

CLAMPING COLLECTS

DEAD-LENGTH COLLET SYSTEM



FOR C.N.C. LATHES WITH FIXED AND MOBILE HEADSTOCK

05

UNILÖCK
clamping solutions

THE ACCURACY OF MECHANICS,
THE HUMAN TOUCH.



SMS - CLAMPING COLLETS

DEAD-LENGTH COLLET SYSTEM



SMS 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).

All **UNILOCK SMS COLLETS**
are **COMPATIBLE** with **FB, BA**
and **DIN 6343**

ADVANTAGES

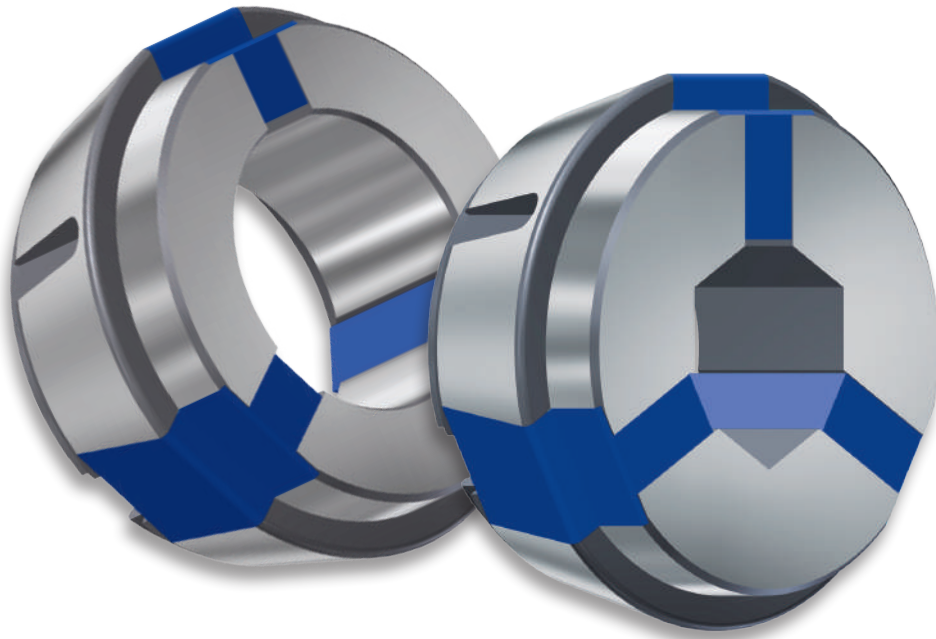
- **UNILOCK SMS COLLETS** close with tapered coupling.

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

- Bar clamping with stationary collet
- Excellent elasticity;
- Reduction of vibrations;
- Less tool wear
- No wear on the collet
- Does not mark the surface of the piece
- Fewer machine downtimes

SMS - CLAMPING COLLETS

TECHNICAL FEATURES



COLLET CLOSURE WITH TAPERED COUPLING

Unilock SMS Collet has closure with TAPERED COUPLING.

This feature allows each individual sector of the collet to close radially, tightening the piece along the entire length of the hole and developing a clamping force that is 5 to 10 times greater with respect to "traditional mono-cone" collets which only close on the front edge. They replace the double cone collets.

BAR CLAMPING WITH STATIONARY COLLET

Unilock SMS Collet closes parallel to the bar axis without interfering in movement of the same. In this way, it does not load the lathe counter-spindle axis.

EXCELLENT ELASTICITY

Thanks to its high elasticity, the Unilock SMS Collet is adaptable to the imperfections of the bar to be clamped. Suitable for machining **rolled, forged and cast elements.**

REDUCTION OF THE VIBRATIONS

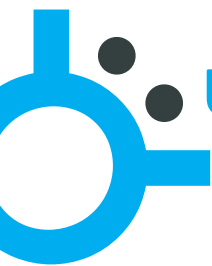
The strong clamping force of the Unilock SMS collet greatly reduces vibrations and resonances.

DOES NOT MARK THE SURFACE OF THE PIECE

During the clamping phase, thanks to the use of a fixed collet closing system (as jaws of self-centering) the bar or the piece is not scratched or marked by the collet.

FEWER MACHINE DOWNTIMES

Unilock SMS Collets do not have cuts. This feature makes it almost impossible for dirt to form inside the spindle.



