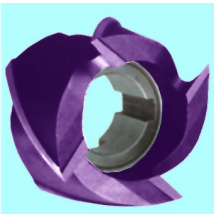
1431 | **1431 B** *CNR* beschichtet

1421

1421 B

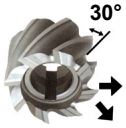
TiAlN

1431



1431 B

CNR



Typ
N

- Universal einsetzbar für sämtliche Werkstoffe.
- Höchstleistung mit **TiAlN** - Beschichtung, und speziell für schwer zerspanbare und rostfreie Stähle.
- Speziell geeignet für ALU und sämtliche NE-Metalle; extra grosse Spanräume.
- Höchstleistung mit **CNR** - Beschichtung.

Best.-Nr. 1421... 1421b... 1431... 1431b...	Thermo Plast. Alu ●	Alu ●	Alu Guss > 10% Si ●	Stahl < 750N ●	Stahl < 900N ●	Stahl < 1400N ○	INOX ○	Ti + Cu ○	GG (G) ○	Uni-versal ●	Ø k_{12}	Brei-te	Boh-rung	Z 1421	Z 1431	1421	1421 B	1431	1431 B
..04000											40	32	16	6	4	103.70	137.20	89.60	181.40
..05000											50	36	22	8	4	146.90	218.20	108.00	220.30
..06300											63	40	27	8	5	191.20	263.50	150.10	293.80
..08000											80	45	27	10	6	285.10	400.70	253.80	448.20
..10000											100	50	32	10	7	467.60	622.10	371.50	690.10
..12500											125	56	40	14	-	651.20	880.20	-	-

HSSE-Co 8 Walzenstirnfräser-Schrupp

1441 DIN 1880 M42-Co 8 | **1441 B**

HSSE-Co 8 Walzenstirnfräser-Feinschrupp

1451 | **1451B** *TiAlN* beschichtet

1441

1441 B

TiAlN

1451

1451 B

TiAlN

Typ
NR

Typ
HR

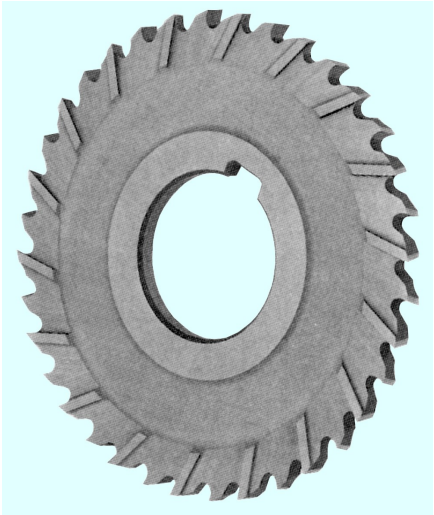
- Universal einsetzbar für sämtliche Werkstoffe.
- Höchstleistung mit **PLUS - FUTURE** - Beschichtung, und speziell für schwer zerspanbare und rostfreie Stähle.

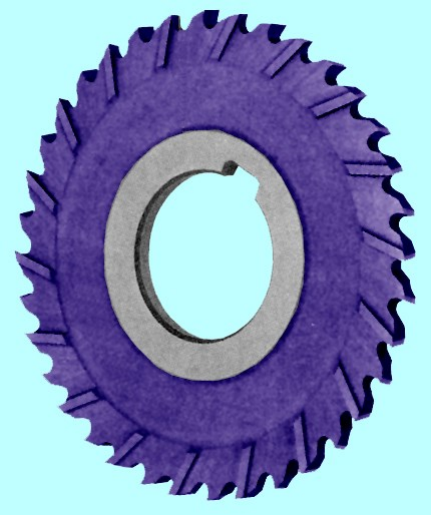
Best.-Nr. 1441... 1441b... 1451... 1451b...	Alu Guss > 10% S	Stahl < 750N ●	Stahl < 900N ●	Stahl < 1400N ○	Stahl < 55HRC	INOX ○	Ti + Cu	GG (G) ○	Uni-versal ●	Ø k_{12}	Breite	Boh-rung	Z 1441	Z 1451	1441 Schrupp	1441 B Schrupp	1451 Feinschrupp	1451 B Feischrupp
..04000										40	32	16	6	8	154.40	187.90	154.40	187.90
..05000										50	36	22	6	8	180.40	252.70	180.40	252.70
..06300										63	40	27	8	10	259.20	331.60	259.20	331.60
..08000										80	45	27	8	10	437.40	539.90	437.40	538.90
..10000										100	50	32	10	12	546.50	700.90	546.50	657.70
..12500										125	56	40	12	12	783.00	1010.90	781.90	1010.90

