

# COLLET CHUCK

## EXPANSION SYSTEM

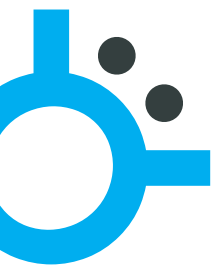


UNILOCK COLLET-CHUCK FOR C.N.C. LATHES

02

**UNILÖCK**  
clamping solutions

THE ACCURACY OF MECHANICS,  
THE HUMAN TOUCH.



# SME - COLLET-CHUCK EXPANSION SYSTEM



One more time Unilock reaches a new milestone to share with you in order to offer you new clamping systems effective and tangible.

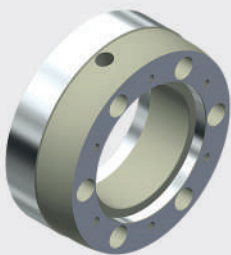
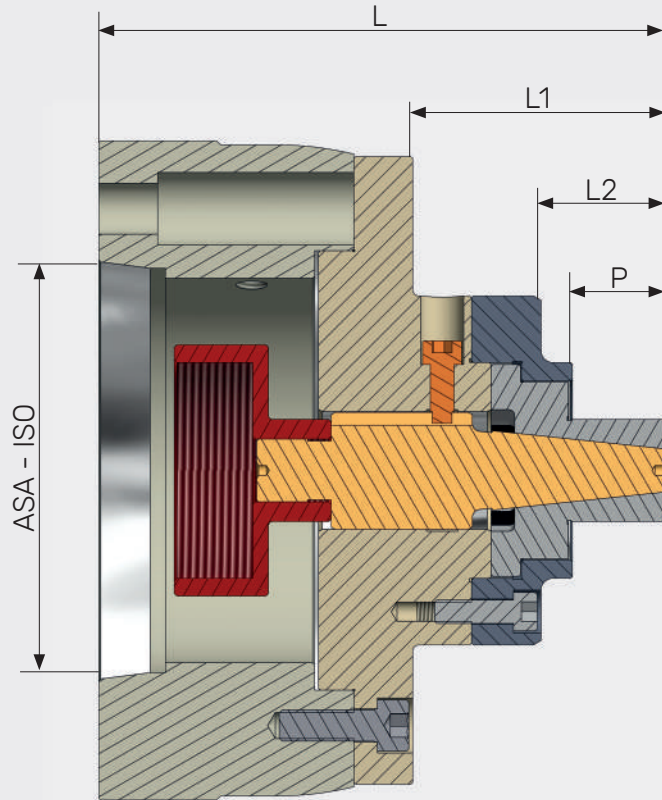
It's a clear example the new collet-chuck expansion system type SME, designed under the philosophy of **FORMULA SYSTEM** (on mandrel basis we build the proper clamping system for each kind of production to perform) that allows a clamping solution powerful and modular.

Main characteristic is the utilization of a "PIN" (push system), that guarantees the same level of performances of a tie rod (pull system) and is slightly bigger in order to be less subject to curves so it can sustain each kind of radial manufacturing process.

## ADVANTAGES

- Minimum clearance
- Piece clamping with stationary collet radial clamping without pull-back effect
- Does not mark the surface of the piece
- Fewer machine downtimes
- High repeatability accuracy
- Machining tolerance lower than DIN tables
- Range of machining: + 0.5 mm / - 0.5 mm
- Clamping of raw pieces (rolled, forged, castings)

# SME - COLLET-CHUCK EXPANSION SYSTEM



Base ASA or ISO



Collet-chuck



Pin



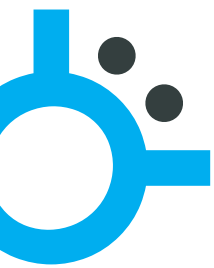
Collet



Quick change  
Workpiece-stop  
nut

ITEM N.	ASA	ISO	L	L1	L2	P
<a href="#">SME 15 - 19</a>	5 - 6 - 8	120 - 170	125	55	22	15
<a href="#">SME 20 - 25</a>	5 - 6 - 8	120 - 170	135	65	32	25
<a href="#">SME 26 - 45</a>	5 - 6 - 8	120 - 170	135	65	32	25
<a href="#">SME 40 - 60</a>	6 - 8	170	175	90	52	45
<a href="#">SME 60 - 80</a>	6 - 8	170	190	105	67	60
<a href="#">SME 80 - 100</a>	6 - 8	170	223	134	86	70
<a href="#">SME 100 - 160</a>	6 - 8 - 11	170	223	134	-	90
<a href="#">SME 160 - 220</a>	8 - 11	-	223	134	-	90





# SME - CLAMPING COLLETS

## EXPANSION SYSTEM



**SME 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.

Unilock clamping collet type SME work with conical coupling. This allow to get a great precision, a big clamping power with a significant reduction of the vibration.

