

Disc milling cutters | Shell end mills

17085

Narrow disc milling cutters (side and face milling cutters), DIN 1834 A



Design

- Type N

- Cuts on three sides

- Cross-toothed

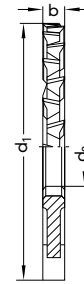
- With longitudinal groove according to DIN 138

Quality

HSS-E.



17085



d ₁ js16 mm	b k11 mm	d ₂ H7 mm	Cutting edges	HSS-E	
				17085	...
63	1.6	22	28	201	
63	2	22	28	202	
63	2.5	22	28	203	
63	3	22	28	204	
63	4	22	28	205	
63	5	22	28	206	
80	2	27	32	207	
80	2.5	27	32	208	
80	3	27	32	209	
80	4	27	32	210	
80	5	27	32	211	
80	6	27	32	212	
100	2	32	36	213	
100	3	32	36	215	
100	4	32	36	216	

d ₁ js16 mm	b k11 mm	d ₂ H7 mm	Cutting edges	HSS-E	
				17085	...
100	5	32	36	217	
100	6	32	36	218	
100	8	32	28	219	
125	2	32	40	220	
125	3	32	40	222	
125	4	32	40	223	
125	5	32	40	224	
125	6	32	40	225	
125	8	32	32	226	
125	10	32	32	227	
160	2	40	48	228	
160	3	40	48	230	
160	4	40	48	231	
160	5	40	48	232	
160	6	40	48	233	

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
100-150	50-80	50-80	35-40	32-35	25-28	22-25	-	-	-	-	-	-	20-25	18-22	12-20	25-40	50-60

17241

Disc milling cutters, DIN 885 A



Design

- Type N

- Cuts on three sides

- Cross-toothed

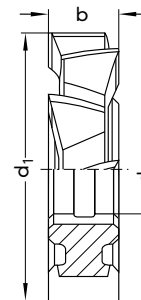
- With longitudinal groove according to DIN 138

Quality

HSS-E (Co5).



17241



d ₁ js16 mm	b k11 mm	d ₂ H7 mm	Cutting edges	HSS-E	
				17241	...
50	5	16	12	201	
50	6	16	12	202	
50	8	16	12	203	
63	6	22	12	205	
63	8	22	12	206	
63	10	22	12	207	
63	12	22	12	208	
80	10	27	14	213	
80	12	27	14	214	
80	16	27	14	216	

d ₁ js16 mm	b k11 mm	d ₂ H7 mm	Cutting edges	HSS-E	
				17241	...
80	20	27	14	218	
100	10	32	14	219	
100	12	32	14	220	
100	16	32	14	222	
100	20	32	14	224	
125	12	32	16	227	
125	14	32	16	228	
125	16	32	16	229	
125	20	32	16	231	
125	25	32	16	233	

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
100-150	50-80	50-80	35-40	32-35	25-28	22-25	-	-	-	-	-	-	20-25	18-22	12-20	25-40	50-60

17413

Shell end mills

DIN
841

N

HSS-E
Co5≤
1000
N/mm²**HW**

Design

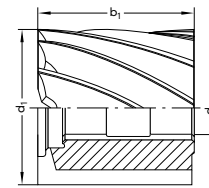
- Type N

- Right cutting
- Right-hand spiral
- For cutting on periphery and end face
- With longitudinal and transverse groove according to DIN 138

Quality

HSS-E (Co5).

17413



d ₁ k12 mm	b ₁ k16 mm	d ₂ H7 mm	Cutting edges	HSS-E 17413	...
40	40	16	8		204
50	50	22	8		206
60	30	27	8		207
60	60	27	8		208
75	35	27	10		209

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
70-120	40-70	40-70	28-32	25-30	18-25	16-22	-	-	-	-	-	-	5-15	3-12	3-12	-	-

17441 - 17443

Shell end mills

DIN
1880

N

≤
1000
N/mm²**HW**

Design

- Type N

- Right cutting
- Right-hand spiral
- For cutting on periphery and end face
- With longitudinal and transverse groove according to DIN 138

17441

Quality

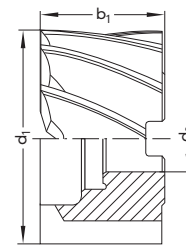
HSS-E (Co5).

17441

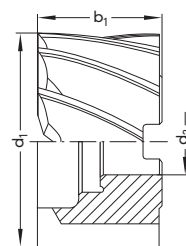
17443

Quality

HSS-E/TiCN-coated.

