

Dead Centers FN / FNC

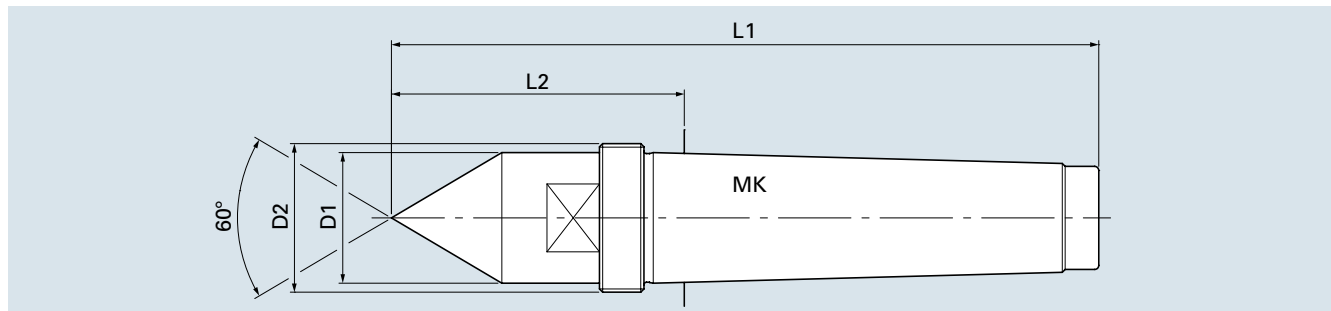
Clamping tools for clamping on machine tools

Rotating and fixed tailstock spindle sleeve. Designed for employment in turning, grinding and other production machines.

made of full-hardened tool steel

→ can be reground

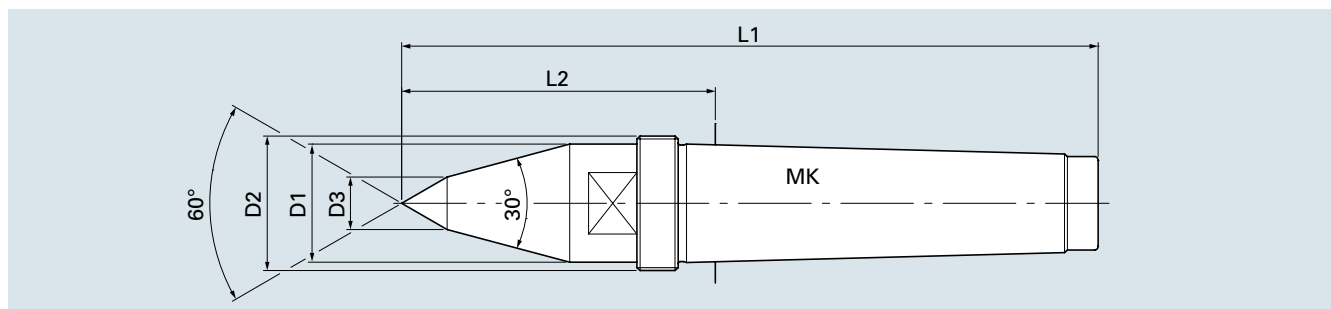
Type FN with morse taperl



| cat. no. | type | MK | D1 | D2 | L1 | L2 |
|----------|--------|----|----|-----------|-----|-----|
| 92001 | FN MK3 | 3 | 24 | M27 x 1.5 | 138 | 57 |
| 92002 | FN MK4 | 4 | 32 | M36 x 1.5 | 175 | 72 |
| 92003 | FN MK5 | 5 | 45 | M48 x 1.5 | 217 | 87 |
| 92004 | FN MK6 | 6 | 64 | M68 x 1.5 | 290 | 108 |

● high true running accuracy max. 0.002

Type FNC with morse taper



| cat. no. | type | MK | D1 | D2 | D3 | L1 | L2 |
|----------|---------|----|----|-----------|----|-----|-----|
| 92101 | FNC MK3 | 3 | 24 | M27 x 1.5 | 10 | 148 | 67 |
| 92102 | FNC MK4 | 4 | 32 | M36 x 1.5 | 14 | 187 | 84 |
| 92103 | FNC MK5 | 5 | 45 | M48 x 1.5 | 16 | 242 | 112 |
| 92104 | FNC MK6 | 6 | 64 | M68 x 1.5 | 20 | 330 | 148 |

● high true running accuracy max. 0.002

All types with extracting thread to prevent spindle ball bearings or solid spindle sleeves from damage. Extracting nuts see page 19 for accessories.