HSSE Scheibenfräser

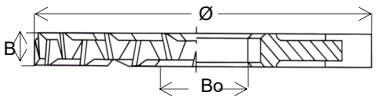
kreuzverzahnt

1470 | 1470 B *TiAlN*





TiAlN



- Universal einsetzbar für sämtliche Werkstoffe. 3-seitig schneidend; damit wird beim Schlitzfräsen eine genaue und saubere Oberfläche erzielt.

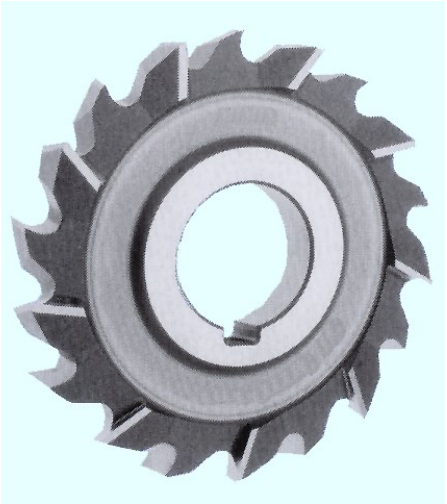
Best.-Nr. 1470... 1470b...	Ø	Breite	Bohrung	Z	1470	1470 B
Alu						
Alu Guss > 10% Si	○					
Stahl < 750N		●				
Stahl < 900N		●				
Stahl < 1400N		○				
INOX		○				
Uni-versal		●				
..0500160	50	1,6	16	22	102.60	150.10
..0500200	50	2	16	22	103.70	151.20
..0500250	50	2,5	16	22	108.00	154.40
..0500300	50	3	16	22	109.10	155.50
..0500350	50	3,5	16	22	128.50	176.00
..0630160	63	1,6	22	28	85.30	132.80
..0630200	63	2	22	28	82.10	128.50
..0630250	63	2,5	22	28	82.10	128.50
..0630300	63	3	22	28	84.20	130.70
..0630400	63	4	22	28	84.20	130.70
..0630500	63	5	22	28	91.80	139.30
..0800160	80	1,6	27	32	104.80	167.40
..0800200	80	2	27	32	99.40	163.10
..0800250	80	2,5	27	32	99.40	163.10
..0800300	80	3	27	32	104.80	167.40
..0800350	80	3,5	27	32	128.50	191.20
..0800400	80	4	27	32	114.50	177.10
..0800500	80	5	27	32	117.70	180.40
..0800600	80	6	27	32	128.50	371.50
..1000160	100	1,6	32	36	135.00	198.70
..1000200	100	2	32	36	128.50	191.20
..1000250	100	2,5	32	36	129.60	192.20
..1000300	100	3	32	36	132.80	194.40

