

## PRODUCT OVERVIEW

CNC automatic lathes

2025



## **Star Micronics**



## **OVERVIEW** OF MACHINES

|          | AXES                    | 7 AXES                         | 8 AXES              |  |
|----------|-------------------------|--------------------------------|---------------------|--|
| DIAMETER | ∅ 10 mm                 | <b>SR-10J</b> type C           | SL-10               |  |
|          | ⊘ 12 mm                 | SB-12R type G                  |                     |  |
|          | ∅ 16 mm                 | SB-16 III                      |                     |  |
|          | arnothing 20 mm (23 mm) | SB-20R type G SR-20J II type A | SR-20JII type B SR- |  |
|          | Ø 23 mm (26 mm)         | SP-23                          |                     |  |
|          |                         |                                | SD-26 type C        |  |
|          | Ø 32 mm (36 mm)         |                                | SR-32J III type B   |  |
|          | Ø 38 mm (42 mm)         |                                |                     |  |



# **CNC AUTOMATIC LATHES**FROM THE SPECIALISTS

The economic and reliable production of high precision parts requires a trained and motivated workforce in combination with a well-equipped and efficient array of machines. Our innovative force and technological leadership is there to enable you to successfully react to changing market conditions.

For over 40 years thousands of customers have trusted in the reliability, technical expertise and experience of STAR. We are the market leader with more than 7000 star\* machines delivered to customers in Germany. In addition to innovative CNC automatic lathes for diameters in the range of 1 to 42 mm, we also offer a range of innovative services.

|                      | 9 AXES           | 10 AXES             | 11 AXES | 12 AXES             |       |
|----------------------|------------------|---------------------|---------|---------------------|-------|
|                      |                  |                     |         |                     |       |
|                      |                  | SW-12RII            |         |                     |       |
|                      |                  |                     |         |                     |       |
| <b>20R IV</b> type A | SR-20R IV type B |                     | SW-20   | SV-20R              | ST-20 |
|                      |                  |                     |         |                     |       |
|                      | SD-26 type E/G   | <b>SD-26</b> type S |         |                     |       |
|                      |                  |                     |         |                     |       |
|                      |                  | SR-38 type B        |         | <b>SX-38</b> type A | ST-38 |



Diameter 10 mm / 12 mm (option)

Machining possibilities



#### **ADVANTAGES**

- FANUC 32i-B control with electronic handwheel
- C-axis control as standard on main and sub spindle
- Fully independent backworking
- Low space requirement
- Ideal replacement for cam-controlled lathes



#### **SPECIFICATIONS**

Diameter 10 mm / 12 mm (option)

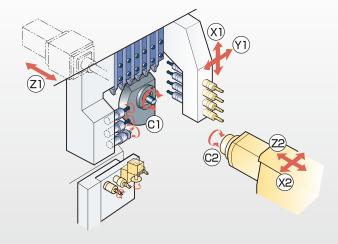
105 mm

Machining possibilities



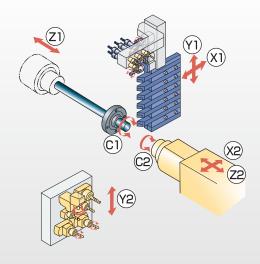
#### **ADVANTAGES**

- FANUC 32i-B Plus control with electronic handwheel
- C-axis control as standard on main and sub spindle
- Fully independent backworking
- Low space requirement
- Ideal replacement for cam-controlled lathes



#### **KINEMATICS & TOOLS**

- 6 turning tools
- Each with 4 drilling tools (front and rear side)
- 3 power-driven tools on the tool post
- $\blacksquare$  4 +  $\alpha$  power-driven tools including sleeves for backworking on 2 stations
- 7 axes



- 6 turning tools
- Each with 4 drilling tools (front and rear side)
- 4 (5) +  $\alpha$  power-driven tools on the tool post
- $\blacksquare$  6 +  $\alpha$  backworking tools, power-driven on 4 stations
- 8 axes



Diameter

12 mm / 13 mm (option)

Headstock stroke  $|\leftrightarrow|$ 

205 mm / 30 mm (fixed headstock lathe)

Machining possibilities



#### **ADVANTAGES**

- FANUC 0i-TF Plus control with electronic handwheel
- C-axis control as standard on main and sub spindle
- Fully independent backworking
- Changeable from sliding head to fixed headstock lathe
- Movable control panel
- Low space requirement
- Ideal replacement for cam-controlled lathes



