

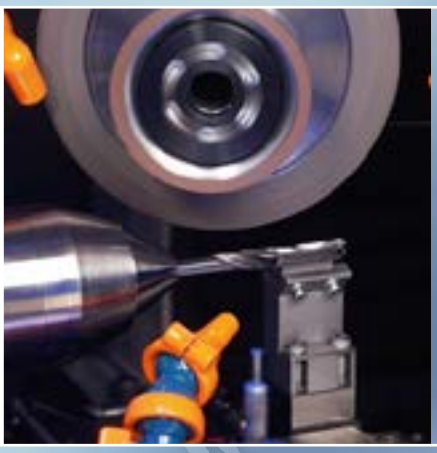

Spiralbohrer
Foret hélicoïdal
Punta elicoidale
Twist drill

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SPHINX
Your partner

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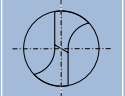
	50814	6	ø 2.00–20.00		VHM MD/SC		
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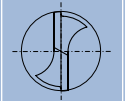
	50830	8	ø 0.30–20.00	–5xd	VHM MD/SC		
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✓ hervorragend
remarquablement
ottimo
outstanding

✓ gut
bien
bene
well

St	St <1000 N/mm²	St >1000 N/mm²	Inox martensit	Inox austenit	EN-GJL EN-GJS	Al <9% Si	Al >9% Si	Ti	CuZn	CuSn	Cu	Kunststoff Plastic	Au	Ag
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
✓					✓	✓	✓		✓	✓		✓		
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		

NC-Anbohrer 90°

Foret à pointer CNC 90°
Punta a centrare CNC 90°
NC spotting drill 90°

Art. 50810

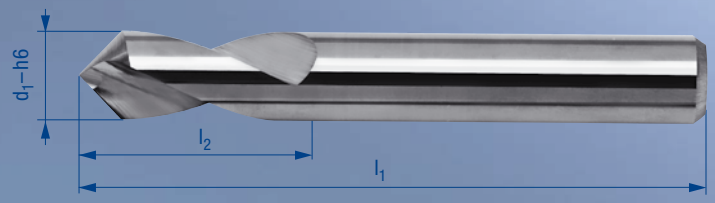
St

Inox

EN-GJL
EN-GJS

Al

CuZn



VHM
MD/SC

SPHINX
NORM

Z
2

Vc => S./p. 10

d_1 mm	l_2 mm	l_1 mm
2.00	8.5	25
3.00	9.5	32
4.00	10.5	40
5.00	16.0	50
6.00	16.0	50
8.00	20.0	60
10.00	22.0	70
12.00	22.0	70
14.00	25.0	75
16.00	25.0	75
20.00	35.0	75

NC-Anbohrer 120°

Foret à pointer CNC 120°
Punta a centrare CNC 120°
NC spotting drill 120°

Art. 50812

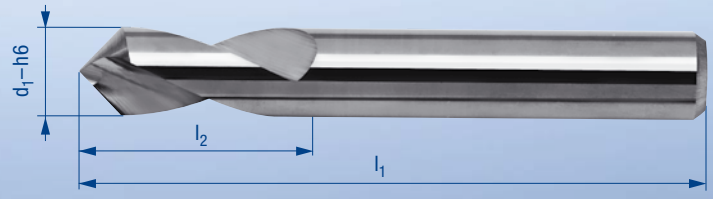
St

Inox

EN-GJL
EN-GJS

Al

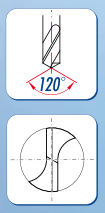
CuZn



VHM
MD/SC

SPHINX
NORM

Z
2



Vc => S./p. 10

d_1 mm	l_2 mm	l_1 mm
2.00	8.5	25
3.00	9.5	32
4.00	10.5	40
5.00	16.0	50
6.00	16.0	50
8.00	20.0	60
10.00	22.0	70
12.00	22.0	70
14.00	25.0	75
16.00	25.0	75
20.00	35.0	75