UNILOCK SMS - CLAMPING COLLETS

DEAD-LENGTH COLLET SYSTEM

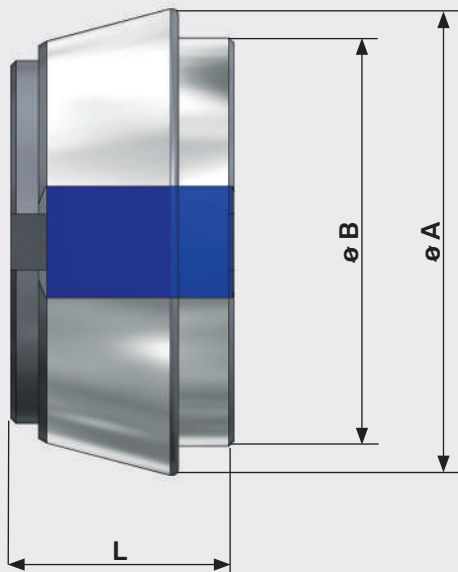
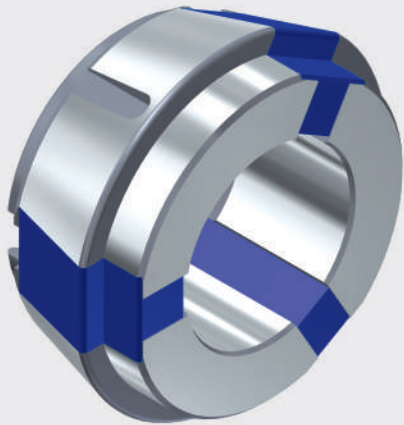
ITEM N.	COMPATIBLE CODE			A	B	L	●	◆
	TIPO F	E - DIN 6343	BA					
U 140 E	F 22 - 71	140 E	-	ø 30	ø 21	24	ø 16	ch 14
U 145 E	F 25 - 64	145 E	-	ø 35	ø 27	28	ø 20	ch 17
U 1446 E	F 30	1446 E	-	ø 38	ø 32	26	ø 30	ch 26
SMS25	F 32	161 E	BA 25	ø 45	ø 34	31	ø 27	ch 24
U 1536 E	F 37	1536 E	-	ø 47	ø 40	31	ø 36	ch 31
SMS 32	F 35	163 E	BA 30	ø 48	ø 38	31,5	ø 32	ch 27
SMS 38	F 42	171 E	BA 36	ø 55	ø 42	32	ø 38	ch 33
SMS 45	F 48	173 E	BA 42	ø 60	ø 50	31	ø 45	ch 39
SMS 56	F 58	177 E	BA 52	ø 70	ø 60	35	ø 56	ch 48
SMS 65	F 66	185 E	BA 60	ø 84	ø 73	40	ø 65	ch 56
SMS 75	-	-	BA 70	ø 98	ø 85	48	ø 75	ch 65
SMS 80	-	-	-	ø 104	ø 91	44	ø 80	ch 69
SMS 95	-	-	-	ø 118	ø 99	49	ø 95	ch 82
SMS 100	-	-	-	ø 126	ø 110	46	ø 100	ch 87
SMS 140	-	-	-	ø 168	ø 152	41	ø 140	ch 120



