

ROTA NCS 3 | ROTA NCS 6

Power Lathe Chucks without Through-hole

Superior Clamping and Gripping



Product overview



Gripping Systems

Clamping Technology



Chuck Jaws



Stationary Workholding



Lathe Chucks



Toolholders



Hydraulic Expansion Technology



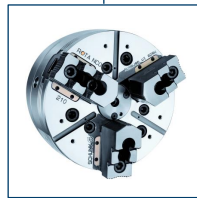
Manual Lathe Chucks



Power Lathe Chucks with Jaw Quick-change System



Power Lathe Chucks with Through-hole



Power Lathe Chucks without Through-hole



Pneumatic Power Chucks



Steady Rests

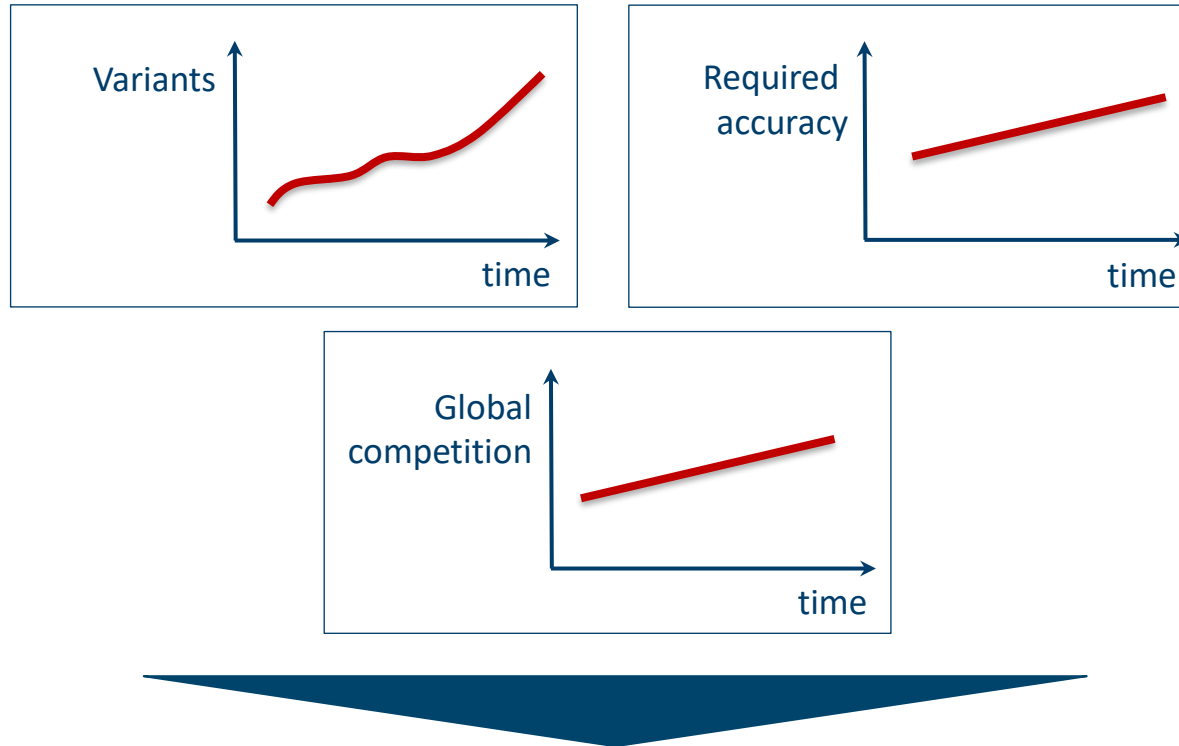


Quick-change Systems



Customized Solutions

Challenges

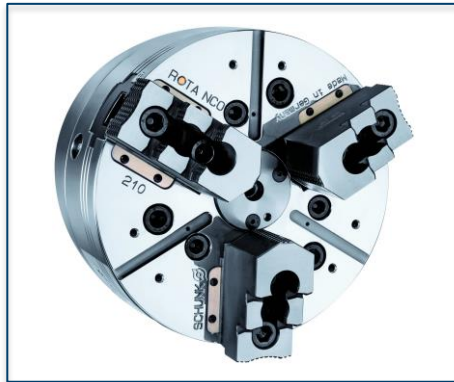


Requirements on the clamping fixture: efficiency, flexibility and...