Dead Centers FNA / FNW

Clamping tools for clamping on machine tools

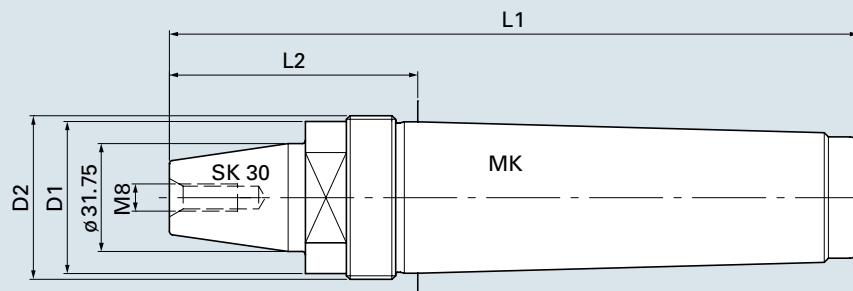
➔ for large work piece centers

High degree of flexibility for clamping of work pieces with large centers.

Different types of center cones from Ø25 to Ø315, see page 16.

Special center cones up to Ø400 available upon customer's request.

Type FNA with morse taper



| cat. no. | type | MK | D1 | D2 | L1 | L2 |
|----------|---------|----|----|-----------|-------|------|
| 92201 | FNA MK3 | 3 | 32 | M27 x 1.5 | 149 | 68 |
| 92202 | FNA MK4 | 4 | 32 | M36 x 1.5 | 173.5 | 71 |
| 92203 | FNA MK5 | 5 | 45 | M48 x 1.5 | 202.5 | 73 |
| 92204 | FNA MK6 | 6 | 64 | M68 x 1.5 | 263.5 | 81.5 |

- true running accuracy at center cone: max. 0.01

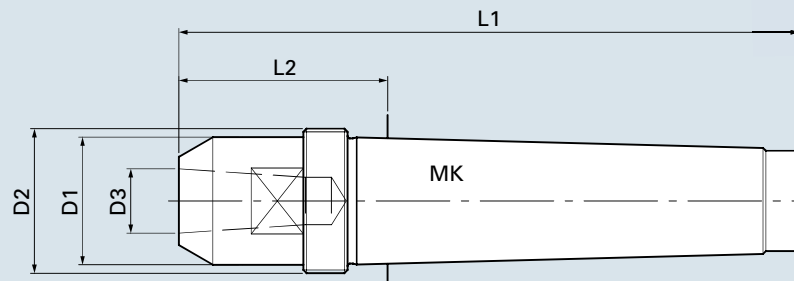
➔ maximum flexibility

The adaptation of various changeable inserts ensures a high degree of flexibility and saving of costs.

Various changeable inserts of different designs, see page 17.

Special inserts available upon customer's request.

Type FNW with morse taper



| cat. no. | type | MK | D1 | D2 | D3 | L1 | L2 |
|----------|---------|----|----|-----------|----|-------|----|
| 92301 | FNW MK3 | 3 | 24 | M27 x 1.5 | 16 | 121 | 40 |
| 92302 | FNW MK4 | 4 | 32 | M36 x 1.5 | 16 | 154.5 | 52 |
| 92303 | FNW MK5 | 5 | 45 | M48 x 1.5 | 22 | 190 | 60 |
| 92304 | FNW MK6 | 6 | 64 | M68 x 1.5 | 22 | 252 | 70 |

- true running accuracy at center cone: max. 0.01

Extracting nuts, see page 19 for accessories.

Carbide Center Pins DIN 806

Clamping tools for clamping on machine tools

To be applied with hardened work pieces
For headstocks and fixed tailstock spindle sleeves.
Designed for employment in grinding and other
production machines.