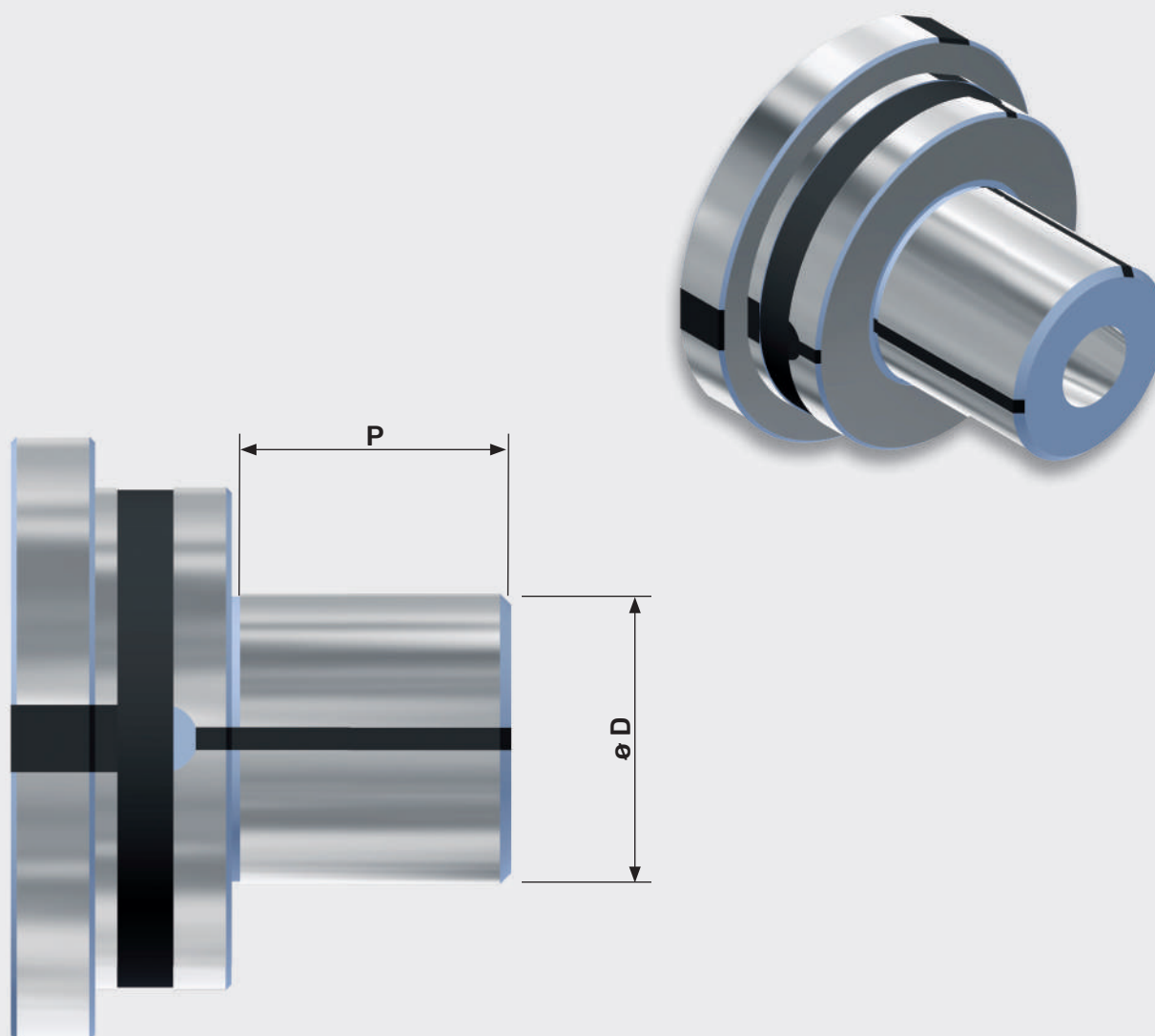
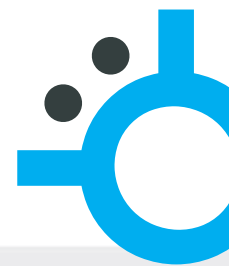
**STATIONARY COLLET-CHUCK  
SYSTEM WITH RADIAL CLAMPING  
WITHOUT AXIAL MOVEMENT**