HSS-E
Co5

d ₁ k12 mm	b ₁ k16 mm	d ₂ H7 mm	Cutting edges	HSS-E 17441	...	HSS-E/TiCN 17443	...
40	32	16	8		101		101
50	36	22	8		102		102
63	40	27	8		103		103
80	45	27	10		104		104
100	50	32	12		105		105
125	56	40	14		106		

HSS-E
TiCN

17443

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
17441																	
70-120	40-70	40-70	28-32	25-30	18-25	16-22	-	-	-	-	-	-	5-15	3-12	3-12	-	-
17443																	
70-200	40-150	40-150	75-85	45-55	40-60	20-45	-	-	-	-	-	-	5-28	3-25	3-25	-	-

17445

Shell end mills

DIN
1880

W

HSS-E
Co5

ALU

≤
1100
N/mm²**HW**

Design

- Type W

- Right cutting
- Right-hand spiral
- For cutting on periphery and end face
- With longitudinal and transverse groove according to DIN 138

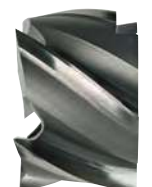
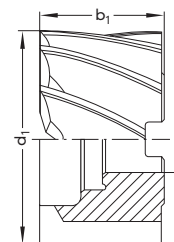
Applications

For materials up to approx. 1100 N/mm² strength.
For soft, tough and long-chipping materials.

Quality

HSS-E (Co5).

17445



d ₁ k12 mm	b ₁ k16 mm	d ₂ H7 mm	Cutting edges	HSS-E 17445	...
40	32	16	4		101
50	36	22	4		102
63	40	27	5		103
80	45	27	6		104

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
70-120	40-70	40-70	28-32	25-30	18-25	16-22	-	-	-	-	-	-	5-15	3-12	3-12	-	-

17452

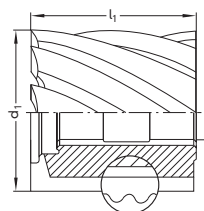
Shell end mills



Quality
HSS-E (Co5).

Design

- Type NR with roughing teeth
(chip separator with round profile)
- Right cutting
- Right-hand spiral
- For cutting on periphery and end face
- Profile relief ground
- With longitudinal and transverse groove according to DIN 138



17452

d ₁ k14 mm	l ₁ k16 mm	d ₂ H7 mm	Cutting edges	HSS-E 17452	...
40	40	16	6		202
50	50	22	8		204
60	30	27	8		205
60	60	27	8		206
75	35	27	8		207

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
70-120	40-70	40-70	28-32	25-30	18-25	16-22	-	-	-	-	-	-	5-15	3-12	3-12	-	-

17475

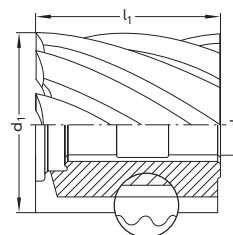
Shell end mills



Quality
HSS-E (Co5).

Design

- Type NR with roughing teeth
- Right cutting
- Right-hand spiral
- For cutting on periphery and end face
- Profile relief ground
- With longitudinal and transverse groove according to DIN 138



17475

d ₁ k14 mm	l ₁ k16 mm	d ₂ H7 mm	Cutting edges	HSS-E 17475	...
40	32	16	6		101
50	36	22	6		102
63	40	27	8		103
80	45	27	8		104
100	50	32	10		105

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
70-120	40-70	40-70	28-32	25-30	18-25	16-22	-	-	-	-	-	-	5-15	3-12	3-12	-	-

17478

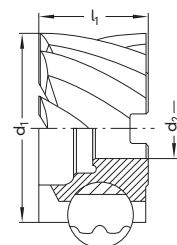
Shell end mills



Quality
HSS-E (Co5).

Design

- Type NF with roughing and finishing teeth
- Right cutting
- Right-hand spiral
- For cutting on periphery and end face
- Profile relief ground
- With longitudinal and transverse groove according to DIN 138



17478

d ₁ k14 mm	l ₁ k16 mm	d ₂ H7 mm	Cutting edges	HSS-E 17478	...
40	32	16	6		101
50	36	22	6		102
63	40	27	8		103
80	45	27	8		104
100	50	32	10		105

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
70-120	40-70	40-70	28-32	25-30	18-25	16-22	-	-	-	-	-	-	5-15	3-12	3-12	-	-

17482 - 17484

Shell end mills

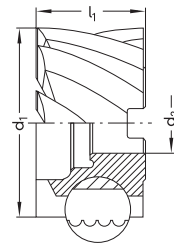


Design

- Type HR, fine roughing profile
- Right cutting
- Right-hand spiral, for cutting on periphery and end face
- Profile relief ground
- With longitudinal and transverse groove according to DIN 138

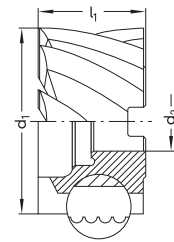
17482
Quality
HSS-E.

