












































**Symbole für Fräswerkzeuge**  
 **Icônes pour fraises**  
**Icons for endmills**

<b>Types</b>	Kühlkanal conduites d'huile internal cooling		Anzahl Schneiden Z Numéro dents Z Number of teeth Z		
<b>Normen Normes Standards</b>	 		Werksnorm Norme usine Factory standard		
<b>Werkzeug-Material Matériaux d'outils Tool material</b>	Schnellarbeitsstahl Aciers rapid High Speed Steel		Kobalt leg. Schnellstahl Acier rapide allié de cobalt High speed Cobalt Steel	 	Hartmetall Feinstkorn Métal dur grain fin Carbide Microfin 
	Pulver-Schnellarbeitsstahl Aciers rapid de poudre High Speed Powder Steel	  	Schnellstahl/Hartmetall Acier rapide/métal dur High Speed Steel/Carbide		
<b>Beschichtung Revêtement Coating</b>	Blank Blanche Bright		Dampf angelassen Vapeuriser Steam tempered		Acrona Pro 
	Bronze Bronze Bronze		Titanium Nitrid Titane Nitride Titanium nitride		Helica 
	X.CEED		Futura(TIALN)		Titancarbonitrid MP Titanium Carbo Nitride MP Titanium Carbo Nitride MP 
	ALUMASTAR		CromNitrid Cromium Nitride Chromium Nitride		Vorbearbeitung Oberfläche préparation de la surface Surfac preparation 
	Diamant Diamant Diamond		Hardlupe		Eckenbehandlung Traitement du chanfrein Edge Treatment 
	TitaniumCarboNitrid TitaneCarboNitride Titanium Carbo Nitride				
<b>Schrupp-Profile Profils d'ébauche Profiles roughing</b>	Standards Standards Standards	  			Werksnorm Normes d'usine Factory standards 
<b>Toleranz Schaft Tolérance tige Shank tolerance</b>	IT.Toleranzwert Valeur de tol. IT Tol. Value IT	  			
<b>Anwendungsbereich Types d'application Application types</b>	Nutenfräsen Rainurage Slotting	 	Schruppen/Schlichten Ébaucher, finir Roughing, Finishing		
	Radius-Fräsen à bout hémisph. Ball nose		Eckenradius-Berab. Contourner à radius Corner rounding		
<b>Schaft Tiege Shank</b>	Zylindrisch(HA) Cylindrique(HA) Straight Shank(HA)		Wekldon Spannfläche (HB) à tiege weldon (HB) Flatted Shank Weldon (HB)		

2.WedevagKON\_2015



Einzahnfräser

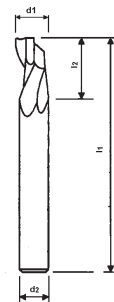
Fraises à un dent

Mill with 1 tooth

2505..

Werkstoff matières	Schneidentyp Type de dent	Spanwinkel Angle de coupe	Spiralwinkel Angle hélice	Schneiden dents	Länge longueur	Haupteinsatz appl.princip.	Norm standard	Norm Schaft stand.queue	Weitere Ang. autres spec.
HSS-Co5	N	20°	30°	1	<b>mittel moyenne</b>	<b>Nuten rainures</b>	<b>Werk usine</b>	<b>DIN 1835A ISO 3338</b>	

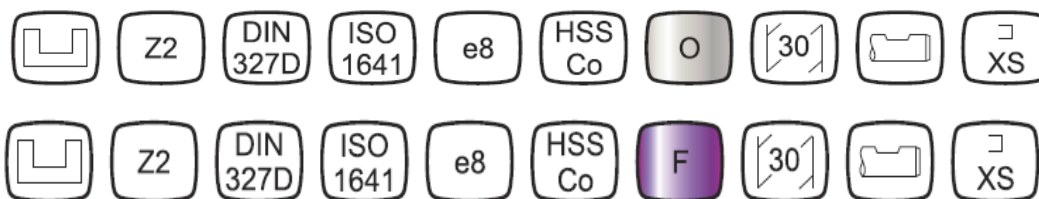
Zu bearbeitendes Material / matières applicables: HRC < 42 ALU CU Plastic D2505.200