Type DIN 806 option model E/HE



Type DIN 806 model E

with half carbide tip

| cat. no. | MK | D1 | D3 | L1 | L2 |
|----------|----|------|----|-----|------|
| 91001 | 1 | 12.2 | 7 | 80 | 26.5 |
| 91003 | 2 | 18 | 7 | 100 | 36 |
| 91006 | 3 | 24.1 | 11 | 125 | 44 |
| 91009 | 4 | 31.6 | 14 | 160 | 57.5 |
| 91012 | 5 | 44.7 | 18 | 200 | 70.5 |
| 91015 | 6 | 63.8 | 18 | 270 | 88 |

● hohe Rundlaufgenauigkeit: max. 0,002

Type similar to DIN 806 model E

with full carbide tip

| cat. no. | MK | D1 | L1 | L2 |
|----------|----|------|-----|------|
| 91002 | 1 | 12.2 | 80 | 26.5 |
| 91005 | 2 | 18 | 100 | 36 |
| 91008 | 3 | 24.1 | 125 | 44 |
| 91011 | 4 | 31.6 | 160 | 57.5 |
| 91014 | 5 | 44.7 | 200 | 70.5 |
| 91018 | 6 | 63.8 | 270 | 88 |

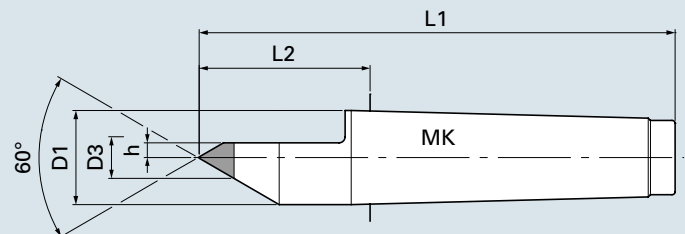
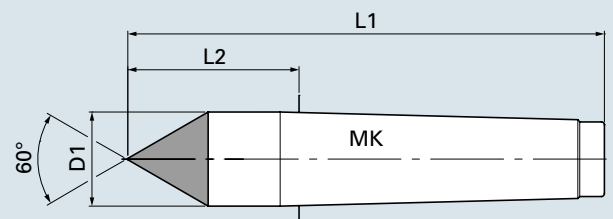
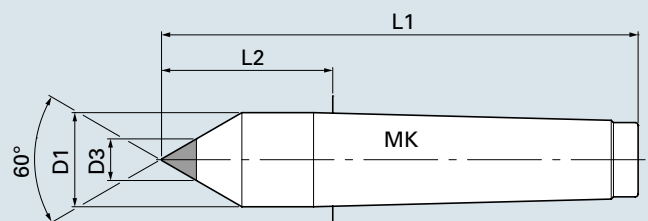
● high true running accuracy max. 0.002

Type DIN 806 model HE

flattened with half carbide tip

| cat. no. | MK | D1 | D3 | L1 | L2 | h |
|----------|----|------|----|-----|------|-----|
| 91101 | 1 | 12.2 | 7 | 80 | 26.5 | 1.5 |
| 91102 | 2 | 18 | 7 | 100 | 36 | 2 |
| 91104 | 3 | 24.1 | 11 | 125 | 44 | 3 |
| 91106 | 4 | 31.6 | 14 | 160 | 57.5 | 5 |
| 91108 | 5 | 44.7 | 18 | 200 | 70.5 | 7 |
| 91110 | 6 | 63.8 | 18 | 270 | 88 | 10 |

● high true running accuracy max. 0.002





Carbide Center Pins DIN 807

Clamping tools for clamping on machine tools

→ with extraction screw thread

DIN 807 with extraction screw thread to prevent spindle ball bearings or unpierced spindle sleeves from damage. Extracting nuts, see page 19 for accessories. Available with spanner flat upon request.