17484
Quality
HSS-E/TiAIN-coated.



HSS-E

17482



HSS-E
TiAIN

17484



d ₁ k14 mm	l ₁ k16 mm	d ₂ H7 mm	Cutting edges	HSS-E		HSS-E/TiAIN	
				17482	...	17484	...
40	32	16	8		101		101
50	36	22	8		102		102
63	40	27	10		103		103
80	45	27	10		104		104
100	50	32	12		105		105

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
17482																	
70-120	40-70	40-70	28-32	25-30	18-25	16-22	12-18	-	-	-	-	-	5-15	3-12	3-12	-	-
17484																	
70-200	40-150	40-150	75-85	45-55	40-60	20-45	15-35	-	-	-	-	-	5-28	3-25	3-25	-	-

17488

Single-angle milling cutters

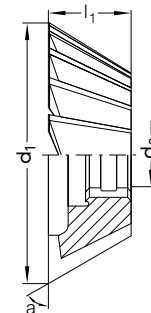


Design

- Type H
- Milling angle $\alpha = 45^\circ$
- Right cutting
- Straight-grooved, for cutting on periphery and end face
- With longitudinal groove according to DIN 138

Applications
For milling dovetail guides etc.

Quality
HSS-E.



17488



d ₁ js16 mm	l ₁ mm	d ₂ H7 mm	Cutting edges	HSS-E	
				17488	...
50	13	13	16		102
63	18	16	18		103
80	22	22	20		104
100	28	27	22		105

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
100-150	45-90	45-56	40-45	35-40	32-36	26-30	-	-	-	-	-	-	20-28	18-25	10-22	28-45	70-90

17490 - 17492

Prism milling cutters



Design

- Straight-grooved
- With longitudinal groove according to DIN 138

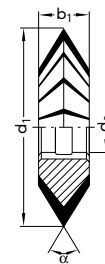
17490
Milling angle $\alpha = 45^\circ$.

17491
Milling angle $\alpha = 60^\circ$.

17492
Milling angle $\alpha = 90^\circ$.

Applications
For milling prismatic guides etc.

Quality
HSS-E.



17490



d ₁ k14 mm	b ₁ mm At milling angle (js 16)			d ₂ H7 mm	Cutt. edges			17490		17491		17492	
	45°	60°	90°		45°	60°	90°	
50	8	10	14	16	16	16	16		201		201		201
63	10	14	20	22	16	16	16		202		202		202
80	12	18	22	27	20	18	18		203		203		203
100	18	25	32	32	20	20	20		204		204		204

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
100-150	45-90	45-56	40-45	35-40	32-36	26-30	-	-	-	-	-	-	20-28	18-25	10-22	28-45	70-90



Semi-circular profile cutters

17493

Semi-circular profile cutters

DIN 855

HSS-E

≤ 1000 N/mm²

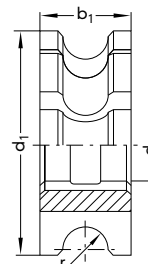
HW

Design

- **Concave**, cutter curved inwards, relieved
- With longitudinal groove according to DIN 138

Quality
HSS-E.

r h11 mm	d ₁ js16 mm	d ₂ H7 mm	b ₁ mm	Cutting edges	HSS-E 17493	...
2	50	16	9	14		104
3	63	22	12	12		106
4	63	22	16	12		108
5	63	22	20	12		109
6	80	27	24	12		110
8	80	27	32	12		112
10	100	32	36	12		114



17493

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
100-150	45-90	45-56	40-45	35-40	32-36	26-30	-	-	-	-	-	-	20-28	18-25	10-22	28-45	70-90

17494

Semi-circular profile cutters

DIN 856

HSS-E

≤ 1000 N/mm²

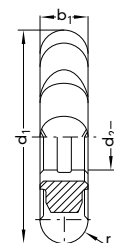
HW

Design

- **Convex**, cutter curved outwards, relieved
- With longitudinal groove according to DIN 138

Quality
HSS-E.

r h11 mm	d ₁ js16 mm	d ₂ H7 mm	b ₁ mm	Cutting edges	HSS-E 17494	...
1	50	16	2	14		101
2	50	16	4	14		104
3	63	22	6	12		106
4	63	22	8	12		108
5	63	22	10	12		109
6	80	27	12	12		110
8	80	27	16	12		112
10	100	32	20	12		114



17494

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
100-150	45-90	45-56	40-45	35-40	32-36	26-30	-	-	-	-	-	-	20-28	18-25	10-22	28-45	70-90