Best.Nr./order no.						Best.Nr./order no.							
d1	d2	l2	l1	Z	no. cde.	CHF	d1	d2	l2	l1	Z	no. cde.	CHF
3.0	8.0	12	60	1	2505. 040	26.80	7.0	8	14	60	1	2505. 070	28.65
4.0	8.0	12	60	1	2505. 040	26.80	8.0	8	14	80	1	2505. 080	28.65
4.0	8.0	12	100	1	2505L. 040	67.85	8.0	8	14	120	1	2505.L 080	42.85
5.0	8.0	12	60	1	2505. 050	26.80	9.0	8	14	80	1	2505. 090	38.90
6.0	8.0	14	60	1	2505. 060	28.65	10.0	10	14	80	1	2505. 100	38.90
6.0	8.0	14	100	1	2505L. 060	48.00	10.0	10	14	120	1	2505L. 100	45.50
2.505215							12.0	12	14	80	1	2505. 120	43.05

Nutenfräser, zwei Schn. Fraises à rainurer, 2 dts. Slotting end mills, 2 teeth  
kurz court. short

2504..  
250410..  
(FUTURA TIALN)



2.504215		HSS-Co		Futura (TIALN)		HSS-Co		Futurat (TIALN)					
d1	d2	l2	l1	Z	Best.Nr. 2504.. order no.	Best.Nr. 250410.. order no.	d1	d2	l2	l1	Z	Best.Nr. 2504.. order no.	Best.Nr. 250410.. order no.
1.0	6	2.5	47	2	2504. 010	250410.010	13.0	12	16	73	2	2504. 130	250410.130
1.5	6	3	47	2	2504. 015	250410.015	13.5	12	16	73	2	2504. 135	250410.135
2.0	6	4	48	2	2504. 020	250410.020	14.0	12	16	73	2	2504. 140	250410.140
2.5	6	5	49	2	2504. 025	250410.025	14.5	12	16	73	2	2504. 145	250410.145
3.0	6	5	49	2	2504. 030	250410.030	15.0	12	16	73	2	2504. 150	250410.150
3.5	6	6	50	2	2504. 035	250410.035	15.5	16	19	79	2	2504. 155	250410.155
4.0	6	7	51	2	2504. 040	250410.040	16.0	16	19	79	2	2504. 160	250410.160
4.5	6	7	51	2	2504. 045	250410.045	16.5	16	19	79	2	2504. 165	250410.165
5.0	6	8	52	2	2504. 050	250410.050	17.0	16	19	79	2	2504. 170	250410.170
5.5	6	8	52	2	2504. 055	250410.055	17.5	16	19	79	2	2504. 175	250410.175
6.0	6	8	52	2	2504. 060	250410.060	18.0	16	19	79	2	2504. 180	250410.180
6.5	10	10	60	2	2504. 067	250410.065	18.5	16	19	79	2	2504. 180	250410.185
7.0	10	10	60	2	2504. 071	250410.070	19.0	16	19	79	2	2504. 190	250410.190
7.5	10	11	60	2	2504. 076	250410.075	19.5	20	22	88	2	2504. 195	250410.195
8.0	10	11	61	2	2504. 081	250410.080	20.0	20	22	82	2	2504. 202	250410.200
8.5	10	11	61	2	2504. 085	250410.085	22.0	20	22	88	2	2504. 220	250410.220
9.0	10	11	61	2	2504. 090	250410.090	24.0	25	26	102	2	2504. 240	250410.240
9.5	10	11	61	2	2504. 095	250410.095	25.0	25	26	102	2	2504. 250	250410.250
10.0	10	13	63	2	2504. 100	250410.100	26.0	25	26	102	2	2504. 260	250410.260
10.5	10	13	70	2	2504. 105	250410.105	28.0	25	26	102	2	2504. 280	250410.280
11.0	12	13	70	2	2504. 110	250410.110	30.0	25	26	102	2	2504. 300	250410.300
11.5	12	13	73	2	2504. 115	250410.115	32.0	32	32	112	2	2504. 323	250410.320
12.0	12	16	73	2	2504. 120	250410.120	36.0	32	32	112	2	2504. 360	250410.360
12.5	12	16	73	2	2504. 125	250410.125	40.0	40	38	130	2	2504. 404	250410.400