Type DIN 807 model E/HE

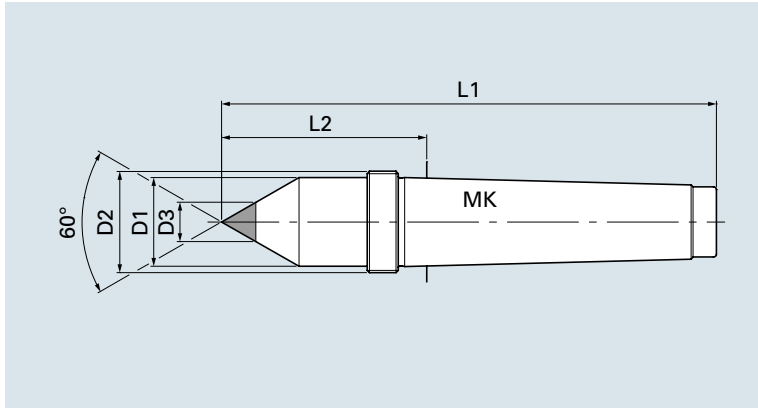


Type DIN 807 model E

with half carbide pin

| cat. no. | MK | D1 | D2 | D3 | L1 | L2 |
|----------|----|------|----------|----|-----|------|
| 91201 | 1 | 12.2 | 16 x 1.5 | 7 | 90 | 36.5 |
| 91203 | 2 | 18 | 22 x 1.5 | 7 | 112 | 48 |
| 91206 | 3 | 24.1 | 27 x 1.5 | 11 | 138 | 57 |
| 91209 | 4 | 31.6 | 36 x 1.5 | 14 | 175 | 72.5 |
| 91212 | 5 | 44.7 | 48 x 1.5 | 18 | 217 | 87.5 |
| 91215 | 6 | 63.8 | 68 x 1.5 | 18 | 290 | 108 |

● high true running accuracy max. 0.002

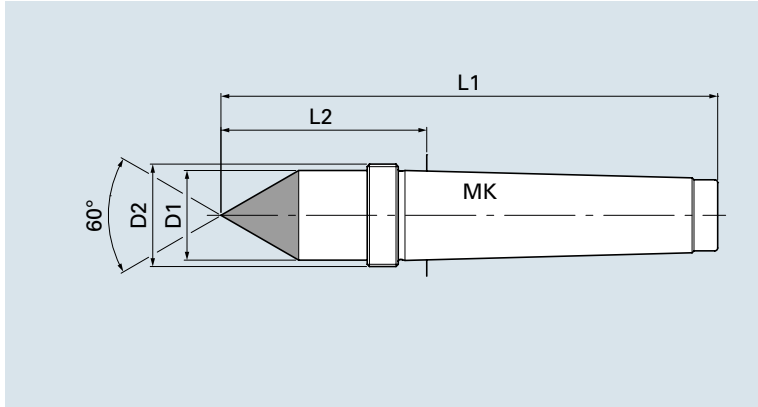


Type similar to DIN 807 model E

with full carbide pin

| cat. no. | MK | D1 | D2 | L1 | L2 |
|----------|----|------|----------|-----|------|
| 91202 | 1 | 12.2 | 16 x 1.5 | 90 | 36.5 |
| 91205 | 2 | 18 | 22 x 1.5 | 112 | 48 |
| 91208 | 3 | 24.1 | 27 x 1.5 | 138 | 57 |
| 91211 | 4 | 31.6 | 36 x 1.5 | 175 | 72.5 |
| 91214 | 5 | 44.7 | 48 x 1.5 | 217 | 87.5 |
| 91218 | 6 | 63.8 | 68 x 1.5 | 290 | 108 |

● high true running accuracy max. 0.002

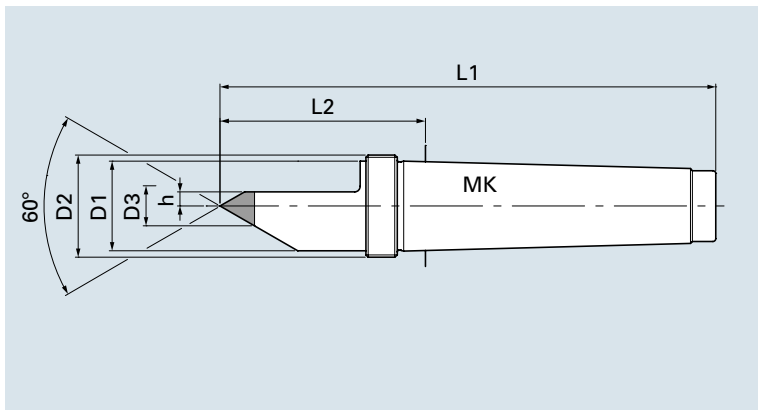


Type DIN 807 model HE

flattened with half carbide tip

| cat. no. | MK | D1 | D2 | D3 | L1 | L2 | h |
|----------|----|------|----------|----|-----|------|-----|
| 91301 | 1 | 12.2 | 16 x 1.5 | 7 | 90 | 36.5 | 1.5 |
| 91303 | 2 | 18 | 22 x 1.5 | 7 | 112 | 48 | 2 |
| 91306 | 3 | 24.1 | 27 x 1.5 | 11 | 138 | 57 | 3 |
| 91309 | 4 | 31.6 | 36 x 1.5 | 14 | 175 | 72.5 | 5 |
| 91312 | 5 | 44.7 | 48 x 1.5 | 18 | 217 | 87.5 | 7 |
| 91315 | 6 | 63.8 | 68 x 1.5 | 18 | 290 | 108 | 10 |

● high true running accuracy max. 0.002



Extracting nuts, see accessories page 19.

