

17085

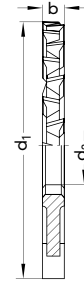
Narrow Side Milling Cutters (Metallic Circular Cutters) DIN 1834 A



Quality
HSS-E.

Type

- Type N
- Cuts on three sides
- Cross-toothed
- With longitudinal slot in compliance with DIN 138.



| 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-steel<900N | VA-steel>900N | Ti alloy | GG(G) | Plastics |
|----------|----------|-------|---------|---------|---------|----------|----------|----------|--------|--------|--------|--------|---------------|---------------|----------|-------|----------|
| 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

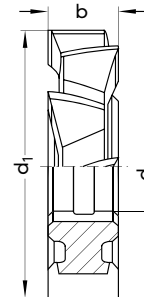
Side Milling Cutters DIN 885 A



Quality
HSS-E (Co5).

Type

- Type N
- Cuts on three sides
- Cross-toothed
- With longitudinal groove in compliance with DIN 138



| 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-steel<900N | VA-steel>900N | Ti alloy | GG(G) | Plastics |
|----------|----------|-------|---------|---------|---------|----------|----------|----------|--------|--------|--------|--------|---------------|---------------|----------|-------|----------|
| 100-150 | 50-80 | 50-80 | 35-40 | 32-35 | 25-28 | 22-25 | - | - | - | - | - | - | 20-25 | 18-22 | 12-20 | 25-40 | 50-60 |

Shell End Milling Cutters

17413

Shell End Milling Cutters

DIN 841

N

HSS-E Co8

≤ 1000 N/mm²

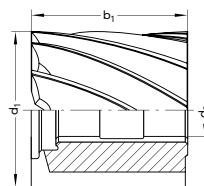
HW

Quality
HSS-E (Co8).

Type

- Type N

- Right-hand cut,
- Right-hand helix,
- Cutting on circumference and at end
- With longitudinal and transverse groove in compliance with DIN 138



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-steel<900N | VA-steel>900N | Ti alloy | GG(G) | Plastics |
|----------|----------|-------|---------|---------|---------|----------|----------|----------|--------|--------|--------|--------|---------------|---------------|----------|-------|----------|
| 70-120 | 40-70 | 40-70 | 28-32 | 25-30 | 18-25 | 16-22 | - | - | - | - | - | - | 5-15 | 3-12 | 3-12 | - | - |

17441 - 17443

Shell End Milling Cutters

DIN 1880

N

≤ 1000 N/mm²

HW

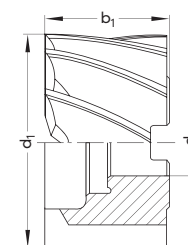
17441
Quality
HSS-E (Co8).

Type

- Type N

- Right-hand cut,
- Right-hand helix,
- Cutting on the circumference and on the end
- With longitudinal and transverse groove in compliance with DIN 138

17443
Quality
HSS-E/TiCN coated.



HSS-E Co8



17441

| 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 | ☒ | 106 |

| Al<10%Si | Al>10%Si | Cu | St<520N | St<750N | St<900N | St<1100N | St<1200N | St<1400N | <45HRC | <55HRC | <60HRC | <67HRC | VA-steel<900N | VA-steel>900N | Ti alloy | GG(G) | Plastics |
|----------|----------|--------|---------|---------|---------|----------|----------|----------|--------|--------|--------|--------|---------------|---------------|----------|-------|----------|
| 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 Milling Cutters

DIN 1880

W

HSS-E Co8

ALU

≤ 1100 N/mm²

HW

Quality
HSS-E (Co8).

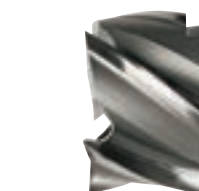
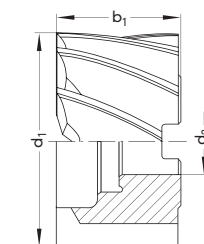
Type

- Type W

- Right-hand cut
- Right-hand helix,
- Cutting on circumference and at end
- With longitudinal and transverse groove in compliance with DIN 138

Use

For materials with a strength of up to approx. 1100 N/mm². For soft, ductile, as well as long-chipping materials.



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-steel<900N | VA-steel>900N | Ti alloy | GG(G) | Plastics |
|----------|----------|-------|---------|---------|---------|----------|----------|----------|--------|--------|--------|--------|---------------|---------------|----------|-------|----------|
| 70-120 | 40-70 | 40-70 | 28-32 | 25-30 | 18-25 | 16-22 | - | - | - | - | - | - | 5-15 | 3-12 | 3-12 | - | - |

17452 - 17453

Shell End Milling Cutters

DIN 841

HSS-E Co8

< 1000 N/mm²



Type

Right-hand cut, right-hand helix, cutting on circumference and at end, profile relief ground with longitudinal and transverse slot in compliance with DIN 138.