NC-Anbohrer 140°

Foret à pointer CNC 140°
Punta a centrare CNC 140°
NC spotting drill 140°

Art. 50814

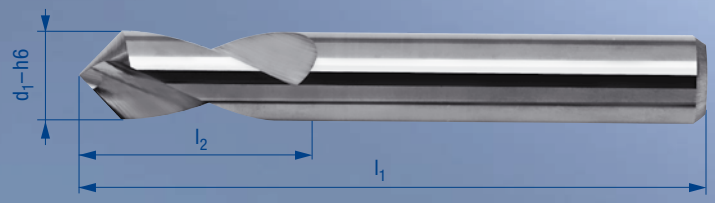
St

Inox

EN-GJL
EN-GJS

Al

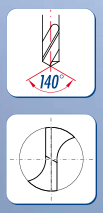
CuZn



VHM
MD/SC

SPHINX
NORM

Z
2



Vc => S./p. 10

d_1 mm	l_2 mm	l_1 mm
2.00	8.5	25
3.00	9.5	32
4.00	10.5	40
5.00	16.0	50
6.00	16.0	50
8.00	20.0	60
10.00	22.0	70
12.00	22.0	70
14.00	25.0	75
16.00	25.0	75
20.00	35.0	75

Spiralbohrer SPICUT
Foret hélicoïdal SPICUT
Punta elicoidale SPICUT
Twist drill SPICUT

Art. 50820

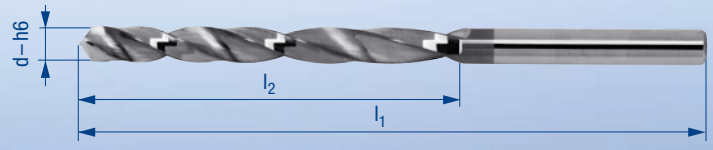
St

EN-GJL
EN-GJS

Al

CuSn

Kunststoff
Plastic



VHM
MD/SC

DIN
338

130°

H7 – H9

Z
2

35° – 15°

– 10xd

ab ø 2 mm mit 4 Führungsfasen
dès ø 2 mm avec 4 listels
dal ø 2 mm con 4 guide
from ø 2 mm with 4 margins

Vc => S./p. 10

d_1 mm	l_2 mm	l_1 mm
0.70	8	28
0.80	9	30
0.90	10	32
1.00	11	34
1.10	13	36
1.20	15	38
1.30	15	38
1.40	17	40
1.50	17	40
1.60	19	43
1.70	19	43
1.80	21	46
1.90	21	46
2.00	23	49
2.10	23	49
2.20	26	53
2.30	26	53
2.40	29	57
2.50	29	57
2.60	29	57
2.70	31	61
2.80	31	61
2.90	31	61
3.00	31	61
3.10	34	65
3.20	34	65
3.30	34	65
3.40	37	70
3.50	37	70
3.60	37	70
3.70	37	70
3.80	41	75
3.90	41	75
4.00	41	75
4.10	41	75
4.20	41	75
4.30	45	80
4.40	45	80

d_1 mm	l_2 mm	l_1 mm
4.50	45	80
4.60	45	80
4.70	45	80
4.80	50	86
4.90	50	86
5.00	50	86
5.10	50	86
5.20	50	86
5.30	50	86
5.40	55	93
5.50	55	93
5.60	55	93
5.70	55	93
5.80	55	93
5.90	55	93
6.00	55	93
6.10	61	101
6.20	61	101
6.30	61	101
6.40	61	101
6.50	61	101
6.60	61	101
6.70	61	101
6.80	67	109
6.90	67	109
7.00	67	109
7.10	67	109
7.20	67	109
7.30	67	109
7.40	67	109
7.50	67	109
7.60	73	117
7.70	73	117
7.80	73	117
7.90	73	117
8.00	73	117
8.10	73	117
8.20	73	117

d_1 mm	l_2 mm	l_1 mm
8.30	73	117
8.40	73	117
8.50	73	117
8.60	78	125
8.70	78	125
8.80	78	125
8.90	78	125
9.00	78	125
9.10	78	125
9.20	78	125
9.30	78	125
9.40	78	125
9.50	78	125
9.60	84	133
9.70	84	133
9.80	84	133
9.90	84	133
10.00	84	133
10.20	84	133
10.50	84	133
11.00	91	142
11.50	91	142
12.00	98	151
12.50	98	151
13.00	98	151
13.50	105	160
14.00	105	160

Spiralbohrer POSICUT
Foret hélicoïdal POSICUT
Punta elicoidale POSICUT
Twist drill POSICUT

