



ROTA NCA

Power Lathe Chucks with 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

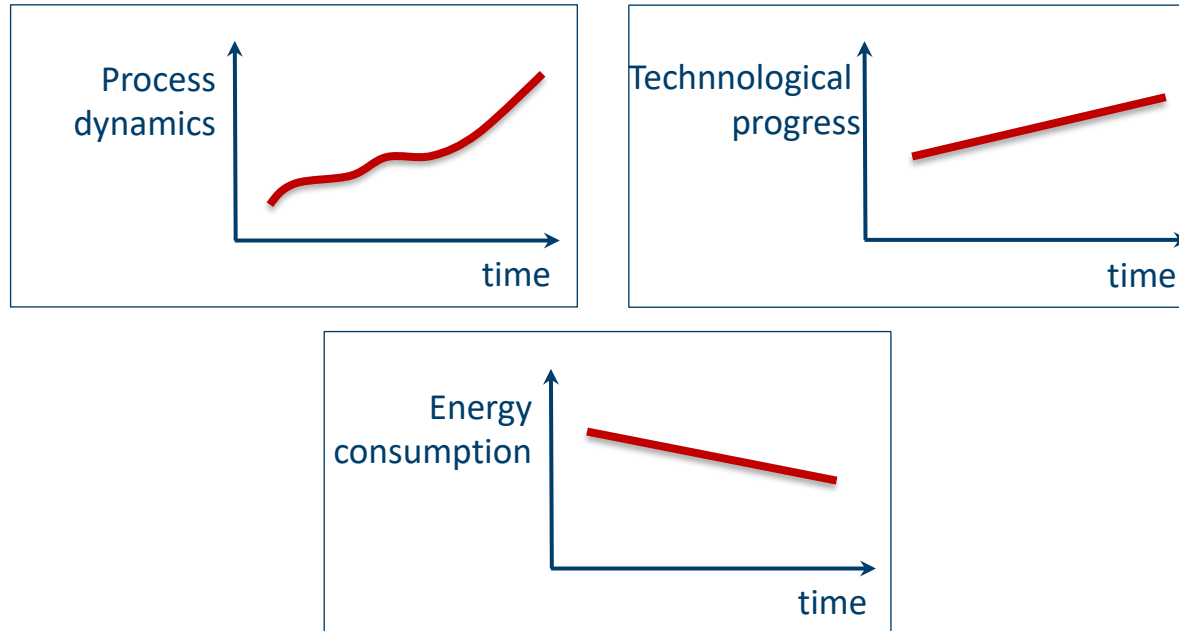


Quick-change Systems



Customized Solutions

Challenges



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

ROTA overview

Power Lathe Chucks with Through-hole

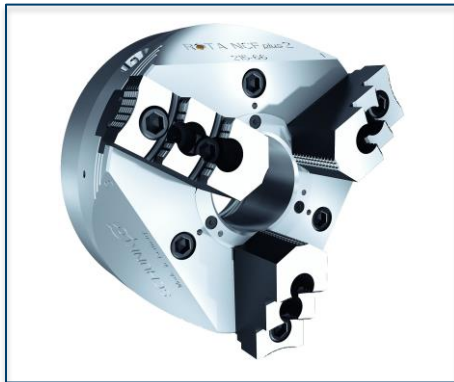
ROTA NCE



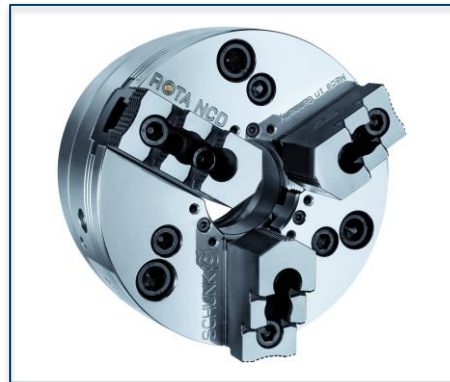
ROTA NCA



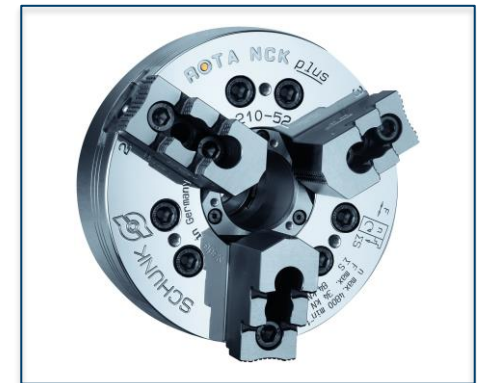
ROTA NC plus 2/NCF plus 2



ROTA NCD



ROTA NCK plus



ROTA NCA



ROTA NCA



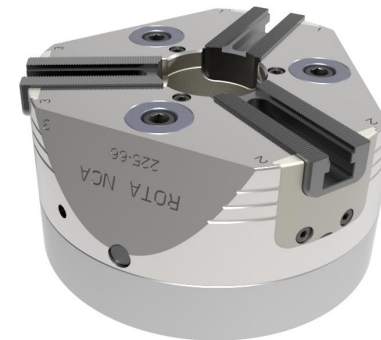
- ① Wedge hook drive
- ② Hardened and extremely rigid base body
- ③ Large through-hole
- ④ Fastening threads for workpiece stops
- ⑤ Standard base jaw serration
- ⑥ Sealing for longer maintenance intervals
- ⑦ Weight-reduced design

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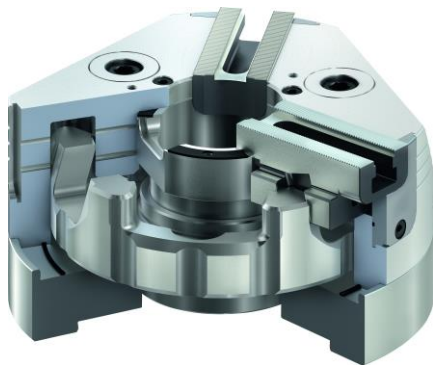
Innovative sealing system



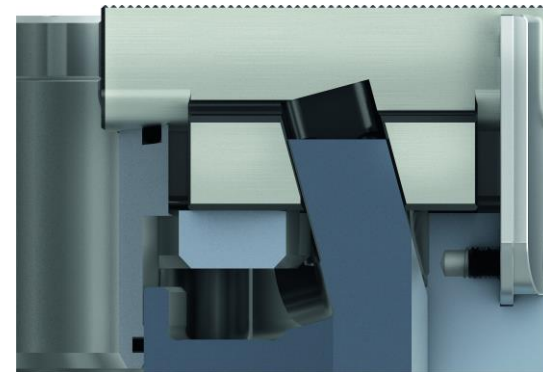
Weight-optimized design with bevelled surfaces



Wedge hook drive in ring piston design with long and precise piston guidance



