COLLET CHUCK PULLING FORCE SYSTEM



UNILOCK COLLET-CHUCK FOR C.N.C. LATES





THE ACCURACY OF MECHANICS, THE HUMAN TOUCH.

SMH - COLLET-CHUCK PULLING FORCE SYSTEM



In the pulling force system the collet couples directly with the spindle cone.

Main uses

Applied to the lathe main spindle it is suitable for bar machining. Moreover, thanks to the construction flexibility of the system, it allows easy specific solutions (drawn bars, rectified items, rolled items, pipes).

The rubber coating of the collets does not allow shavings to pass inside the spindle.

QUICK CHANGE COLLET

The system allows a fast front removal of the collet. In this way, replacement or disassembly collet cleaning operations result easier and quicker, without dead times.

Available in the following models:

SMH 42 - bar passage ø 42 mm SMH 52 - bar passage ø 52 mm SMH 65 - bar passage ø 65 mm SMH 80 - bar passage ø 80 mm SMH 100 - bar passage ø 100 mm

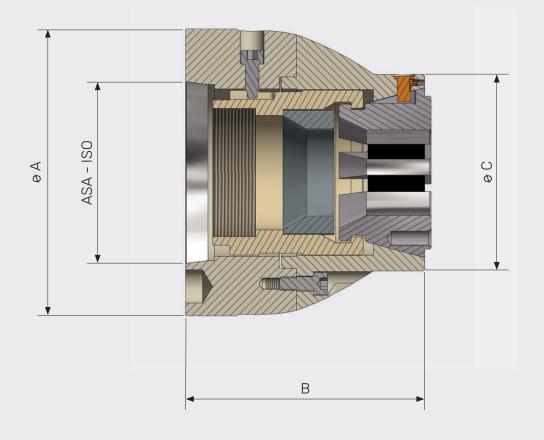
All models are **COMPATIBLE** with original **HAINBUCH** collets

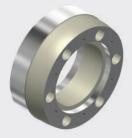
ADVANTAGES

- Strong clamping strength
- Machining tolerance lower than **DIN** tables
- Minimum weight and small clearance
- Range of machining: -1.0 mm

- Strength for a noteworthy decrease of the vibrations of the piece machined
- Clamping of raw pieces (rolled, forged, cast elements)
- Quick change collet

SMH - COLLET-CHUCK PULLING FORCE SYSTEM





Base ASA or ISO



Master sleeve

Bush



Quick change clamping nut

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Collet

| ITEM N. | ASA | ISO | А | В | С | | |
|---------|--------|-----------|-------|-----|-------|-------|-------|
| SMH 42 | 5 | 115 - 120 | ø 135 | 127 | ø 95 | ø 42 | ch 38 |
| SMH 52 | 5 | 115 - 120 | ø 135 | 127 | ø 95 | ø 52 | ch 45 |
| SMH 65 | 5 - 6 | 120 - 170 | ø 168 | 140 | ø 115 | ø 65 | ch 56 |
| SMH 80 | 6 - 8 | 140 - 170 | ø 208 | 145 | ø 142 | ø 80 | ch 68 |
| SMH 100 | 8 - 11 | 170 | ø 228 | 162 | ø 168 | ø 100 | ch 86 |



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SMH - CLAMPING COLLECT PULLING FORCE SYSTEM



SMH clamping collets are made up from metal inserts, units of vulcanised rubber. This allows the collet to close radially in a perfect manner, blocking the piece along the entire length of the hole and eliminates the intrusion of shavings to pass inside the spindle.

Applied to the lathe main spindle it is suitable for bar machining.

Moreover, the construction flexibility of the system allows easy specific solutions (drawn bars, rectified items, rolled items, pipes).

QUICK CHANGE COLLET

The system allows a fast front removal of the collet. In this way, replacement or disassembly collet cleaning operations result easier and quicker, without dead times.