Art. 50830

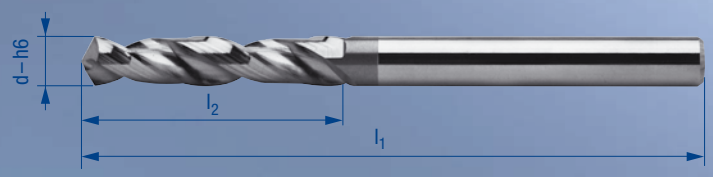
St

EN-GJL
EN-GJS

Al

Cu

Inox



VHM
MD/SC

DIN
6539

Typ
N

Z
2

Vc => S./p. 11

d_1 mm	l_2 mm	l_1 mm
0.30	1.5	19
0.40	2.3	19
0.50	2.8	20
0.60	3.3	21
0.70	4.3	23
0.80	4.8	24
0.90	5.3	25
1.00	5.7	26
1.10	6.7	28
1.20	7.7	30
1.30	7.7	30
1.40	8.7	32
1.50	8.7	32
1.60	9.7	34
1.70	9.7	34
1.80	10.7	36
1.90	10.7	36
2.00	11.5	38
2.10	11.5	38
2.20	12.5	40
2.30	12.5	40
2.40	13.5	43
2.50	13.5	43
2.60	13.5	43
2.70	15.5	46
2.80	15.5	46
2.90	15.5	46
3.00	15.5	46
3.10	17.5	49
3.20	17.5	49
3.30	17.5	49
3.40	19.5	52
3.50	19.5	52
3.60	19.5	52
3.70	19.5	52
3.80	21.5	55

d_1 mm	l_2 mm	l_1 mm
3.90	21.5	55
4.00	21.5	55
4.10	21.5	55
4.20	21.5	55
4.30	23	58
4.40	23	58
4.50	23	58
4.60	23	58
4.70	23	58
4.80	25	62
4.90	25	62
5.00	25	62
5.10	25	62
5.20	25	62
5.30	25	62
5.40	27	66
5.50	27	66
5.60	27	66
5.70	27	66
5.80	27	66
5.90	27	66
6.00	27	66
6.10	30	70
6.20	30	70
6.30	30	70
6.40	30	70
6.50	30	70
6.60	30	70
6.70	30	70
6.80	33	74
6.90	33	74
7.00	33	74
7.10	33	74
7.20	33	74
7.30	33	74
7.40	33	74

d_1 mm	l_2 mm	l_1 mm
7.50	33	74
7.60	36	79
7.70	36	79
7.80	36	79
7.90	36	79
8.00	36	79
8.10	36	79
8.20	36	79
8.30	36	79
8.40	36	79
8.50	36	79
8.60	39	84
8.70	39	84
8.80	39	84
8.90	39	84
9.00	39	84
9.10	39	84
9.20	39	84
9.30	39	84
9.40	39	84
9.50	39	84
9.60	41	89
9.70	41	89
9.80	41	89
9.90	41	89
10.00	41	89
10.20	41	89
10.50	41	89
11.00	45	95
11.50	45	95
12.00	49	102
12.50	49	102
13.00	49	102
13.50	52	107
14.00	52	107
15.00	54	111

d_1 mm	l_2 mm	l_1 mm
16.00	56	115
17.00	58	119
18.00	60	123
19.00	62	127
20.00	64	131

Spiralbohrer SPIREC
Foret hélicoïdal SPIREC
Punta elicoidale SPIREC
Twist drill SPIREC

Art. 50838

St

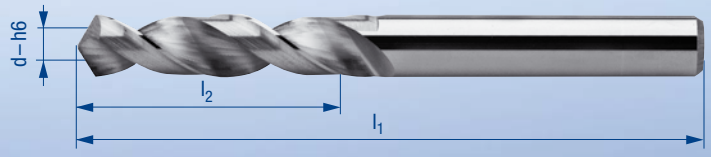
Inox

EN-GJL
EN-GJS

Al

Kunststoff
Plastic

CuZn



VHM
MD/SC

SPHINX
NORM

118°

Typ
N

Z
2

30° – 35°

– 10xd

Vc => S./p. 11

d_1 mm	l_2 mm	l_1 mm
0.30	3.7	38
0.35	3.7	38
0.40	4.7	38
0.45	4.7	38
0.50	5.7	38
0.55	5.7	38
0.60	7.7	38
0.65	7.7	38
0.70	9.7	38
0.75	9.7	38
0.80	11.7	38
0.85	11.7	38
0.90	14.7	38
0.95	14.7	38
1.00	14.7	38
1.05	14.7	38
1.10	14.7	38
1.15	14.7	38
1.20	14.7	38
1.25	14.7	38
1.30	14.7	38
1.35	14.7	38
1.40	14.7	38
1.45	14.7	38
1.50	14.7	38
1.55	14.7	38
1.60	14.7	38
1.65	14.7	38
1.70	14.7	38
1.75	14.7	38
1.80	14.7	38
1.85	14.7	38
1.90	14.7	38
1.95	14.7	38
2.00	14.7	38
2.05	14.7	38