Base jaw safety feature



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Low-maintenance power chuck with permanent grease lubrication



Up to 20 times longer maintenance intervals

Inlays near the fastening holes



Large through-hole



Base jaws with fine serration, high flexibility with 1/16" x 90° and 1.5 mm x 60°



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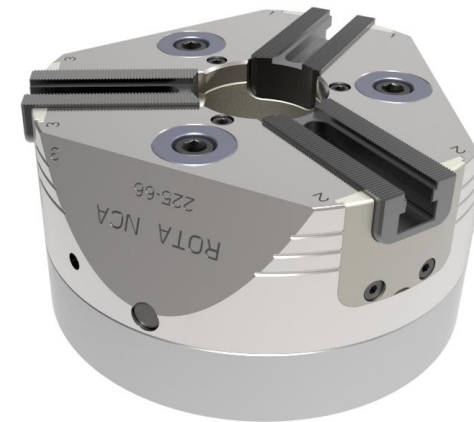
Lubrication intervals conventional power lathe chucks

Lubrication interval	Strain
every 25 hours	normal / coolant utilization
every 8 hours	high / coolant utilization
after 1200 hours or as needed	Total cleaning with disassembly of the chuck, depending on type and degree of contamination



Lubrication intervals ROTA NCA

Lubrication interval	Demands
every 30 days or after 50,000 clamping cycles	normal / use of coolant
every 10 days or after 15,000 clamping cycles	high / use of coolant
after one year or after 250,000 clamping cycles	Full cleaning with disassembly of chuck depending on type of contamination and quantity