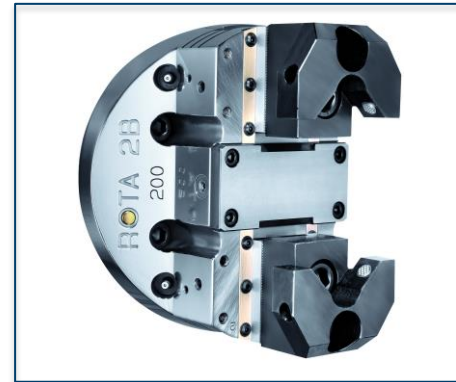
ROTA overview

Power Lathe Chucks without Through-hole

ROTA NCO



ROTA 2B



ROTA NCR/ NCR-A



ROTA NCS 3/ NCS 6



ROTA NCS 6

Example of application



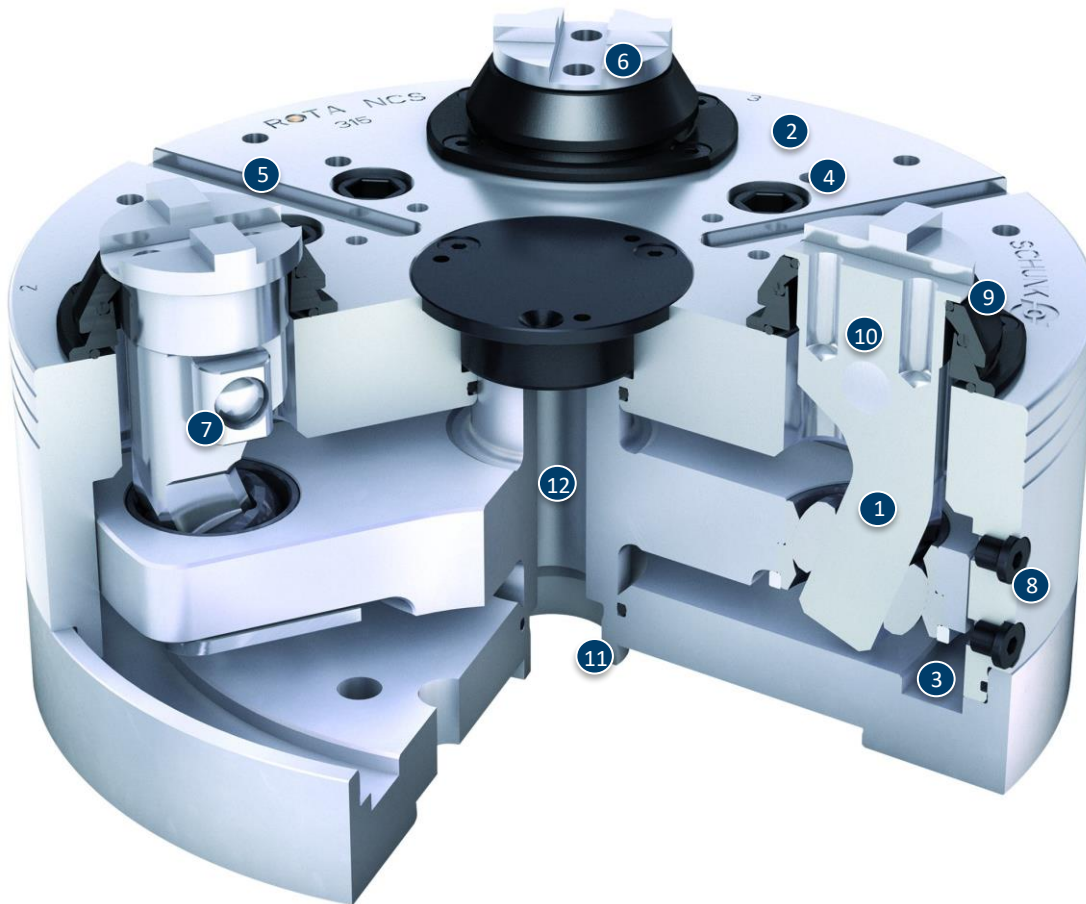
Clamping device:

ROTA NCS 260/6 jaws with special chuck jaws.

Features/Application:

O.D of gear components with pull-down for highest requirements on plane parallelism. Sealed pendulum compensation chuck for series production even for workpieces that are sensitive to deformation.

ROTA NCS 3



- ① Lever drive
- ② Hardened and extremely rigid base body
- ③ Hermetically sealed and oil-filled
- ④ Mounting threads
- ⑤ Additional slot guidance on the chuck face
- ⑥ Standard chuck jaw interface
- ⑦ Lever bearing
- ⑧ Oil drain-screw
- ⑨ Cover with integrated sealing element of the lever
- ⑩ Simple conversion
- ⑪ Optimized piston mount
- ⑫ Central media feed-through