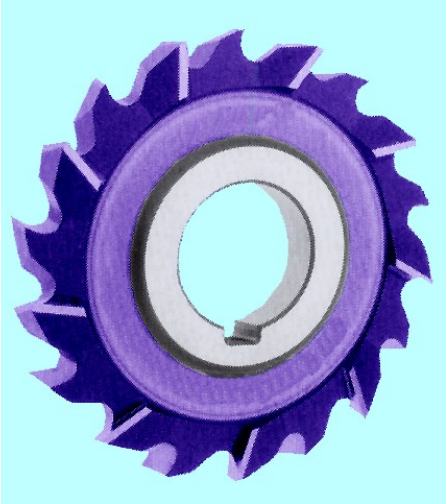
Best.-Nr. 1470... 1470b...	Ø	Breite	Bohrung	Z	1470	1470 B
Alu						
Alu Guss > 10% Si	○					
Stahl < 750N		●				
Stahl < 900N		●				
Stahl < 1400N		○				
INOX		○				
Uni-versal		●				
..1000350	100	3,5	32	36	165.20	227.90
..1000400	100	4	32	36	143.60	206.30
..1000500	100	5	32	36	154.40	217.10
..1000600	100	6	32	36	167.40	230.00
..1000800	100	8	32	36	205.20	268.90
..1250200	125	2	32	40	155.50	233.30
..1250250	125	2,5	32	40	162.00	238.70
..1250300	125	3	32	40	169.60	247.30
..1250350	125	3,5	32	40	178.20	256.00
..1250400	125	4	32	40	187.90	264.60
..1250500	125	5	32	40	209.50	286.20
..1250600	125	6	32	40	226.80	304.60
..1250800	125	8	32	32	289.40	366.10
..1251000	125	10	32	32	322.90	400.70
..1600200	160	2	40	48	245.20	372.60
..1600250	160	2,5	40	48	245.20	372.60
..1600300	160	3	40	48	239.80	368.30
..1600350	160	3,5	40	48	252.70	381.20
..1600400	160	4	40	48	251.60	379.10
..1600500	160	5	40	48	280.80	408.20
..1600600	160	6	40	48	298.10	424.40
..1600800	160	8	40	36	345.60	474.10
..1601000	160	10	40	36	387.70	515.20
..1601200	160	12	40	36	467.60	596.20

HSSE Scheibenfräser

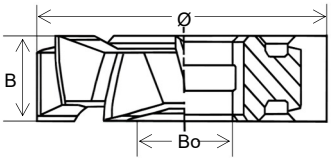
kreuzverzahnt

1480	1480 B	*TiAlN* beschichtet





TiAlN



- Universal einsetzbar für sämtliche Werkstoffe. Für tiefe Schlitze. 3-seitig schneidend.

	Alu ○	Alu Guss > 10% Si ○	Stahl < 750N ●	Stahl < 900N ●	Stahl < 1400N ○	INOX ○	Uni-versal ●	1480	1480 B
Best.-Nr. 1480... 1480b...	Ø	Breite	Bohrung	Z					
..0500400	50	4	16	10	83.20	122.00
..0500500	50	5	16	10	82.10	122.00
..0500600	50	6	16	10	85.30	125.30
..0500800	50	8	16	10	91.80	132.80
..0501000	50	10	16	10	99.40	140.40
..0630400	63	4	22	12	91.80	132.80
..0630500	63	5	22	12	95.00	135.00
..0630600	63	6	22	12	97.20	137.20
..0630800	63	8	22	12	108.00	146.90
..0631000	63	10	22	12	121.00	160.90
..0631200	63	12	22	12	127.40	166.30
..0800400	80	4	27	18	115.50	166.30
..0800500	80	5	27	14	121.00	175.00
..0800600	80	6	27	14	127.40	180.40
..0800800	80	8	27	14	130.70	185.80
..0801000	80	10	27	14	142.60	196.60
..0801200	80	12	27	14	154.40	208.40
..1000400	100	4	32	22	153.40	206.30

	Alu ○	Alu Guss > 10% Si ○	Stahl < 750N ●	Stahl < 900N ●	Stahl < 1400N ○	INOX ○	Uni-versal ●	1480	1480 B
Best.-Nr. 1480... 1480b...	Ø	Breite	Bohrung	Z					
..1000500	100	5	32	22	154.40	208.40
..1000600	100	6	32	16	165.20	218.20
..1000800	100	8	32	16	180.40	233.30
..1001000	100	10	32	16	198.70	251.60
..1001200	100	12	32	16	218.20	271.10
..1250600	125	6	32	24	233.30	299.20
..1250800	125	8	32	16	263.50	330.50
..1251000	125	10	32	16	263.50	330.50
..1251200	125	12	32	16	283.00	347.80
..1600600	160	6	40	26	358.60	467.60
..1600800	160	8	40	18	359.60	469.80
..1601000						
..1601200	160	12	40	18	420.10	530.30
..1601400	160	14	40	18	464.40	573.50
..2001200	200	12	40	22	640.40	804.60
..2001400	200	14	40	22	691.20	855.40
..2001600	200	16	40	22	745.20	898.60
..2002000	200	20	40	22	883.40	1047.60