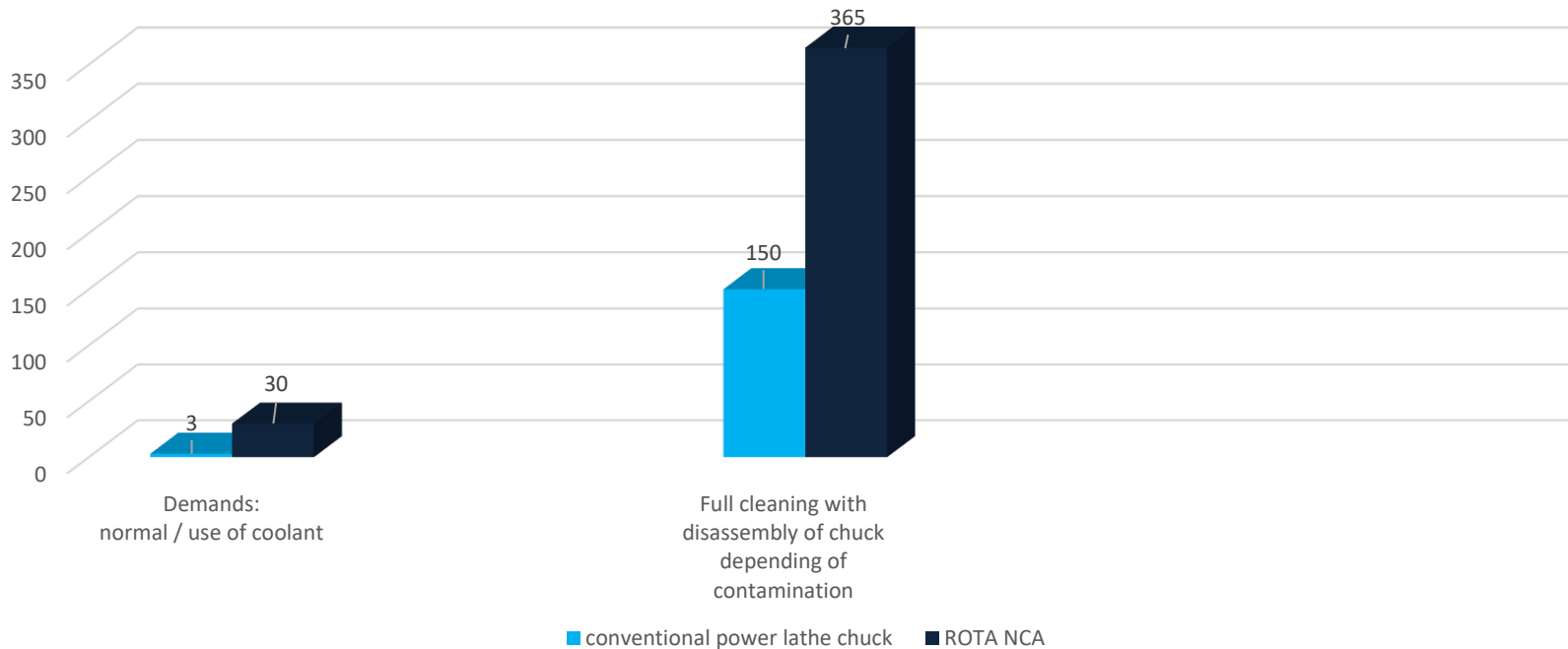


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Comparison lubrication intervals:

Conventional power lathe chucks --> ROTA NCA

Time up to next lubrication intervals or maintenance (per days)



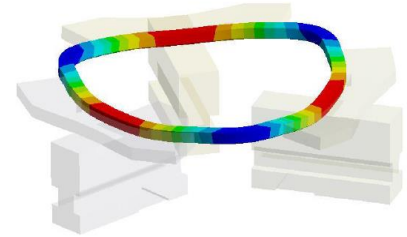
Variants ROTA NCA

Technical data	Max. RPM [min ⁻¹]	Max. clamping force [kN]	Max. actuating force [kN]	Stroke/jaw [mm]	Through-hole [mm]	Piston stroke [mm]
ROTA NCA 160-32	5500	45	20	4	32	15
ROTA NCA 200-52	5000	72	32	5,3	52	20
ROTA NCA 225-66	5000	100	45	5,3	66	20
ROTA NCA 280-86	4000	140	63	5,3	86	20
ROTA NCA 330-104	3500	160	72	5,3	104	20

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



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