## ADVANTAGES

- **UNILOCK SME COLLETS** close with **tapered coupling**. This feature allows a bar clamping over the entire lenght of the collet hole
- Great clamping strenght
- 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
- Quick collet change
- Fewer machine downtimes

# SME - CLAMPING COLLETS

## EXPANSION SYSTEM

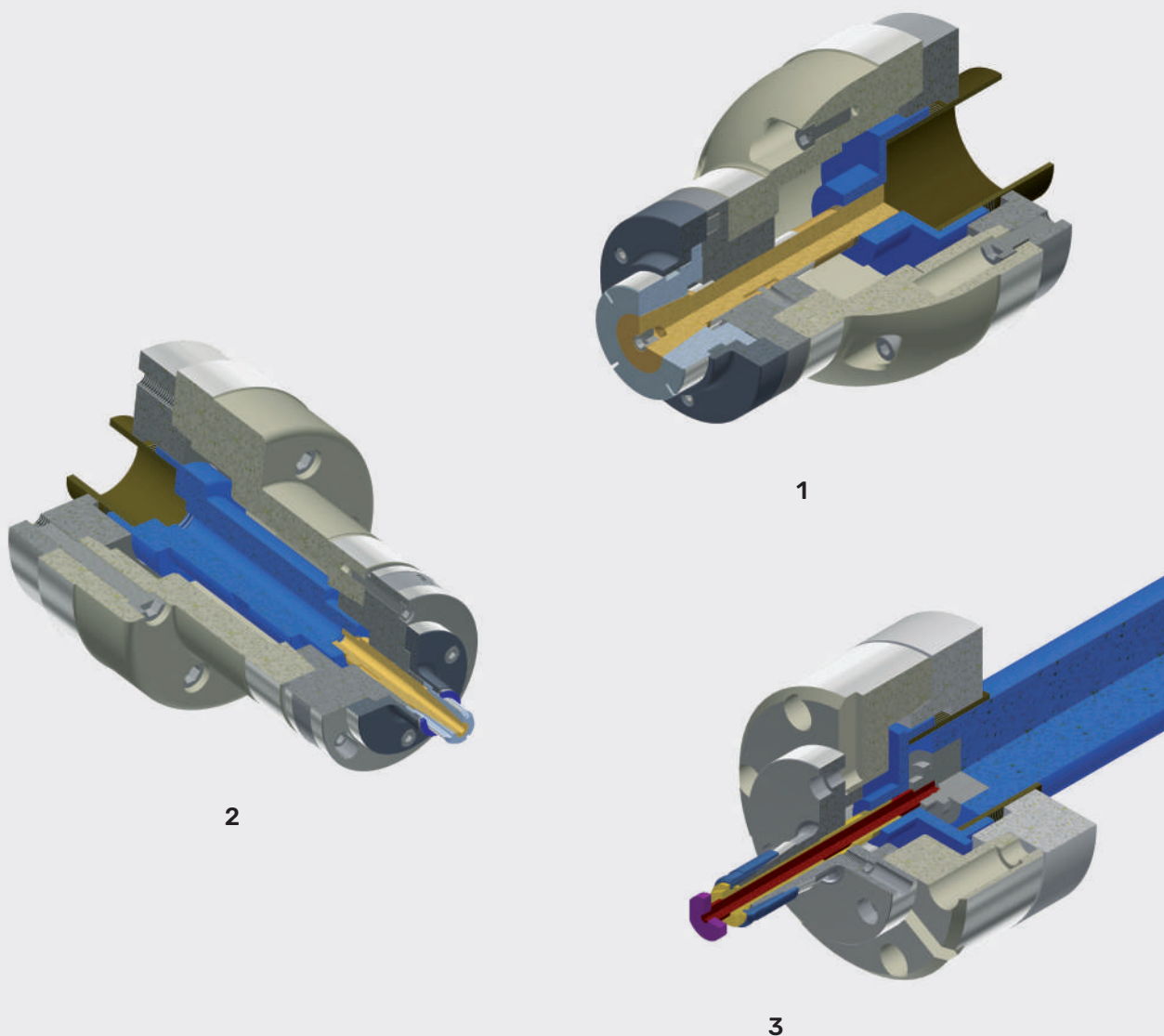


ITEM N.	P	D
SME 15-19	mm 15	ø 15 - 19
SME 20-25	mm 25	ø 20 - 25
SME 26-45	mm 25	ø 26 - 45
SME 40-60	mm 45	ø 40 - 60
SME 60-80	mm 60	ø 60 - 80
SME 80-100	mm 70	ø 80 - 100
SME 100-160	mm 80	ø 100 - 160
SME 160-220	mm 90	ø 160 - 220