**2507..(HSS-Co)**

**Nutenfräser mittel,  
Z=2**

**Fraise à rainurer moy-  
enne, Z=2**

**Slotting end mills,  
medium, Z=2**



2.507215							2507..		2507..								
d1	x	d2	%	l2	l1	z	Best.Nr.	CHF	d1	x	d2	%	l2	l1	z	Best.Nr.	CHF
e8		h6					no.cde./ord.no.		e8		h6					no.cde./ord.no.	
2.5*	x	6	8%	8	52	2	2507.025	19.10	7.0	x	10	8%	16	80	2	2507.071	29.70
3.0	x	6	8%	8	56	2	2507.030	20.00	7.5*	x	8	8%	19	63	2	2507.075	20.20
3.5*	x	6	8%	10	54	2	2507.035	23.30	9.0	x	10	8%	19	69	2	2507.090	28.90
4.0*	x	6	8%	11	55	2	2507.040	19.10	10	x	10	8%	22	72	2	2507.100	23.70
4.5*	x	6	8%	11	55	2	2507.045	25.90	14	x	12	8%	26	110	2	2507.100	23.70
5.0	x	6	8%	13	68	2	2507.050	19.10	16*	x	16	8%	32	92	2	2507.160	49.30
5.5*	x	6	8%	13	57	2	2507.055	22.10	17*	x	16	8%	32	92	2	2507.170	62.80
6.0*	x	6	8%	13	57	2	2507.060	19.30	18*	x	16	8%	32	92	2	2507.180	56.50

\* solange Vorrat, jusqu'à l'épuisement du stock, as long as stock lasts

**250710..Futura(TIALN)**

**Nutenfräser mittel, Z=2  
Futura(TIALN) be-  
schichtet**

**Fraises à rainurer,  
moyenne, Z=2, revête-  
ment Futura (TIALN)**

**Slotting end mills, me-  
dium, Z=2, Futura  
(TIALN) coated**



2.50710215							250710..	
d1	x	d2	% Co	l2	l1	z	Best.Nr.	CHF
e8		h6					no.cde./ord.no.	
3.0	x	6	8%	8	56	2	250710.030	20.00
5.0	x	6	8%	13	68	2	250710.050	19.10
8.0	x	10	8%	19	88	2	250710.075	20.20
9.0	x	10	8%	19	88	2	250710.090	28.90
10.0	x	10	8%	22	95	2	250710.090	28.90
12.0	x	12	8%	26	110	2	250710.100	23.70
14.0	x	12	8%	26	110	2	250710.100	23.70
18.0	x	16	8%	32	123	2	250710.180	56.50
20.0	x	20	8%	38	141	2	250710.200	56.50

Einwegsparfräser

Fraiser à jeter

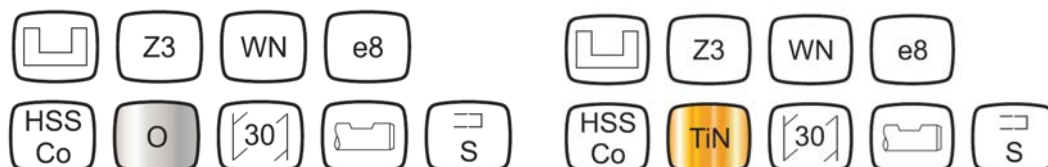
Disposable mills

2512TA..  
2512TATIN..