HSSE - Co8 Schlitzfräser

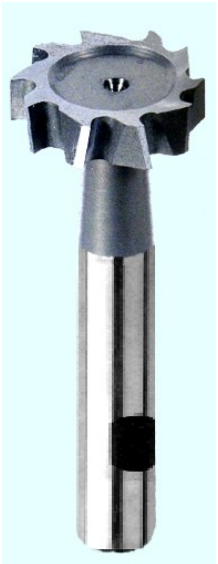
1482 W

1482 WB

TiAlN beschichtet

High - Flyer

- Universal einsetzbar, am Umfang schneidend, seitlich freigeschliffen, kreuzverzahnt.
- Höchstleistung mit **TiAlN** Beschichtung, speziell für schwer zerspanbare und rostfreie Stähle.



1482 W

1482 WB

Thermo Plast. Alu	Alu	Alu Guss > 10% Si	Stahl < 750N	Stahl < 900N	Stahl < 1400N	Stahl < 55HRC	INOX	Ti + Cu	GG (G)	Uni-versal
	○	○	●	●			●	○	○	●

Best.-Nr. 1482w... 1482wb...	Ø x B	Schaft-Ø	Gesamt-länge	Z	1482 W	1482 WB
..0750015	7,5 x 1,5	6	50	6	37.80	49.70
..0750020	7,5 x 2	6	50	6	37.80	49.70
..1050020	10,5 x 2	6	50	6	37.80	49.70
..1050025	10,5 x 2,5	6	50	6	37.80	49.70
..1050030	10,5 x 3	6	50	6	37.80	49.70
..1350020	13,5 x 2	10	56	8	44.30	57.20
..1350030	13,5 x 3	10	56	8	44.30	57.20
..1350040	13,5 x 4	10	56	8	44.30	57.20
..1650030	16,5 x 3	10	56	8	50.80	68.00
..1650040	16,5 x 4	10	56	8	50.80	68.00
..1650050	16,5 x 5	10	56	8	50.80	68.00
..1950030	19,5 x 3	10	56	8	58.30	83.20
..1950040	19,5 x 4	10	56	8	58.30	83.20
..1950050	19,5 x 5	10	56	8	58.30	83.20
..2250040	22,5 x 4	10	56	8	69.10	102.60
..2250050	22,5 x 5	10	56	8	69.10	102.60
..2250060	22,5 x 6	10	56	8	69.10	102.60
..2550040	25,5 x 4	10	56	8	78.80	121.00
..2550050	25,5 x 5	10	56	8	78.80	121.00
..2550060	25,5 x 6	10	56	8	78.80	121.00
..2550080	25,5 x 8	10	56	8	78.80	121.00
..2850060	28,5 x 6	10	56	8	91.80	133.90
..2850080	28,5 x 8	10	56	8	91.80	133.90
..3250060	32,5 x 6	10	56	10	109.10	164.20
..3250070	32,5 x 7	10	56	10	109.10	164.20
..3250080	32,5 x 8	10	56	10	109.10	164.20
..4550100	45,5 x 10	12	63	10	155.50	217.10

HSSE - Co8 - T - Nutenfräser

1483 W

1483 WB

TiAlN beschichtet

- am Umfang und seitlich schneidend
- kreuzverzahnt

High - Flyer

1483 W

1483 WB

Thermo Plast. Alu	Alu	Alu Guss > 10% Si	Stahl < 750N	Stahl < 900N	Stahl < 1400N	Stahl < 55HRC	INOX	Ti + Cu	GG (G)	Uni-versal
	○	○	●	●			●	○	○	●

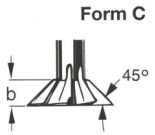
Best.-Nr. 1483w... 1483wb...	Ø x B	Schaft-Ø	Gesamt-länge	Z	1483 W	1483 WB
..1250060	12,5 x 6	10	57	6	60.00	74.50
..1600080	16 x 8	10	62	6	71.30	89.60
..1800080	18 x 8	12	70	6	81.00	101.50
..1900090	19 x 9	12	70	6	83.20	109.10
..2100090	21 x 9	12	74	6	81.00	121.00
..2200100	22 x 10	12	74	6	83.20	122.00
..2500110	25 x 11	16	82	6	95.00	135.00
..2800120	28 x 12	16	85	6	108.00	160.90
..3200140	32 x 14	16	90	8	126.40	186.80
..3600160	36 x 16	25	103	8	158.80	229.00
..4000180	40 x 18	25	108	8	203.00	289.40