Quality

HSS-E (Co8).

17452

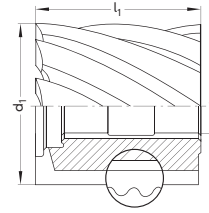
Type NR, with roughing teeth (chip divider with circular profile).

17453

Type NF, with roughing/finishing teeth (chip divider with flat profile).

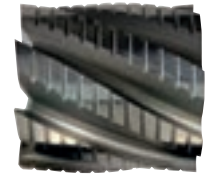
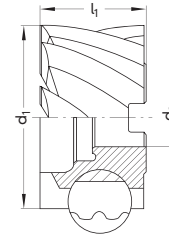
NR

17452



NF

17453



| d ₁ k14 mm | l ₁ k16 mm | d ₂ H7 mm | Cutting edges | Type NR | | Type NF | |
|-----------------------|-----------------------|----------------------|---------------|---------|-----|---------|-----|
| | | | | 17452 | ... | 17453 | ... |
| 40 | 40 | 16 | 6 | 202 | | 202 | |
| 50 | 50 | 22 | 8 | 204 | | 204 | |
| 60 | 30 | 27 | 8 | 205 | | 205 | |
| 60 | 60 | 27 | 8 | 206 | | 206 | |
| 75 | 35 | 27 | 8 | 207 | | 207 | |
| 90 | 35 | 27 | 10 | 209 | | 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-steel<900N | VA-steel>900N | Ti alloy | GG(G) | Plastics |
|----------|----------|-------|---------|---------|---------|----------|----------|----------|--------|--------|--------|--------|---------------|---------------|----------|-------|----------|
| 70-120 | 40-70 | 40-70 | 28-32 | 25-30 | 18-25 | 16-22 | - | - | - | - | - | - | 5-15 | 3-12 | 3-12 | - | - |

17475

Shell End Milling Cutters

DIN 1880

NR

HSS-E Co8

< 1000 N/mm²



Type

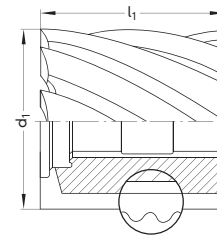
Type NR with roughing tothing.

Right-hand cut, right-hand helix, cutting on circumference and at end, profile relief ground with longitudinal and transverse slot in compliance with DIN 138.

Quality

HSS-E (Co8).

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-steel<900N | VA-steel>900N | Ti alloy | GG(G) | Plastics |
|----------|----------|-------|---------|---------|---------|----------|----------|----------|--------|--------|--------|--------|---------------|---------------|----------|-------|----------|
| 70-120 | 40-70 | 40-70 | 28-32 | 25-30 | 18-25 | 16-22 | - | - | - | - | - | - | 5-15 | 3-12 | 3-12 | - | - |

17478

Shell End Milling Cutters

DIN 1880

NF

HSS-E Co5

< 1000 N/mm²



Type

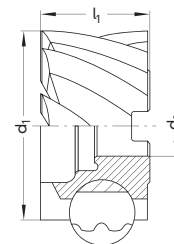
Type NF, with roughing/finishing tothing.

Right-hand cut, right-hand helix, cutting on circumference and at end, profile relief ground with longitudinal and transverse slot in compliance with DIN 138.

Quality

HSS-E (Co5).

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-steel<900N | VA-steel>900N | Ti alloy | GG(G) | Plastics |
|----------|----------|-------|---------|---------|---------|----------|----------|----------|--------|--------|--------|--------|---------------|---------------|----------|-------|----------|
| 70-120 | 40-70 | 40-70 | 28-32 | 25-30 | 18-25 | 16-22 | - | - | - | - | - | - | 5-15 | 3-12 | 3-12 | - | - |

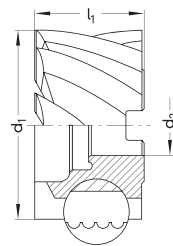
17482 - 17484 Shell End Milling Cutters



Type
Type HR, fine roughing profile. Right-hand cut, right-hand helix, cutting on circumference and at end, profile relief ground with longitudinal and transverse slot in compliance with DIN 138.