Kurze Sorte / série courte / short serie

D [mm]	D1 Schaft queue shank	I Schnitt coupe cut	L Total totale total	HSS-Co Best.Nr. 2512TA.. no.cde. order no.	CHF	HSS-Co-TIN Best.Nr. 2512TATIN.. no.cde. order no.	CHF
2512TA215							
1.0	6	2	34	2512TA. 010	22.50	2512TATIN. 010	33.40
1.5	6	3	34	2512TA. 015	22.10	2512TATIN. 015	33.40
2.0	6	4	35	2512TA. 020	14.90	2512TATIN. 020	27.70
2.5	6	5	36	2512TA. 025	14.90	2512TATIN. 025	27.70
3.0	6	5	36	2512TA. 030	14.90	2512TATIN. 030	27.70
3.5	6	6	37	2512TA. 035	14.90	2512TATIN. 035	27.70
3.8*	6	7	38	2512TA. 038*	15.00	2512TATIN. 038*	19.10
4.0	6	7	38	2512TA. 040	14.90	2512TATIN. 040	27.70
4.5	6	7	38	2512TA. 045	14.90	2512TATIN. 045	27.70
5.0	6	8	39	2512TA. 050	14.90	2512TATIN. 050	27.70
5.5	6	8	39	2512TA. 055	14.90	2512TATIN. 055	27.70
5.8*	6	8	39	2512TA. 058	15.00	2512TATIN. 055*	19.10
6.0	6	8	39	2512TA. 060	14.90	2512TATIN. 060	27.70
6.5	8	10	50	2512TA. 065	18.80	2512TATIN. 065	33.60
7.0	8	10	42	2512TA. 070	18.80	2512TATIN. 070	33.60
7.5	8	10	42	2512TA. 075	18.80	2512TATIN. 075	33.60
8.0	8	11	43	2512TA. 080	18.80	2512TATIN. 080	33.60
9.0	10	11	48	2512TA. 090	20.70	2512TATIN. 090	36.80
9.5*	10	13	50	2512TA. 100	15.20	2512TATIN. 100*	27.10
10.0	10	13	50	2512TA. 100	20.70	2512TATIN. 100	36.80
12.0	12	16	58	2512TA. 120	23.50	2512TATIN. 120	42.00



2513TA..  
2513TATIN..

Mittlere Sorte / série moyenne / Medium serie

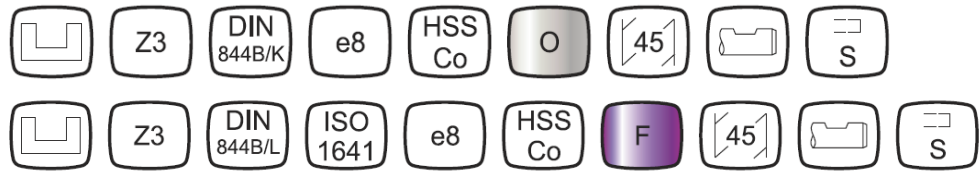
D [mm]	D1 Schaft queue shaft	I Schnitt coupe cut	L Total totale total	HSS-Co Best.Nr. 2513TA.. no.cde. order no.	CHF	HSS Co-TIN Best.Nr. 2513TATIN.. no.cde. order no.	CHF
2.513TA215							
2.0	6	7	38	2513TA. 020	16.10	2513TATIN. 020	28.60
2.5	6	6	40	2513TA. 025	16.10	2513TATIN. 025	28.60
3.0	6	7.5	40	2513TA. 030	16.10	2513TATIN. 030	28.60
3.5	6	8.5	40	2513TA. 035	16.10	2513TATIN. 035	28.60
4.0	6	9.5	47	2513TA. 040	16.10	2513TATIN. 040	28.60
4.5	6	11	47	2513TA. 045	16.10	2513TATIN. 045	28.60
5.0	6	12	47	2513TA. 050	16.10	2513TATIN. 050	28.60
5.5	6	14	47	2513TA. 055	16.10	2513TATIN. 055	28.60
6.0	6	16	47	2513TA. 060	16.10	2513TATIN. 060	28.60
6.5	10	16	60	2513TA. 065	19.80	2513TATIN. 065	35.20
7.0	10	16	60	2513TA. 070	19.80	2513TATIN. 070	35.20
7.5	10	18	60	2513TA. 075	19.80	2513TATIN. 075	35.20
8.0	10	19	60	2513TA. 080	19.80	2513TATIN. 080	35.20
9.0	10	20	70	2513TA. 090	20.80	2513TATIN. 090	37.50
9.5*	10	22	70			2513TATIN. 095	28.80
10.0	10	22	70	2513TA. 100	20.80	2513TATIN. 100	37.50
18.0*	20	40	105	2513TA. 180	67.10		