# COLLET-CHUCK

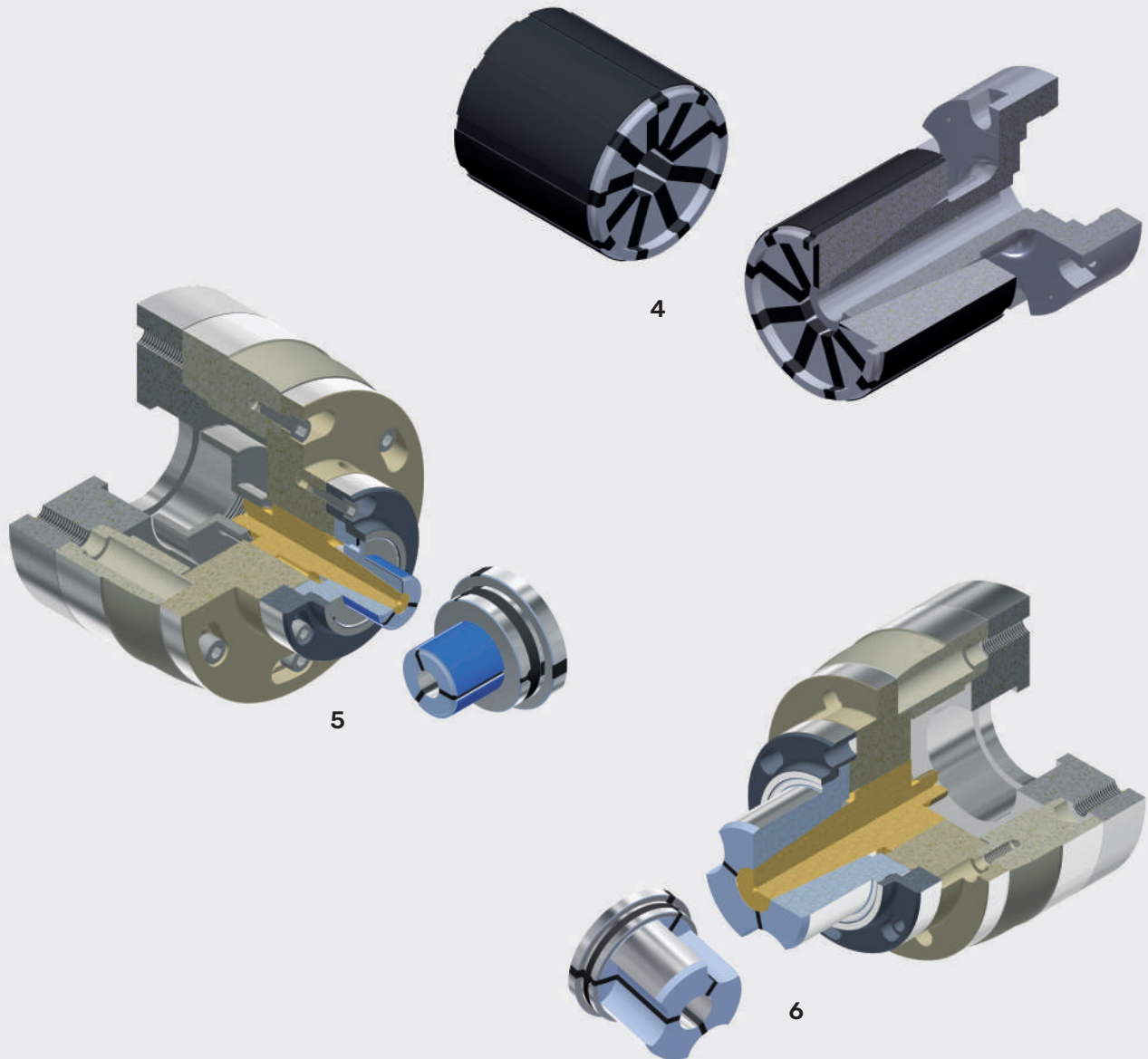
## SPECIAL APPLICATION



Unilock can also plan and produce in 'co-design'. Taking this approach, our technical office works with the customer to assist in the design process, suggest modifications, and improve the product for optimal results.

# COLLET-CHUCK

## SPECIAL APPLICATION



**1** - Ideal for Aluminum foundry process.

**2** - Ideal for internal clamping with little diameters.

**2** - Ideal for blind bores; Possibility to get a Workpiece-stop.

**4 / 5** - Ideal for the production of lapping pipe. Collet completely vested with gum.

**6** - Template collet.



clamping solutions

2021 edition



2022

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

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