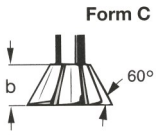
HSSE - Co8 Winkelfräser 45°/60°

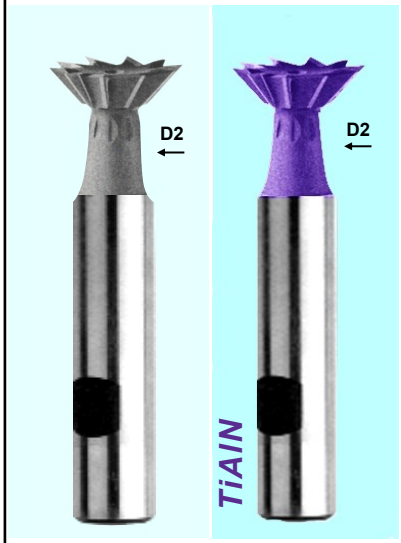
1484 W	1484 WB	1485 W	1485 WB
45°	*TiAlN*	60°	*TiAlN*

Form C

DIN 1833







1484 W	1484 WB	45°
1485 W	1485 WB	60°

- Form C am Umfang + stirnseitig schneidend
- Höchstleistung mit *TiAlN*- Beschichtung

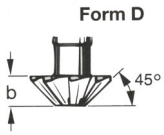
Thermo Plast. Alu	Alu	Alu Guss > 10% Si	Stahl < 750N	Stahl < 900N	Stahl < 1400N	Stahl < 55HRC	INOX	Ti + Cu	GG (G)	Uni-versal
○	○	○	●	●			●	○	○	●

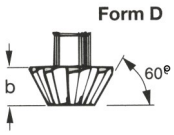
Best.-Nr. 1484w... 1484wb... 1485w... 1485wb...	Ø	Ø D2	Schneidenbreite 45°	Schneidenbreite 60°	Schaft-Ø	Ges.-länge	Z	1484 W 45°	1484 WB 45°	1485 W 60°	1485 WB 60°
..1600	16	6	4	6,3	12	60	10	43.20	56.20	43.20	56.20
..2000	20	7.8	5	8	12	63	10	49.70	59.40	49.70	59.40
..2500	25	9	6,3	10	16	67	10	62.60	87.50	62.60	87.50
..3200	32	15	8	12,5	16	71	12	94.00	125.30	94.00	125.30

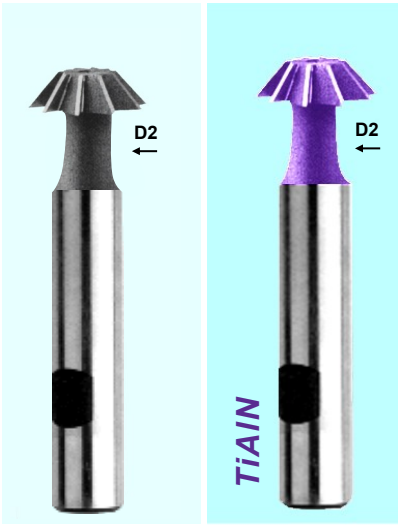
1486 W	1486 WB	1487 W	1487 WB
45°	*TiAlN* beschichtet	60°	*TiAlN* beschichtet

Form D

DIN 1833







1486 W	1486 WB	45°
1487 W	1487 WB	60°

- Form D nur am Umfang schneidend
- Höchstleistung mit *TiAlN* - Beschichtung

Thermo Plast. Alu	Alu	Alu Guss > 10% Si	Stahl < 750N	Stahl < 900N	Stahl < 1400N	Stahl < 55HRC	INOX	Ti + Cu	GG (G)	Uni-versal
○	○	○	●	●			●	○	○	●