\* solange Vorrat / jusqu'à épuisement du stock / as long stock lasts

**2512.. HSS-CO  
251210..Futura(TIALN)**

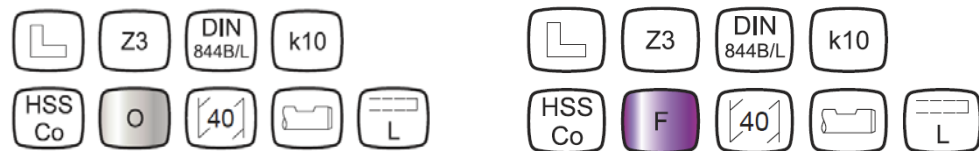
**Nutenfräser, mittel, z=3 *Fraises à rainurer, 3- dents* Slotting end mill, z = 3**



d1e8	d2h6	l2	l1	Z	Best. N 2512.. no.cde.HSSCO	CHF	Best.Nr. 251210.. no.cde.TIALN	CHF	d1e8	d2 h6	l2	l1	Z	Best.Nr. 2512.. no.cde.HSSCO	CHF	Best.Nr. 251210.. no.cde.TIALN	CHF
2.512215																	
3.0	6	8	52	3	2512.030	19.70	251210.030	32.40	9.5	10	22	72	3	2512.095	28.90	251210.095	49.40
3.5	6	10	54	3	2512.036	24.60	251210.035	38.40	10.0	10	22	72	3	2512.100	24.50	251210.100	44.80
4.0	6	11	55	3	2512.040	19.70	251210.040	32.40	11.0	12	22	79	3	2512.110	34.40	251210.110	58.10
4.5	6	11	55	3	2512.046	23.90	251210.045	36.30	12.0	12	26	83	3	2512.120	28.90	251210.120	50.60
5.0	6	13	57	3	2512.050	18.80	251210.050	32.40	14.0	12	26	83	3	2512.140	36.20	251210.140	66.20
5.5	6	13	57	3	2512.055	23.10	251210.055	35.40	16.0	16	32	92	3	2512.160	44.90	251210.160	72.80
6.0	6	13	57	3	2512.060	18.10	251210.060	29.20	18.0	16	32	92	3	2512.180	54.80	251210.180	88.60
6.5	10	16	66	3	2512.066	33.20	251210.065	38.40	20.0	20	38	104	3	2512.200	64.10	251210.200	110.30
7.0	10	16	66	3	2512.071	29.60	251210.070	32.40	22.0	20	38	104	3	2512.220	88.20		
7.5	10	19	69	3	2512.076	30.70	251210.075	35.40	24.0	25	45	121	3	2512.240	133.30		
8.0	10	19	69	3	2512.081	24.60	251210.080	29.20	25.0	25	45	121	3	2512.250	117.60	251210.250	169.10
8.5	10	19	69	3	2512.085	34.00	251210.085	47.30	32.0	32	53	133	3	2512.323	198.60	251210.320	259.40
9.0	10	19	69	3	2512.090	30.60	251210.090	49.50									

**2513N..  
2513N10..(Futura)**

**Nutenfräser lang *Fraises à rain., longue* Slotting end mill long**



D [mm]	d Schaft queue shaft	l2 Schnitt coupe cut	l1 Total totale total	HSS-Co Best.Nr. 2513N.. no.cde. order no.	CHF	HSSCO-Futuro Best.Nr. 2513N10.. no.cde. order no.	CHF
2.513N215							
4.0	6	19	63	2513N.040	22.30	2513N10.040	32.30
5.0	6	24	68	2513N.050	22.30	2513N10.050	32.30
6.0	6	24	68	2513N.060	19.90	2513N10.060	29.90
8.0	10	38	88	2513N.080	24.50	2513N10.080	34.50
10.0	10	45	95	2513N.100	28.10	2513N10.100	38.10
12.0	12	53	110	2513N.120	36.20	2513N10.120	46.20
14.0	12	53	110	2513N.140	50.30	2513N10.140	60.30
16.0	16	63	123	2513N.160	55.40	2513N10.160	65.40
18.0	16	63	123	2513N.180	69.90	2513N10.180	79.90
20.0	20	75	141	2513N.200	79.20	2513N10.200	89.20