17482
Quality
HSS-E.

17484
Quality
HSS-E/TiCN coated.



17482



17484



| d ₁ k14 mm | l ₁ k16 mm | d ₂ H7 mm | Cutting edges | HSS-E | | HSS-E/TiCN | |
|-----------------------|-----------------------|----------------------|---------------|-------|-----|------------|-----|
| | | | | 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 | <55 HRC | <60HRC | <67HRC | VA-steel<900N | VA-steel>900N | Ti alloy | GG(G) | Plastics |
|--------------|----------|--------|---------|---------|---------|----------|----------|----------|--------|---------|--------|--------|---------------|---------------|----------|-------|----------|
| 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 | - | - |

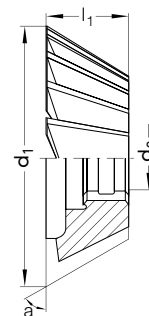
17488 Angle Milling Cutters



Type
Type H, chamfer angle $\alpha = 45^\circ$. Right-hand cut, straight flute, cutting on circumference and at end, with longitudinal keyway in compliance with DIN138.

Quality
HSS-E.

Application
 For milling dovetail guides, etc.



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-steel<900N | VA-steel>900N | Ti alloy | GG(G) | Plastics |
|----------|----------|-------|---------|---------|---------|----------|----------|----------|--------|--------|--------|--------|---------------|---------------|----------|-------|----------|
| 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 Double angle milling cutters



Type
 Straight flute, with longitudinal slot in compliance with DIN138.

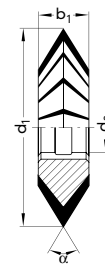
17490
Included angle $\alpha = 45^\circ$.

Use
 For milling Vee-notches etc.

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

Quality
HSS-E.

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



17490



45° 60° 90°

| d ₁ k14 mm | b ₁ mm at included angle (js 16) | | | d ₂ H7 mm | Cutt. edges | | | HSS-E | | HSS-E/TiCN | | | |
|-----------------------|---|-----|-----|----------------------|-------------|-----|-----|-------|-----|------------|-----|-------|-----|
| | 45° | 60° | 90° | | 45° | 60° | 90° | 17490 | ... | 17491 | ... | 17492 | ... |
| 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-steel<900N | VA-steel>900N | Ti alloy | GG(G) | Plastics |
|----------|----------|-------|---------|---------|---------|----------|----------|----------|--------|--------|--------|--------|---------------|---------------|----------|-------|----------|
| 100-150 | 45-90 | 45-56 | 40-45 | 35-40 | 32-36 | 26-30 | - | - | - | - | - | - | 20-28 | 18-25 | 10-22 | 28-45 | 70-90 |



17493

Convex Milling Cutters

DIN
855

HSS-E

≤
1000
N/mm²**HHW**Quality
HSS-E.

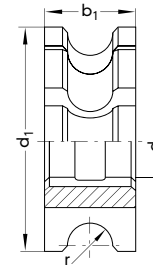
Type

Concave milling cutter, relieved.
with longitudinal slot in compliance with DIN 138.

HSS-E

17493

| r h11 mm | d ₁ js16 mm | d ₂ H7 mm | b ₁ mm | Cutting edges | ... |
|-------------|---------------------------|-------------------------|----------------------|---------------|-----|
| 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-steel<900N | VA-steel>900N | Ti alloy | GG(G) | Plastics |
|----------|----------|-------|---------|---------|---------|----------|----------|----------|--------|--------|--------|--------|---------------|---------------|----------|-------|----------|
| 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

Convex Milling Cutters

DIN
856

HSS-E

≤
1000
N/mm²**HHW**Quality
HSS-E.

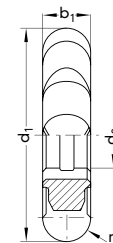
Type

Convex, milling cutter, relieved.
with longitudinal slot in compliance with DIN 138.

HSS-E

17494

| r h11 mm | d ₁ js16 mm | d ₂ H7 mm | b ₁ mm | Cutting edges | ... |
|-------------|---------------------------|-------------------------|----------------------|---------------|-----|
| 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-steel<900N | VA-steel>900N | Ti alloy | GG(G) | Plastics |
|----------|----------|-------|---------|---------|---------|----------|----------|----------|--------|--------|--------|--------|---------------|---------------|----------|-------|----------|
| 100-150 | 45-90 | 45-56 | 40-45 | 35-40 | 32-36 | 26-30 | - | - | - | - | - | - | 20-28 | 18-25 | 10-22 | 28-45 | 70-90 |

DATA MATRIX //DMC ... scan and be done!

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■ Shopping cart

The data will be automatically transferred into the shopping cart. Close your order by pressing the confirm key.

■ Scan

Scan in the desired article. Entry is confirmed and concluded by the beep tone.

■ OCI / ePos / etc.

Naturally the purchase orders can also be transferred into your OCI-capable enterprise resource planning system.

■ Interface

Connect the scanner to a computer and the Internet via the provided docking station. Then confirm the webshop access with your password.

For this additional settings may be required.

■ Curious?

Schedule a meeting with our regional sales manager.