Changeable Center Cone for RNA / FNA

Clamping tools for clamping on machine tools

Center cones for large work piece centers

High degree of flexibility for clamping of work pieces with large centers.

Suitable for live centers type RNA on page 6 and for dead centers type FNA on page 13.

Special cones up to $\varnothing 400$ available upon customer's request.

For type RNA / FNA with SK30 interface

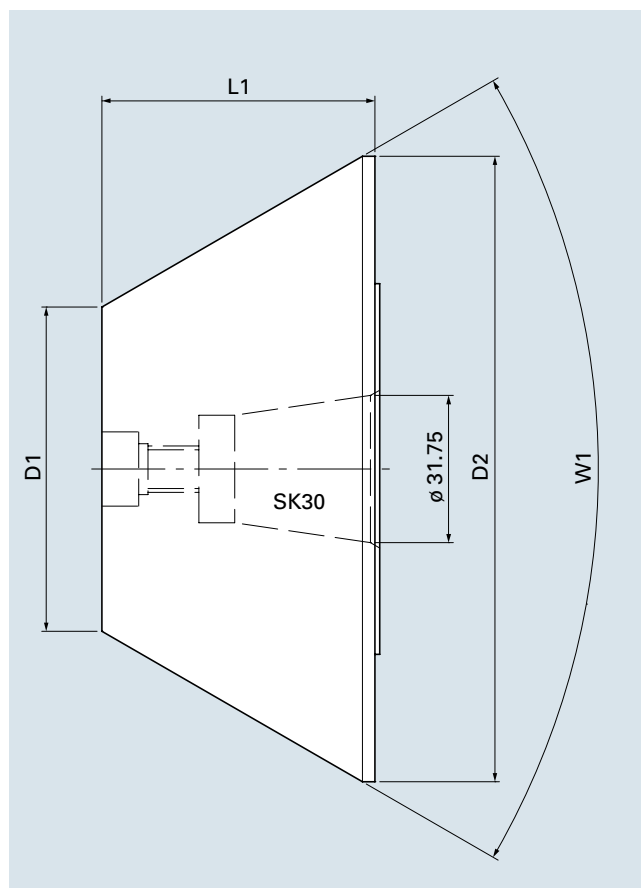


For types RNA and FNA

| cat. no. | W1 | D1 | D2 | L |
|--------------|----|-----|-----|----|
| 81450 | 60 | 20 | 85 | 60 |
| 81451 | 60 | 70 | 135 | 60 |
| 81452 | 60 | 120 | 185 | 60 |
| 81453 | 60 | 170 | 235 | 60 |
| 81454 | 60 | 220 | 285 | 60 |
| 81455 | 75 | 20 | 105 | 60 |
| 81456 | 75 | 90 | 175 | 60 |
| 81457 | 75 | 160 | 245 | 60 |
| 81458 | 75 | 230 | 315 | 60 |
| 81459 | 90 | 20 | 130 | 60 |
| 81460 | 90 | 100 | 210 | 60 |
| 81461 | 90 | 180 | 290 | 60 |

The center cones are fastened with a screw M8 DIN 912 onto the base body.

The center cones can be forced off with a screw M10.



Changeable Inserts for RNW / FNW

Clamping tools for clamping on machine tools

Changeable inserts for a maximum of flexibility

The adaptation of various changeable inserts ensures a high degree of flexibility and saving of costs.

Suitable for live centers type RNW on page 7 and for the dead centers type FNW on page 13.

Special inserts available upon customer's request.

