

Quick guide Automatic tool changer for deburring spindles ATC

About this manual

This document describes the design and assembly of the automatic tool changer for the products RCV, RCE, CRT and FDB 300 and 340.

During assembly, observe the safety notes of each product in Chapter 2 of the operating manual.

The catalog data sheet contains more information. The latest relevant version is valid.

Scope of delivery

- Ordered components of the automatic tool changer ATC
- Quick guide
- Assembly and operating manual for the product
- Accessory pack

Basic safety notes

Personnel qualification

- All work may only be performed by qualified personnel.
- Before working with the product, the personnel must have read and understood the complete assembly and operating manual.

Personal protective equipment

- When working on and with the product, observe the occupational health and safety regulations and wear the required personal protective equipment.
- Wear protective gloves to guard against sharp edges and corners or rough surfaces.
- Wear heat-resistant protective gloves when handling hot surfaces.
- Wear close-fitting protective clothing and wear long hair in a hairnet when dealing with moving components.

Spare parts

Use of unauthorized spare parts

Using unauthorized spare parts can endanger personnel and damage the product or cause it to malfunction.

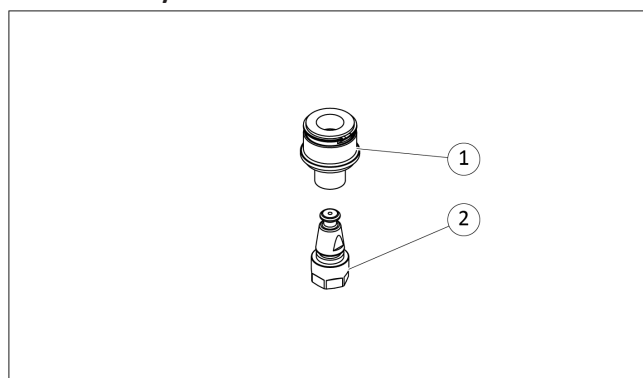
- Use only original spare parts or spares authorized by SCHUNK.

Technical data

Designation	ATC
Nominal operating pressure [bar]	4.1
Pressure medium	Compressed air (clean, dry, filtered ($\leq 5 \mu\text{m}$), oil-free)

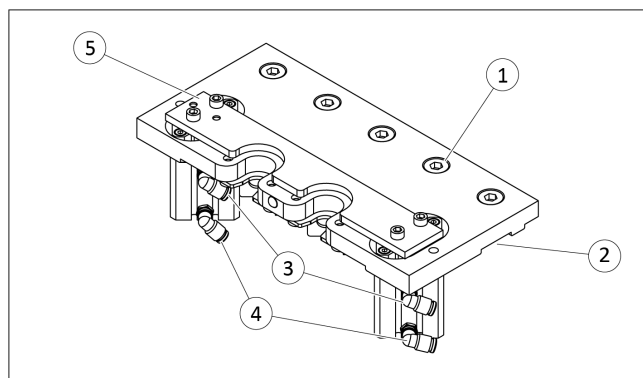
Design

Collet chuck system



1	Master side
2	Tool holder

Tool stand module

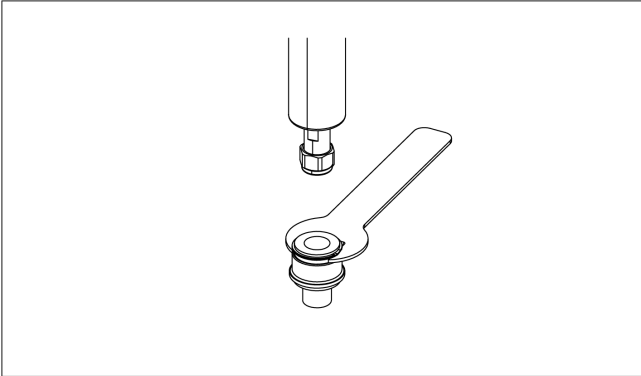


1	Mounting screw
2	Recess for T-nuts
3	Air connection retract
4	Air connection extend
5	Push plate

Quick guide Automatic tool changer for deburring spindles ATC

Assembly

Assembling the collet chuck system

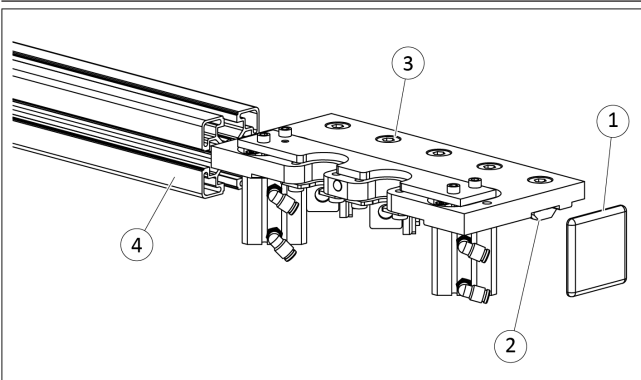


1. Remove the compressed air hose.
2. **For rotating products:** Remove the collet chuck nut, collet chuck and any tools from the product.
For file tools: Remove file holder and any tools from the product.
3. Carefully screw on the automatic quick release (master side) for tool holders to the stop with a wrench from the accessory kit.

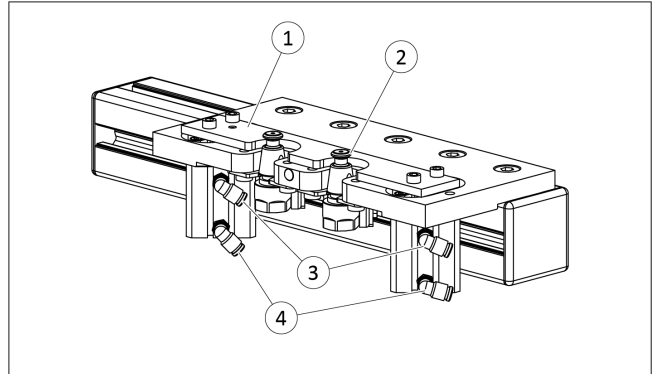
Mount the tool stand module

NOTE

Observe the requirements for the compressed air supply, [Technical data](#) ► 1].



1. Remove the end cap (1) from the extruded aluminum rail (4).
2. Push the tool stand module to the desired position with the T-nut (2) into the extruded aluminum rail (4).
3. Tighten tool stand module with fastening screw (3).
□ Max. tightening torque: 10 Nm.
4. Place the end cap (1) onto the extruded aluminum rail (4).



1. Connect the four air connections retract (3) and extend (4) to the system.
□ Nominal operating pressure: 4.1 bar
2. Manually fasten the tool holder (2) in the storage area on the tool stand module.
3. Pressurize air connection extend (4) with compressed air. Vent air connection retract (3).
4. Move robot to the tool holder in teach mode.
□ The push plate (1) attached to the cylinders is pressed down.
5. Program the robot so that the product couples with the tool holder.
6. Pressurize air connection retract (3) with compressed air. Vent air connection extend (4).
7. Move the robot away from the tool stand module to the side.
8. Repeat steps 5 and 6 for the other tool holder.

Troubleshooting

Master holder does not pick up tool holder

Possible cause	Corrective action
Tool holder is contaminated.	Clean master holder and tool holder of contamination.

Tool holder falls out of storage module

Possible cause	Corrective action
Magnet contaminated.	Clean magnet of contamination.
Tool holder damaged.	Exchange tool holder if required.

Push plate is not raised

Possible cause	Corrective action
Air hoses are contaminated.	Clean air hoses of contamination.
Air hoses are damaged.	Exchange air hoses if required.