Schruppfräser extra kurz, *Fraises d'ébauche extra courtes*, Z=3

Roughing mills, extra short, Z=3

20513TA.. HSS-Co  
20513TATN..TIN



2.0513TA116					HSS-Co8	
d1 e8	d2 h6	l2	l1	Z	Best.Nr. 20513TA.. no. cde. order no.	CHF
6,0	6	13	44	3	20513TA. 060	28,80
7,0	8,0	16	60	3	20513TA. 070	35,90
8,0	8,0	19	51	3	20513TA. 080	35,90
9,0	10,0	19	56	3	20513TA. 090	39,50
10,0	10,0	22	59	3	20513TA. 100	39,50

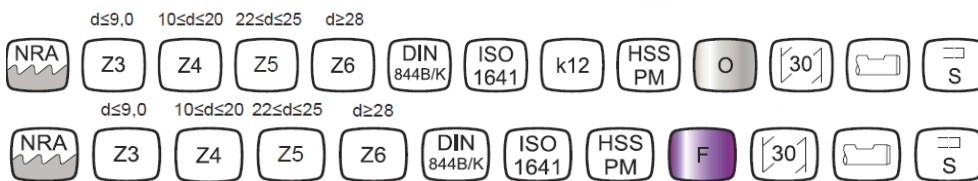


Schruppfräser mittel, 3-lip-pig, mit Zentrumsschnitt

*Fraises d'ébauche, moy., Z=3, coupe au centre*

Roughing mill, medium, Z=3, center cut

2514.. HSS-Co  
251410..Futura (TIALN)



2.514116					HSS-Co		Futura TIALN	
d1 k 12	d2 h6	l2	l1	Z	Bst.Nr. 2514.. no. cde. order no.	CHF	Bst.Nr. 251410.. no. cde. order no.	CHF
6,0	6	13	57	4	2514. 060	45,60	251410. 060	52,40
7,0	8	16	66	4	2514. 070	48,70	251410. 070	60,20
8,0	8	19	69	4	2514. 080	44,10	251410. 080	55,70
9,0	10	19	69	4	2514. 090	52,90	251410. 090	63,90
10,0	10	22	72	4	2514. 100	43,50	251410. 100	55,10
12,0	10	26	83	4	2514. 120	56,50	251410. 120	68,90
13,0	10	26	83	4	2514. 130	76,20		
14,0	14	26	83	4	2514. 140	61,40	251410. 140	78,10
15,0	12	26	83	4	2514. 150	89,10		
16,0	16	32	92	4	2514. 160	75,10	251410. 160	103,80
17,0	16	32	92	4	2514. 170	87,50		
18,0	18	32	92	4	2514. 180	80,00	251410. 180	112,30
19,0	18	32	92	4	2514. 190	115,00		
20,0	20	38	104	4	2514. 200	98,20	251410. 200	129,10
22,0	20	38	104	5	2514. 220	114,10	251410. 220	140,20
25,0	25	45	121	5	2514. 250	139,80	251410. 250	175,00
25,0 *	25	45	121	5	2514. 256	80,00		
28,0	25	45	121	6	2514. 280	164,40	251410. 280	200,30
30,0	25	45	121	6	2514. 300	192,70	251410. 300	231,30
32,0	32	53	133	6	2514. 320	197,60	251410. 320	240,80
36,0	32	53	133	6	2514. 360	260,30	251410. 360	317,70
40,0	32	63	155	6	2514. 400	316,70	251410. 400	404,40