All **UNILOCK SMS COLLETS** are **COMPATIBLE** with **FB, BA** and **DIN 6343**

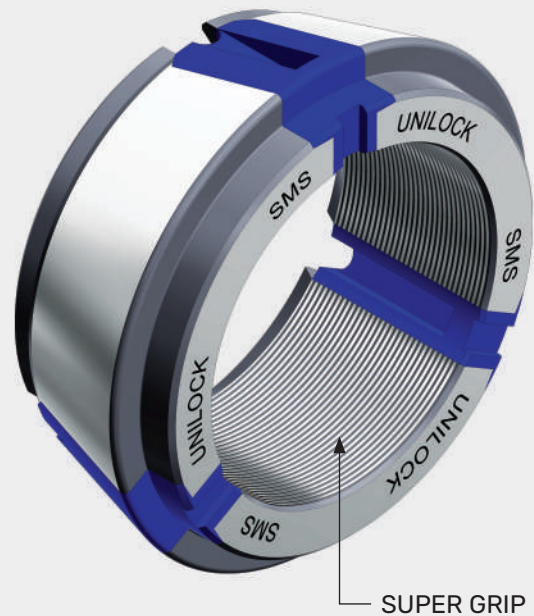
UNILOCK SMS - CLAMPING COLLETS

TECHNICAL FEATURES



SUPER GRIP

High friction coefficient



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

SUPER GRIP CLAMPING COLLETS

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). **SEE TABLE**

KIT CLAMPING COLLETS - SLIDING HEADSTOCK

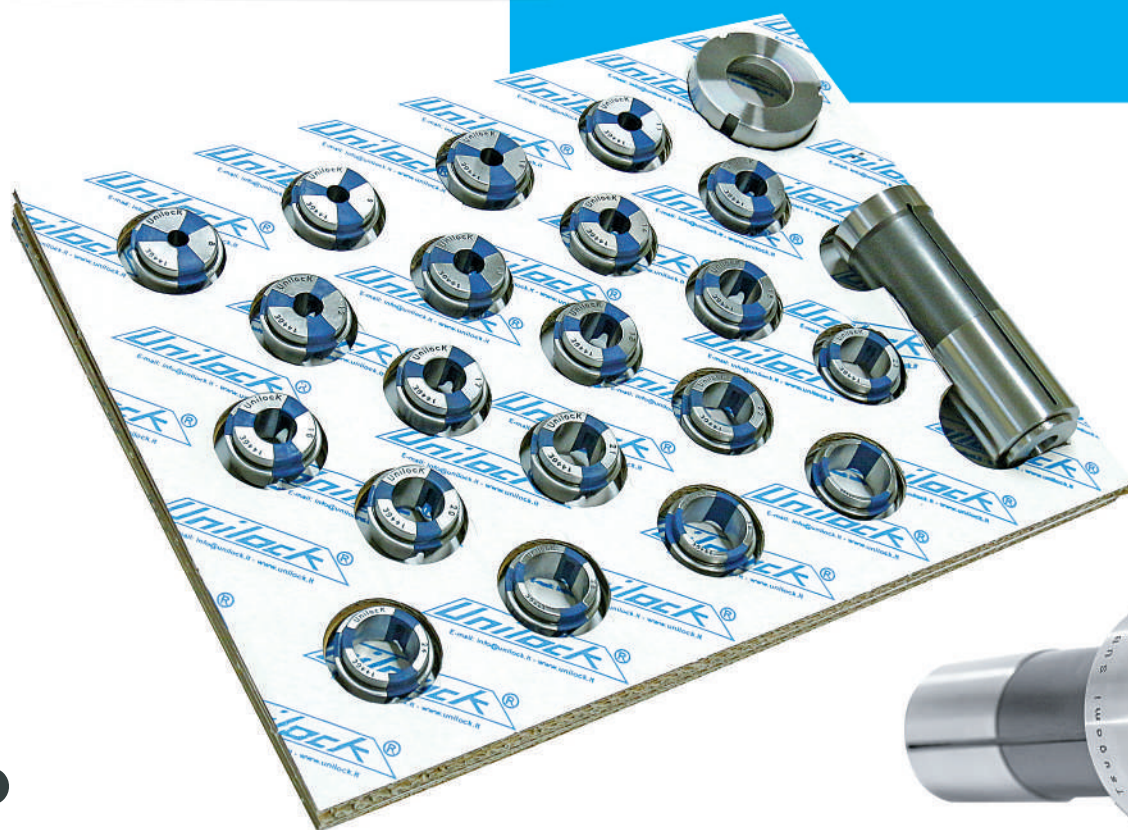
CITIZEN - TORNOS - NOMURA - NEXTURN - TSUGAMI - STAR - GILDEMEISTER - HANWHA

FOR SUB-SPINDLE



ADVANTAGES - COLLETS 1446/E (F30)

- UNILOCK SMS COLLETS close with tapered coupling. This feature allows a bar clamping over the entire length of the collet hole with a force from 5 to 10 times greater than conventional collets.
- Precision construction: concentricity of less than 1 cent
- Bar clamping with stationary collet: Dead Length Collet
- Excellent elasticity
- Reduction of vibrations
- Less tool wear
- No wear on the collet
- Does not mark the surface of the piece
- Fewer machine downtimes



KIT INCLUDES

N. 1 COLLET HOLDER SLEEVE + N. 1 LOCKRING + N. 20 CLAMPING COLLETS

KIT CLAMPING COLLETS - SLIDING HEADSTOCK

CITIZEN - TORNOS - NOMURA - NEXTURN - TSUGAMI - STAR - GILDEMEISTER - HANWHA

FOR SUB-SPINDLE



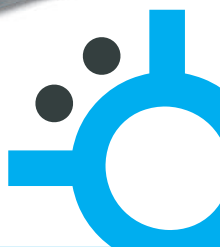
ADVANTAGES - COLLETS 1536/E (F37)

- UNILOCK SMS COLLETS close with tapered coupling. This feature allows a bar clamping over the entire length of the collet hole with a force from 5 to 10 times greater than conventional collets.
- Precision construction: concentricity of less than 1 cent
- Bar clamping with stationary collet: Dead Length Collet
- Excellent elasticity
- Reduction of vibrations
- Less tool wear
- No wear on the collet
- Does not mark the surface of the piece
- Fewer machine downtimes
- CENTRING HEXAGONAL BAR BUSHING: automatic entry into the clamp without error.



KIT INCLUDES

N. 1 COLLET HOLDER SLEEVE + N. 20 CENTRING BAR BUSHES
+ N. 20 CLAMPING COLLETS



clamping solutions

2021 edition



w w w . u n i l o c k . i t

UNILÖCK
clamping solutions

UNILOCK SAS

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