> All UNILOCK SMH collets are COMPATIBLE with original HAINBUCH collet-chucks

ADVANTAGES

• UNILOCK SMH COLLETS close with tapered coupling.

This feature allows a bar clamping over the entire lenght of the collet hole with a force from 5 to 10 times greater than conventional collets

- Excellent elasticity
- Reduction of vibrations
- Less tool wear
- No wear on the collet
- Does not mark the surface of the piece
- Quick change collet
- Fewer machine downtimes.

SMH - CLAMPING COLLECT PULLING FORCE SYSTEM





SUPER GRIP High friction coefficient



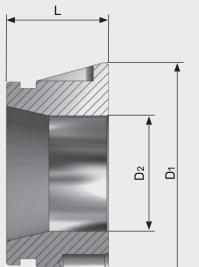
SUPER GRIP

SUPER GRIP COLLETS as well as maintaining the basic features, it presents an high friction coefficient obtained by a special machining process, which increases the clamping force even further.

The "dynamic friction coefficient" is determined on the basis of the roughness present inside the collet and must be considered according to the type of material to be machined (e.g. stainless steel, steel, brass).

| MATERIAL | DYNAMIC FRICTION COEFFICIENT | | | | |
|-----------------|------------------------------|--|--|--|--|
| STAINLESS STEEL | 0,42 | | | | |
| STEEL | 0,48 | | | | |
| BRASS | 0,55 | | | | |
| NO COATING | 0,18 | | | | |

| | | | D2 | | |
|-------------|---------|----|-------|--------|--|
| ITEM N | D1 | L | | | |
| SMH 6970 zw | ø 69,50 | 42 | ø 36 | ch 31 | |
| SMH 32 | ø 57,7 | 47 | ø 32 | ch 27 | |
| SMH 42 | ø 79,3 | 42 | ø 42 | ch 37 | |
| SMH 52 | ø 79,3 | 46 | ø 52 | ch 45 | |
| SMH 65 | e 99,5 | 54 | ø 65 | ch 56 | |
| SMH 80 | ø 114,5 | 53 | e 80 | ch 68 | |
| SMH 100 | e 144,5 | 63 | e 100 | ch 86 | |
| SMH 160 | e 225 | 63 | e 160 | ch 140 | |



SMH AX - COLLET-CHUCK DEAD-LENGTH COLLET SYSTEM



Dead-length collet system with radial clamping without axial movement. Used EXCLUSIVELY on the lathes sub-spindle.

QUICK CHANGE COLLET

The system allows a fast front removal of the collet. In this way, replacement or disassembly collet cleaning operations result easier and quicker, without dead times.

Available in the following models:

SMH AX 52 bar passage ø 52 mm SMH AX 65 bar passage ø 65 mm

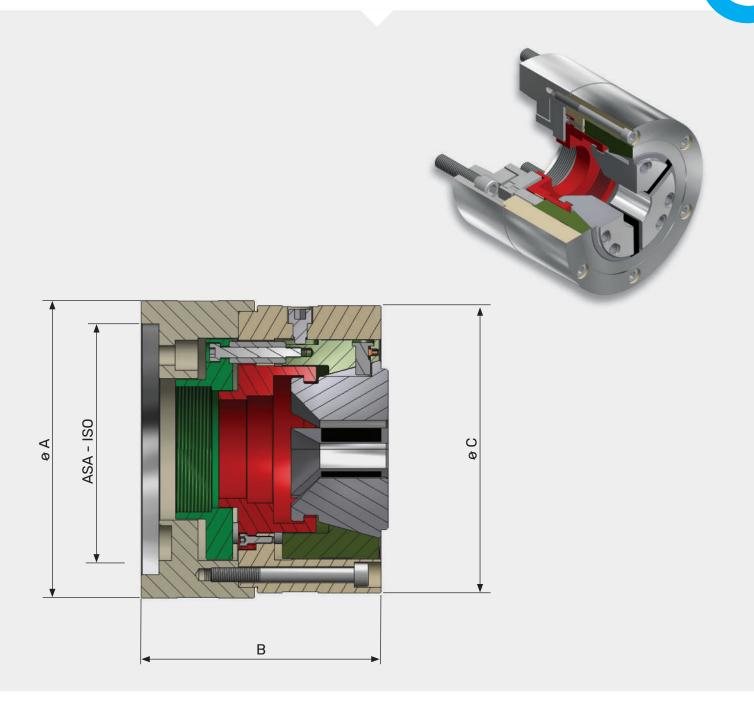
SMH AX 80 bar passage ø 80 mm

> All UNILOCK SMH AX collet-chuck are COMPATIBLE with original HAINBUCH collets

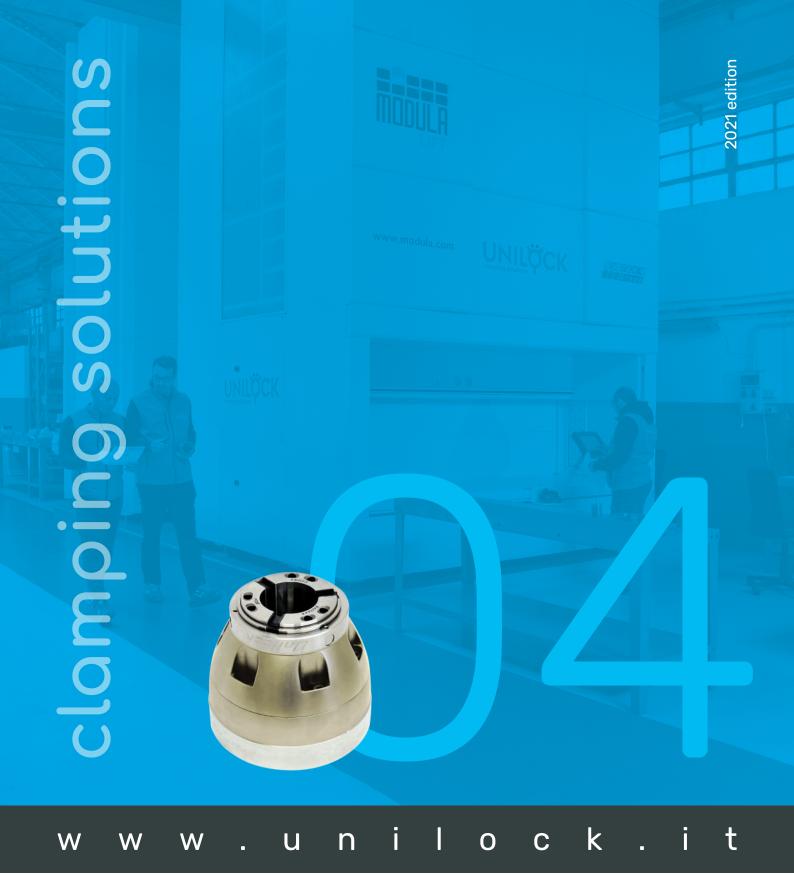
ADVANTAGES

- Suitable for grip without radial effort
- Reduced piece grip depth
- Quick change collet

SMH AX - COLLET-CHUCK DEAD-LENGTH COLLET SYSTEM



| ITEM N. | ASA | ISO | Α | В | С | | |
|-----------|-------|-----------|-------|-----|-------|------|-------|
| SMH AX 52 | 5 | 115 - 120 | ø 145 | 120 | ø 140 | ø 52 | ch 45 |
| SMH AX 65 | 5 - 6 | 140 - 170 | ø 167 | 135 | ø 161 | ø 65 | ch 56 |
| SMH AX 80 | 6 - 8 | 140 - 170 | ø 210 | 145 | ø 180 | ø 80 | ch 68 |





UNILOCK SAS

 Viale Edison, 56 20090 Trezzano S/N (MI) • Italy
(+39) 02 48401499
∞ info@unilock.it
www.unilock.it