Best.-Nr. 1486w... 1486wb... 1487w... 1487wb...	Ø	Ø D2	Schneidenbreite 45°	Schneidenbreite 60°	Schaft-Ø	Ges.-länge	Z	1486 W 45°	1486 WB 45°	1487 W 60°	1487 WB 60°
..1600	16	8.2	4	6,3	12	60	10	42.10	55.10	42.10	55.10
..2000	20	10.5	5	8	12	63	10	47.50	63.70	47.50	63.70
..2500	25	11.5	6,3	10	16	67	10	60.50	85.30	60.50	85.30
..3200	32	15	8	12,5	16	71	12	91.80	123.10	91.80	123.10

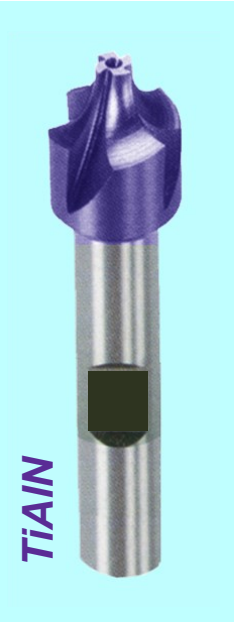
HSSE - Co8 - Viertelkreisfräser

1488 WR | 1488 WBR

TiAlN beschichtet

- Universal einsetzbar zum Kanten abrunden
- Höchstleistung mit **PLUS - FUTURE -** Beschichtung.

1488 WR



1488 WBR

Thermo Plast. Alu ○	Alu ○	Alu Guss > 10% Si ○	Stahl < 750N ●	Stahl < 900N ●	Stahl < 1400N	Stahl < 55HRC	INOX ○	Ti + Cu ○	GG (G) ○	Uni-versal ●	1488 WR	1488 WBR
Best.-Nr. 1488wr... 1488wbr...	R	Ø	Schaft-Ø	Gesamtlänge	Z						1488 WR	1488 WBR
..0100	1	8	10	60	4						44.30	51.80
..0150	1,5	9	10	60	4						57.20	65.80
..0200	2	10	10	60	4						44.30	51.80
..0250	2,5	11	10	60	4						57.20	71.30
..0300	3	12	12	60	4						49.70	63.70
..0350	3,5	13	12	60	4						68.00	82.10
..0400	4	14	12	60	4						56.20	70.20
..0450	4,5	15	12	60	4						73.40	91.80
..0500	5	16	12	60	4						60.50	78.80
..0550	5,5	19	16	67	4						77.80	96.10
..0600	6	20	16	67	4						65.90	84.20
..0650	6,5	21	16	71	4						90.70	99.40
..0700	7	22	16	71	4						91.80	110.20
..0750	7,5	23	16	71	4						95.00	113.40
..0800	8	24	16	71	4						83.20	113.40
..0850	8,5	28	20	85	4						116.60	145.80
..0900	9	28	20	85	4						108.00	137.20
..0950	9,5	28	20	85	4						113.40	137.20
..1000	10	28	25	85	4						113.40	137.20
..1050	10,5	32	25	90	4						133.90	165.20
..1100	11	32	25	90	4						133.90	165.20
..1200	12	34	25	90	4						133.90	165.20
..1400	14	44	25	100	6						178.20	217.10
..1500	15	46	25	100	6						234.40	273.20
..1600	16	48	25	100	6						259.20	300.20
..1800	18	52	32	112	6						283.00	340.20
..2000	20	56	32	112	6						334.80	392.00

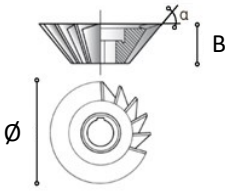
EUROPA TOOL

HSSE - Co - Winkelfräser

1490 45° 1491 60°

1490 B 45° 1491 B 60°

Alu	Alu Guss >	Stahl <	Stahl <	Stahl <	INOX	Uni-versal
○	○	●	●	○	○	●



Best.-Nr. 1490... 1490b...	Ø	Winkel a ± 25´	Breite B	Boh-rung	Zähne	1490	1490 B
..05000	50	45°	13	13	16	149.00	206.30
...06300	63	45°	18	16	16	198.70	259.20
..08000	80	45°	22	22	18	311.00	382.30
..10000	100	45°	28	28	20	531.40	612.40