d_1 mm	l_2 mm	l_1 mm
2.10	14.7	38
2.15	14.7	38
2.20	14.7	38
2.25	14.7	38
2.30	14.7	38
2.35	14.7	38
2.40	14.7	38
2.45	14.7	38
2.50	14.7	38
2.55	14.7	38
2.60	14.7	38
2.65	14.7	38
2.70	14.7	38
2.75	14.7	38
2.80	14.7	38
2.85	14.7	38
2.90	14.7	38
2.95	14.7	38
3.00	14.7	38
3.05	14.7	38
3.10	14.7	38
3.15	14.7	38
3.175	14.7	38
3.20	19.7	50
3.30	19.7	50
3.40	19.7	50
3.50	19.7	50
3.60	19.7	50
3.70	19.7	50
3.80	19.7	50
3.90	19.7	50
4.00	19.7	50
4.10	24.7	50
4.20	24.7	50
4.30	24.7	50
4.40	24.7	50

d_1 mm	l_2 mm	l_1 mm
4.50	24.7	50
4.60	24.7	50
4.70	24.7	50
4.80	24.7	50
4.90	24.7	50
5.00	24.7	50
5.10	24.7	50
5.20	24.7	50
5.30	24.7	50
5.40	24.7	50
5.50	24.7	50
5.60	24.7	50
5.70	24.7	50
5.80	24.7	50
5.90	24.7	50
6.00	24.7	50

Schnittdaten
Données de coupe
Parametri di lavoro
Cutting data

Art. 50810/50812/50814

Material Matière Materiale Material	Durchmesser mm Diamètre mm Diametro mm Diameter mm	v=m/min	f=mm/U f=mm/ t f=mm/ r
St	3.0 – 6.0	60 – 90	0.03 – 0.07
	8.0 – 12.0	60 – 90	0.06 – 0.14
	14.0 – 20.0	60 – 90	0.12 – 0.25
St <1000 N/mm²	3.0 – 6.0	35 – 60	0.03 – 0.06
	8.0 – 12.0	35 – 60	0.05 – 0.12
	14.0 – 20.0	35 – 60	0.12 – 0.23
St >1000 N/mm²	3.0 – 6.0	30 – 50	0.02 – 0.06
	8.0 – 12.0	30 – 50	0.06 – 0.10
	14.0 – 20.0	30 – 50	0.10 – 0.20
Inox	3.0 – 6.0	30 – 50	0.02 – 0.06
	8.0 – 12.0	30 – 50	0.06 – 0.10
	14.0 – 20.0	30 – 50	0.10 – 0.20
EN-GJL	3.0 – 6.0	80 –120	0.04 – 0.08
	8.0 – 12.0	80 –120	0.08 – 0.16
	14.0 – 20.0	80 –120	0.16 – 0.50
EN-GJS	3.0 – 6.0	50 – 80	0.03 – 0.06
	8.0 – 12.0	50 – 80	0.06 – 0.12
	14.0 – 20.0	50 – 80	0.12 – 0.30
Al <9% Si	3.0 – 6.0	100 –150	0.04 – 0.10
	8.0 – 12.0	100 –150	0.10 – 0.20
	14.0 – 20.0	100 –150	0.20 – 0.45
Al >9% Si	3.0 – 6.0	100 –150	0.04 – 0.10
	8.0 – 12.0	100 –150	0.10 – 0.18
	14.0 – 20.0	100 –150	0.18 – 0.40
Ti	3.0 – 6.0	70 –120	0.03 – 0.08
	8.0 – 12.0	70 –120	0.08 – 0.12
	14.0 – 20.0	70 –120	0.12 – 0.20