\* ohne Weldon/sans Weldon/without Weldon



Schruppfräser mittel, Z=3-6, feine Rillenteilung HR, Zentrums Schnitt

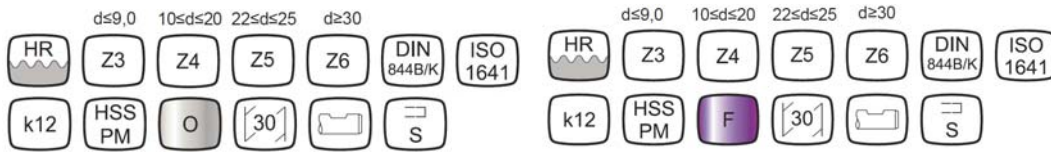
*Fraises d'ebauche, moyenne 3-6 dents, pas fin HR, coupe au centre*

Roughing end mill medium, Z=3-6, fine pitch HR and center cut

**2514LF..HSS-Co**

**2514GR.LF..Futura TIALN**

**251450..Granit-Dry PM**



d1	d2h6	I2	I2	Z	HSS-Co		Futura TIALN		Granit-Dry PM	
js14	Schaft	Schnitt	Total	Zähne	Best.Nr. 2514LF..		Best.Nr. 2514GR.LF..		Best.Nr. 251450..*	
	queue	coupe	totale	dents	no. cde.		no. cde.		no. cde.	
2.514LF112	shaft	cut	total	teeth	order no.	CHF	order no.	CHF	order no.	CHF
6.0	6	13	57	3	2514LF. 060	36.20	2514GR.LF. 060	43.60	251450. 060	45.70
7.0	8	16	60	3	2514LF. 070	48.20	2514GR.LF. 070	71.10	251450. 070	52.90
8.0	8	19	63	3	2514LF. 080	41.40	2514GR.LF. 080	51.70	251450. 080	55.80
9.0	10	19	69	3	2514LF. 090	54.40	2514GR.LF. 090	72.60	251450. 090	77.90
10.0	10	22	72	4	2514LF. 100	45.90	2514GR.LF. 100	58.30	251450. 100	58.70
11.0	12	22	79	4					251450. 110	79.20
12.0	12	26	83	4	2514LF. 120	51.60	2514GR.LF. 120	61.10	251450. 120	70.40
13.0	12	26	83	4					251450. 130	93.60
14.0	14	26	83	4	2514LF. 140	57.50	2514GR.LF. 140	92.50	251450. 140	95.50
15.0	12	26	83	4					251450. 150	108.50
16.0	16	32	92	4	2514LF. 160	68.70	2514GR.LF. 160	82.60	251450. 160	97.70
17.0	16	32	92	4					251450. 170	132.00
18.0	18	32	92	4	2514LF. 180	79.40	2514GR.LF. 180	114.50	251450. 180	132.00
20.0	20	38	104	4	2514LF. 200	91.30	2514GR.LF. 200	107.20	251450. 200	142.70
22.0	20	38	104	5	2514LF. 220	124.80	2514GR.LF. 220	162.00		
25.0	25	45	121	5	2514LF. 250	146.70	2514GR.LF. 250	172.50	251450. 250	227.20
28.0	25	45	121	4	2514LF. 280	195.90	2514GR.LF. 280	256.10		
30.0	25	45	121	6	2514LF. 300	204.90	2514GR.LF. 300	262.30		
32.0	32	53	133	6	2514LF. 320	209.90	2514GR.LF. 320	260.40	251450. 320	327.50