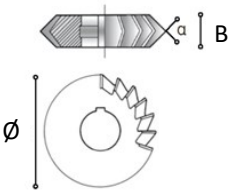
Best.-Nr. 1491... 1491b...	Ø	Winkel a ± 25´	Breite B	Boh-rung	Zähne	1491	1491 B
..05000	50	60°	16	13	16	149.00	206.30
..06300	63	60°	20	16	16	198.70	259.20
..08000	80	60°	25	22	18	311.00	382.30
..10000	100	60°	32	27	20	531.40	612.40

HSSE - Co - Prismenfräser

1493 45° 1494 60° 1495 90°

1493B 45° 1494B 60° 1495B 90°

Alu	Alu Guss >	Stahl <	Stahl <	Stahl <	INOX	Uni-versal
○	○	●	●	○	○	●



Best.-Nr. 1493... 1493b...	Ø	Winkel a ± 25´	Breite B	Boh-rung	Zähne	1493	1493 B
..05000	50	45°	8	16	16	125.30	177.10
..06300	63	45°	10	22	18	168.50	214.90
..08000	80	45°	12	27	18	252.70	324.00
..10000	100	45°	18	32	20	362.90	453.60

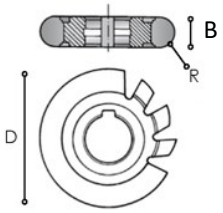
Best.-Nr. 1494... 1494b...	Ø	Winkel a ± 25´	Breite B	Boh-rung	Zähne	1494	1494 B
..05000	50	60°	10	16	16	135.00	185.80
..06300	63	60°	14	22	18	179.30	246.20
..08000	80	60°	18	27	18	259.20	330.50
..10000	100	60°	25	32	20	395.30	505.40

Best.-Nr. 1495... 1495b...	Ø	Winkel a ± 25´	Breite B	Boh-rung	Zähne	1495	1495 B
..05000	50	90°	14	16	16	140.40	193.30
..06300	63	90°	20	22	18	192.20	259.20
..08000	80	90°	22	27	18	285.10	358.60
..10000	100	90°	32	32	20	425.50	570.20

HSSE - Co - Halbkreisfräser, konvex

1497 | 1497 B

Alu	Alu Guss >	Stahl <	Stahl <	Stahl <	INOX	Uni-versal
○	○	●	●	○	○	●

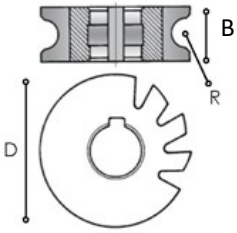


Best.-Nr. 1497... / 1497b...	Radius	Ø	Breite B	Bohrung	Zähne	1497	1497 B
..0100	1	50	2	16	14	109.10	154.40
..0150	1.5	50	3	16	14	144.50	165.20
..0200	2	50	4	16	14	116.60	168.50
..0250	2.5	63	5	22	12	125.30	173.90
..0300	3	63	6	22	12	130.70	177.12
..0350	3.5	63	7	22	12	151.20	202.00
..0400	4	63	8	22	12	156.60	212.80
..0450	4.5	63	9	22	12	165.20	220.30
..0500	5	63	10	22	12	172.80	227.90
..0550	5.5	80	11	27	12	202.00	257.00
..0600	6	80	12	27	12	202.00	259.20
..0800	8	80	16	27	12	245.20	308.90
..1000	10	100	20	32	12	325.10	428.80

HSSE - Co - Halbkreisfräser, konkav

1499 | 1499 B

Alu	Alu Guss >	Stahl <	Stahl <	Stahl <	INOX	Uni-versal
○	○	●	●	○	○	●



Best.-Nr. 1499... / 1499b...	Radius	Ø	Breite B	Bohrung	Zähne	1499	1499 B
..0100	1	50	6	16	14	139.30	180.40
..0150	1.5	50	8	16	14	145.80	192.20
..0200	2	50	9	16	14	143.60	194.40
..0250	2.5	63	10	22	12	149.00	198.70
..0300	3	63	12	22	12	169.60	220.30
..0400	4	63	16	22	12	204.10	272.20
..0500	5	63	20	22	12	232.20	306.70
..0600	6	80	24	27	12	287.30	374.80
..0800	8	80	32	27	12	422.30	518.40
..1000	10	100	36	32	12	561.60	690.10