Art. 50820

Material Matière Materiale Material	Durchmesser mm Diamètre mm Diametro mm Diameter mm	v=m/min	f=mm/U f=mm/ t f=mm/ r
St	0.7 – 2.5	25 – 60	0.004 – 0.007
	2.6 – 6.0	60 – 90	0.007 – 0.012
	6.1 – 9.0	60 – 90	0.010 – 0.025
	9.1 – 11.0	60 – 90	0.020 – 0.040
	11.1 – 14.0	60 – 90	0.040 – 0.070
St <1000 N/mm²	0.7 – 2.5	10 – 35	0.003 – 0.005
	2.6 – 6.0	35 – 60	0.004 – 0.010
	6.1 – 9.0	35 – 60	0.010 – 0.020
	9.1 – 11.0	35 – 60	0.020 – 0.035
	11.1 – 14.0	35 – 60	0.035 – 0.060
Al <9% Si	0.7 – 2.5	80 – 160	0.004 – 0.007
	2.6 – 6.0	80 – 180	0.007 – 0.015
	6.1 – 9.0	80 – 180	0.015 – 0.030
	9.1 – 11.0	80 – 180	0.030 – 0.080
	11.1 – 14.0	80 – 180	0.080 – 0.150
Al >9% Si	0.7 – 2.5	60 – 100	0.004 – 0.007
	2.6 – 6.0	60 – 120	0.007 – 0.015
	6.1 – 9.0	60 – 120	0.015 – 0.030
	9.1 – 11.0	60 – 120	0.030 – 0.080
	11.1 – 14.0	60 – 120	0.080 – 0.150
CuZn	0.7 – 2.5	40 – 80	0.005 – 0.020
	2.6 – 6.0	80 – 160	0.020 – 0.040
	6.1 – 9.0	80 – 160	0.040 – 0.080
	9.1 – 11.0	80 – 160	0.080 – 0.120
	11.1 – 14.0	80 – 160	0.120 – 0.180
Kunststoff Plastic	0.7 – 2.5	30 – 50	0.005 – 0.020
	2.6 – 6.0	30 – 100	0.020 – 0.040
	6.1 – 9.0	30 – 100	0.040 – 0.080
	9.1 – 11.0	30 – 100	0.060 – 0.120
	11.1 – 14.0	30 – 100	0.100 – 0.150

Genannte Werte sind Richtwerte, die je nach Maschine, Aufspannung, Kühlschmierstoff usw. noch angepasst werden müssen.
Les valeurs mentionnées sont des valeurs recommandées qui doivent être adaptées selon les conditions de la machine, du serrage, du lubrifiant etc.
Questi valori sono valori raccomandati che devono essere adattati secondo le condizioni de la macchina, del serraggio, del lubrificante etc.
These are recommended values that depend on the condition of the machine, fixture, coolant etc. may they have to be adapted.