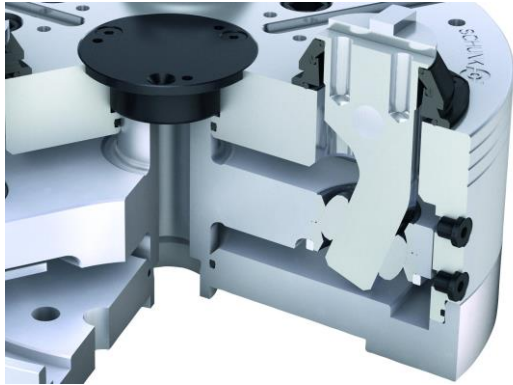
ROTA NCS 6



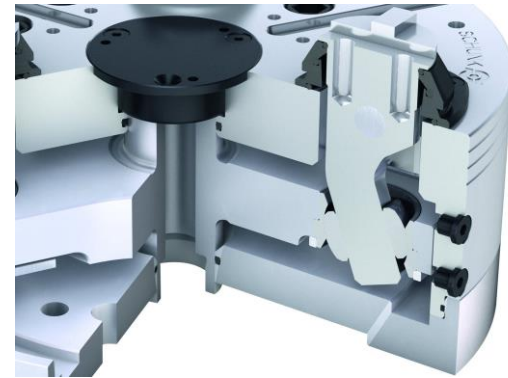
- ① Lever drive
- ② Hardened and extremely rigid base body
- ③ Hermetically sealed and oil-filled
- ④ Mounting threads
- ⑤ Additional slot guidance on the chuck face
- ⑥ Standard chuck jaw interface
- ⑦ Lever bearing
- ⑧ Cover with integrated sealing element of the lever
- ⑨ Simple conversion
- ⑩ Inside located pendulum body
- ⑪ Optimized piston mount
- ⑫ Central media feed-through

ROTA NCS 3/NCS 6

Lever assembly for external clamping



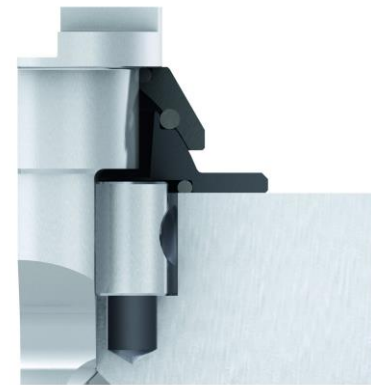
Lever assembly for internal clamping



Active pull down

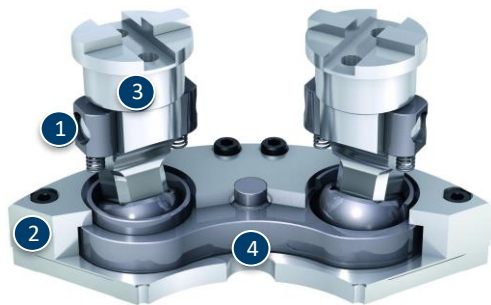


Blocked pull down



ROTA NCS 6

Pendulum mechanism ROTA NCS 6-jaw chuck



- ① Active jaw pull-down
- ② Piston
- ③ Lever
- ④ Pendulum body

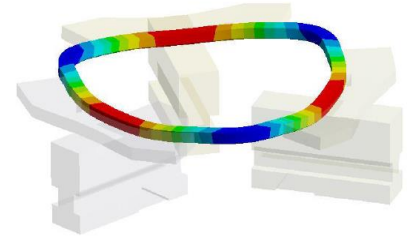
Variants ROTA NCS 3/NCS 6

Technical Data	Max. RPM [min ⁻¹]	Max. Clamping force [kN]	Max. actuating force [kN]	Stroke/jaw [mm]	Piston stroke [mm]	Niederzug [mm]	Pull-down action [mm]	Recommendation clamping range	
								O.D. clamping [mm]	I. D. clamping [mm]
ROTA NCS 175/3	5000	44	20	5.8	21	0.3		32-100	80-150
ROTA NCS 210/3	4500	60	32	6.9	25	0.3		34-132	84-184
ROTA NCS 250/3	4000	80	48	7.7	25	0.3		38-168	92-224
ROTA NCS 315/3	3300	80	48	7.7	25	0.3		88-218	142-274
ROTA NCS 400/3	2200	120	60	8.2	30	0.5		102-272	160-332
ROTA NCS 500/3	1700	150	60	8.2	30	0.5		222-320	280-452
ROTA NCS 260/6	3800	44	20	5.8	21	0.3	± 2	38-168	92-224
ROTA NCS 315/6	2200	80	48	7.7	25	0.3	± 2	88-218	142-274
ROTA NCS 400/6	2000	80	48	7.7	25	0.3	± 3	132-258	192-318
ROTA NCS 500/6	1400	120	65	8.2	30	0.5	± 3	222-320	280-452

SCHUNK Services

Engineering

- Dimensioning of special plates designed to the manufacturing specifications
- Development of special solutions together with the customer
- FEM analysis for critical components



Testing

- Endurance tests with all new developments
- Abrasion checking
- Measurement of accuracy



Service

- Initial operation of customer's solution
- Inspection and maintenance
- Repairs



Superior Clamping and Gripping



© 2021 SCHUNK GmbH & Co. KG
schunk.com