\* solange Vorrat / jusqu'a epuisement du stock/ sa long sotcl lasts

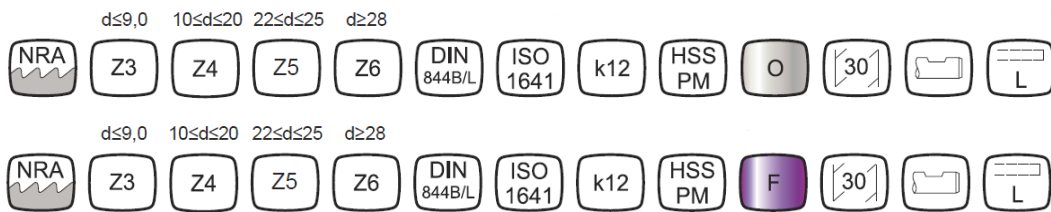


Schruppfräser lang 4-6 lippig

*Fraises d'ebauche longues, 4-6 dents*

Rouging endmill, long 4-6 teeth

**2514L...**  
**2514L10...**



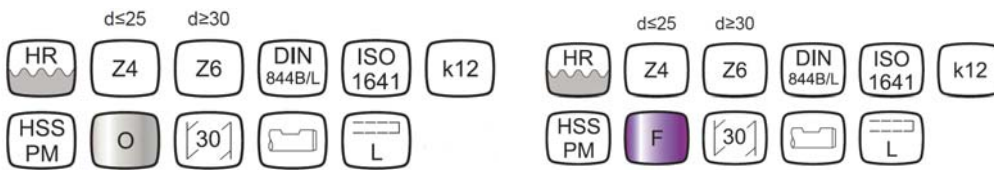
d1	d2	I2	I2	Z	HSS-Co		Futura TIALN 2514L215	
Durchm.	Schaft	Schnitt	Total	Zähne	Best.Nr.2514L..		Best.Nr.2514L10..	
diamètre	queue	coupe	totale	dents	no. cde.		no. cde.	
diameter	shaft	cut	total	teeth	order no.	CHF	order no.	CHF
8.0	10	38	88	4	2514L. 081	66.90	2514L10. 080	82.00
10.0	10	45	95	4	2514L. 100	72.70	2514L10. 100	96.80
12.0	12	53	110	4	2514L. 120	81.00	2514L10. 120	101.80
14.0	14	53	110	4	2514L. 140	86.70	2514L10. 140	111.50
16.0	16	63	123	4	2514L. 160	107.10	2514L10. 160	134.30
18.0	18	63	123	4	2514L. 180	113.20	2514L10. 180	148.60
20.0	20	75	141	4	2514L. 200	142.10	2514L10. 200	184.10
22.0	20	75	141	4	2514L. 220	179.20	2514L10. 220	222.90
25.0	25	90	166	5	2514L. 250	211.70	2514L10. 250	274.80
28.0	25	90	166	5	2514L. 280	222.40	2514L10. 280	319.40
30.0	30	90	166	5	2514L. 300	274.40	2514L10. 300	381.90
32.0	32	106	186	5	2514L. 320	291.60	2514L10. 320	373.90
36.0	32	106	186	5	2514L. 360	324.70	2514L10. 360	388.00
40.0	32	125	217	6	2514L. 400	453.00	2514L10. 400	498.00





Schruppfräser lang, 4/6 lipp. *Fraises d'ebauche, long., 4/6 dts, pas fin HR, c. au cen.* Roughing end mill long, Z=4-6, fine pitch HR, centre cut

**251475..HSS-CO**  
**251480..Futura TIALN**



2.51475215		Best.Nr. 251475..					Best.Nr. 251480..				
d1	d2	l2	l1	Z	no. cde.	<b>HSS-CO</b>	no. cde.	<b>Futura TIALN</b>	Z		
js14	h6				order no.	CHF	order no.	CHF			
<b>10.0</b>	10	45	95	4	251475. 100	<b>59.40</b>	251480. 100	<b>72.60</b>	4		
<b>12.0</b>	12	53	110	4	251475. 120	<b>75.40</b>	251480. 120	<b>83.80</b>	4		
<b>14.0</b>	12	53	110	4			251480. 140	<b>91.60</b>	4		
<b>16.0</b>	16	63	123	4	251475. 160	<b>107.60</b>	251480. 160	<b>113.30</b>	4		
<b>18.0</b>	16	63	123	4	251475. 180	<b>112.30</b>					
<b>20.0</b>	20	75	141	4	251475. 200	<b>141.80</b>					
<b>25.0</b>	25	90	166	4	251475. 250	<b>207.20</b>	251480. 250	<b>231.00</b>	4		
<b>30.0</b>	25	90	166	6	251475. 300	<b>249.50</b>	251480. 300	<b>312.00</b>	6		
<b>32.0</b>	32	106	186	6	251475. 320	<b>299.60</b>					