Schnittdaten
Données de coupe
Parametri di lavoro
Cutting data

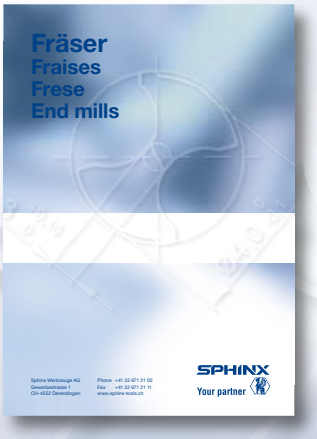
Art. 50830/50838

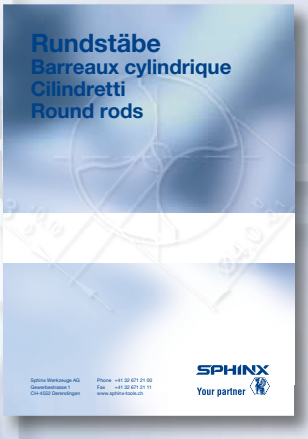
Material Matière Materiale Material	Durchmesser mm Diamètre mm Diametro mm Diameter mm	v=m/min	f=mm/U f=mm/ t f=mm/ r
St	0.3 – 4.0	30 – 90	0.01 – 0.04
	4.1 – 8.0	60 – 90	0.04 – 0.08
	8.1 – 12.0	60 – 90	0.08 – 0.14
	12.1 – 16.0	60 – 90	0.14 – 0.20
	16.1 – 20.0	60 – 90	0.20 – 0.26
St <1000 N/mm²	0.3 – 4.0	20 – 35	0.01 – 0.03
	4.1 – 8.0	35 – 60	0.03 – 0.07
	8.1 – 12.0	35 – 60	0.07 – 0.12
	12.1 – 16.0	35 – 60	0.12 – 0.18
	16.1 – 20.0	35 – 60	0.18 – 0.23
St >1000 N/mm²	0.3 – 4.0	15 – 30	0.005 –0.02
	4.1 – 8.0	30 – 50	0.02 – 0.06
	8.1 – 12.0	30 – 50	0.06 – 0.10
	12.1 – 16.0	30 – 50	0.10 – 0.15
	16.1 – 20.0	30 – 50	0.15 – 0.20
Inox martensit	0.3 – 4.0	15 – 30	0.005 –0.02
	4.1 – 8.0	30 – 50	0.02 – 0.06
	8.1 – 12.0	30 – 50	0.06 – 0.10
	12.1 – 16.0	30 – 50	0.10 – 0.15
	16.1 – 20.0	30 – 50	0.15 – 0.20
Inox austenit	0.3 – 4.0	10 – 20	0.004 –0.02
	4.1 – 8.0	20 – 40	0.02 – 0.06
	8.1 – 12.0	20 – 40	0.06 – 0.10
	12.1 – 16.0	20 – 40	0.10 – 0.14
	16.1 – 20.0	20 – 40	0.14 – 0.18
EN-GJL	0.3 – 4.0	40 – 80	0.01 – 0.06
	4.1 – 8.0	80 –120	0.06 – 0.10
	8.1 – 12.0	80 –120	0.10 – 0.16
	12.1 – 16.0	80 –120	0.16 – 0.30
	16.1 – 20.0	80 –120	0.30 – 0.50
EN-GJS	0.3 – 4.0	20 – 50	0.01 – 0.03
	4.1 – 8.0	50 – 80	0.03 – 0.08
	8.1 – 12.0	50 – 80	0.08 – 0.13
	12.1 – 16.0	50 – 80	0.13 – 0.18
	16.1 – 20.0	50 – 80	0.18 – 0.30
Al <9% Si	0.3 – 4.0	60 –100	0.015 –0.05
	4.1 – 8.0	100 –150	0.05 – 0.12
	8.1 – 12.0	100 –150	0.12 – 0.20
	12.1 – 16.0	100 –150	0.20 – 0.30
	16.1 – 20.0	100 –150	0.30 – 0.45

Material Matière Materiale Material	Durchmesser mm Diamètre mm Diametro mm Diameter mm	v=m/min	f=mm/U f=mm/ t f=mm/ r
Al >9% Si	0.3 – 4.0	30 – 70	0.01 – 0.05
	4.1 – 8.0	70 –120	0.05 – 0.11
	8.1 – 12.0	70 –120	0.11 – 0.18
	12.1 – 16.0	70 –120	0.18 – 0.28
	16.1 – 20.0	70 –120	0.28 – 0.40
Ti	0.3 – 4.0	20 – 30	0.02 – 0.04
	4.1 – 8.0	30 – 50	0.04 – 0.08
	8.1 – 12.0	30 – 50	0.08 – 0.12
	12.1 – 16.0	30 – 50	0.12 – 0.16
	16.1 – 20.0	30 – 50	0.16 – 0.20

Genannte Werte sind Richtwerte, die je nach Maschine, Aufspannung, Kühlschmierstoff usw. noch angepasst werden müssen.
Les valeurs mentionnées sont des valeurs recommandées qui doivent être adaptées selon les conditions de la machine, du serrage, du lubrifiant etc.
Questi valori sono valori raccomandati che devono essere adattati secondo le condizioni de la macchina, del serraggio, del lubrificante etc.
These are recommended values that depend on the condition of the machine, fixture, coolant etc. may they have to be adapted.

Produkteübersicht
Gamme d‘outils
Programma di fabbricazione
Product overview





Die Fertigungsstätten in Derendingen und Porrentruy, eine Referenz für «Made in Switzerland».
Les ateliers de fabrication à Derendingen et Porrentruy, une référence de «Made in Switzerland».
Gli stabilimenti di produzione a Derendingen e Porrentruy, una referenza di «Made in Switzerland»
Production facilities in Derendingen and Porrentruy, a reference for «Made in Switzerland».