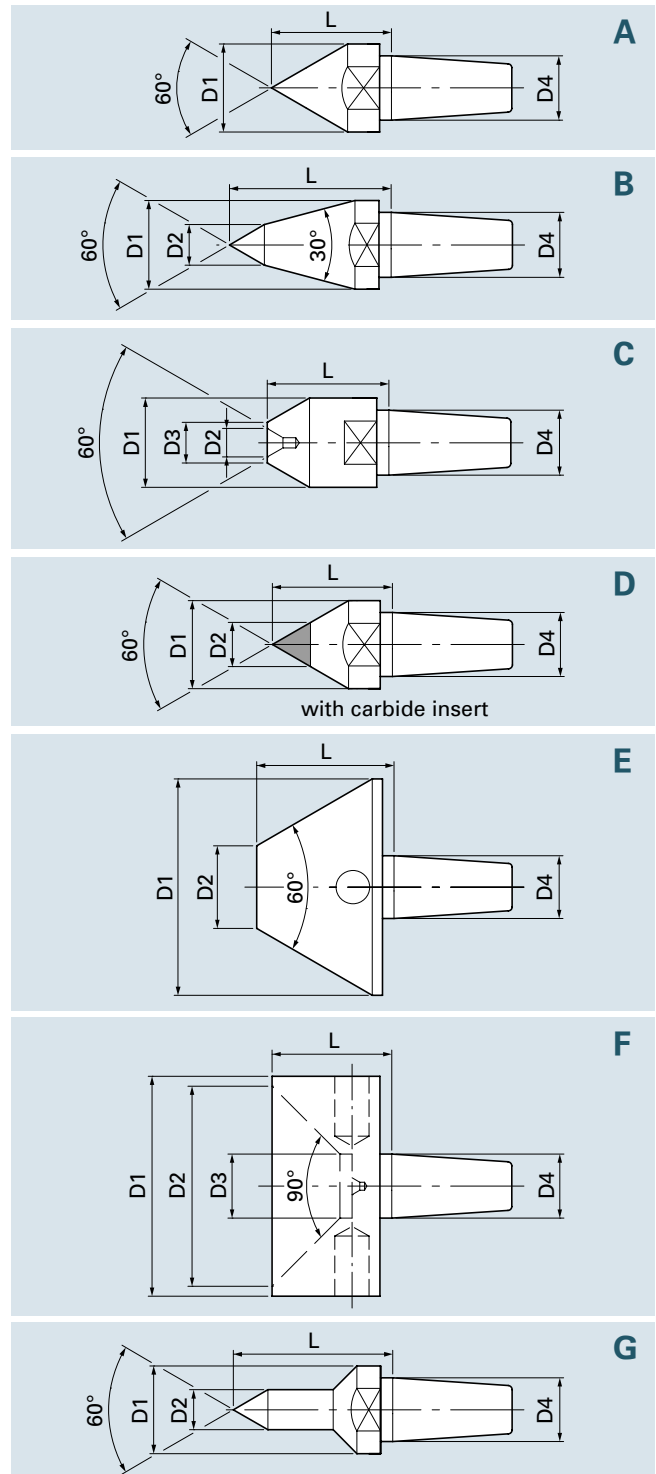
For types RNW 3 and 4 FNW MK3 and 4

| cat. no. | type | D1 | D2 | D3 | D4 | L |
|----------|------|----|----|----|----|----|
| 81550 | A | 22 | - | - | 16 | 30 |
| 81551 | B | 22 | 10 | - | 16 | 40 |
| 81552 | C | 22 | 7 | 10 | 16 | 30 |
| 81553 | D | 22 | 11 | - | 16 | 30 |
| 81554 | E | 55 | 21 | - | 16 | 35 |
| 81555 | F | 55 | 50 | 10 | 16 | 30 |
| 81556 | G | 22 | 10 | - | 16 | 40 |

For types RNW 5 and 6 FNW MK5 and 6

| cat. no. | type | D1 | D2 | D3 | D4 | L |
|----------|------|----|----|----|----|----|
| 81560 | A | 34 | - | - | 22 | 35 |
| 81561 | B | 34 | 16 | - | 22 | 45 |
| 81562 | C | 34 | 10 | 7 | 22 | 29 |
| 81563 | D | 34 | 18 | - | 22 | 35 |
| 81564 | E | 70 | 33 | - | 22 | 38 |
| 81565 | F | 70 | 64 | 24 | 22 | 34 |
| 81566 | G | 34 | 16 | - | 22 | 45 |

For type RNW / FNW with taper interface



For quick demounting all changeable inserts come with spanner flat or cross hole.