#### **SPECIFICATIONS**

Diameter



16 mm

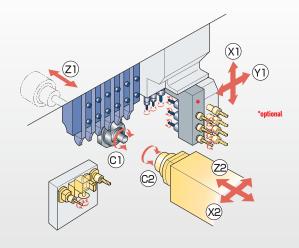
155 mm

Machining possibilities



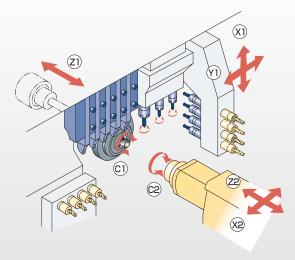
#### **ADVANTAGES**

- FANUC 0i-TF Plus control with electronic handwheel
- C-axis control as standard on main and sub spindle
- Fully independent backworking
- Low space requirement
- Ideal replacement for cam-controlled lathes



#### **KINEMATICS & TOOLS**

- 7 turning tools
- Each with 4 drilling tools (front and rear side)
- 4 (5) +  $\alpha$  power-driven tools on the tool post
- $4 + \alpha$  power-driven tools for backworking
- 7 axes



- 5 turning tools
- Each with 4 drilling tools (front and rear side)
- 3 power-driven tools on the tool post
- 4 backworking tools
- 7 axes



Diameter

20 mm / 23 mm (option)

Headstock stroke

 $|\leftrightarrow|$ 

205 mm / 50 mm (fixed headstock lathe)

Machining possibilities



#### **ADVANTAGES**

- FANUC 0i-TF Plus control with electronic handwheel
- C-axis control as standard on main and sub spindle
- Fully independent backworking
- Changeable from sliding head to fixed headstock lathe
- Movable control panel
- Low space requirement
- Ideal replacement for cam-controlled lathes



**SPECIFICATIONS** 

Diameter



23 mm / 26 mm (option)

Headstock stroke  $|\leftrightarrow|$ 



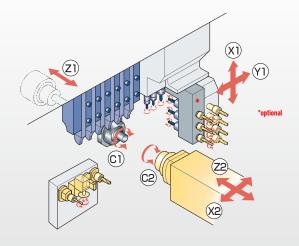
196 mm / 50 mm (fixed headstock lathe)

Machining possibilities



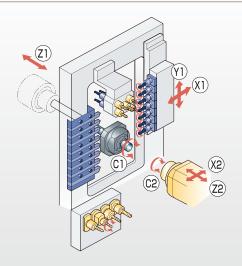
#### **ADVANTAGES**

- FANUC 0i-TF Plus control with electronic handwheel
- C-axis control as standard on main and sub spindle
- Fully independent backworking
- Changeable from sliding head to fixed headstock lathe
- Movable control panel



#### **KINEMATICS & TOOLS**

- 6 turning tools
- Each with 4 drilling tools (front and rear side)
- 4 (5) +  $\alpha$  power-driven tools on the tool post
- $4 + \alpha$  power-driven tools for backworking
- 7 axes



- 8 turning tools
- Each with 5 drilling tools (front and rear side)
- $\blacksquare$  7 +  $\alpha$  power-driven tools on the tool post
- $4 + \alpha$  power-driven tools for backworking
- 7 axes



Diameter

20 mm / 23 mm (option)

Headstock stroke  $\mid \leftrightarrow \mid$ 

205 mm / 50 mm (fixed headstock lathe)

Machining possibilities



#### **ADVANTAGES**

- FANUC 32i-B control with electronic handwheel
- C-axis control as standard on main and sub spindle
- Fully independent backworking
- Changeable from sliding head to fixed headstock lathe
- Movable control panel
- 2 additional deep hole drilling stations



#### **SPECIFICATIONS**

Diameter



20 mm / 23 mm (option)

Headstock stroke  $|\leftrightarrow|$ 



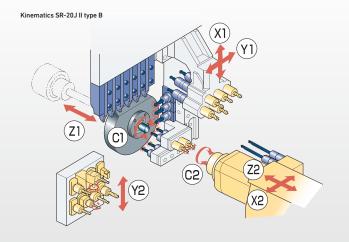
205 mm / 50 mm (fixed headstock lathe)

Machining possibilities



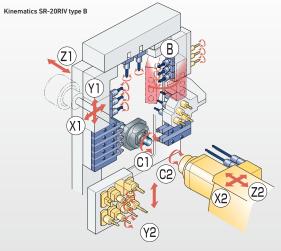
#### **ADVANTAGES**

- FANUC 31i-B5 (type A: 31i-B) control with electronic handwheel
- C-axis control as standard on main and sub spindle
- Fully independent backworking
- Changeable from sliding head to fixed headstock lathe
- Movable control panel
- 2 additional deep hole drilling stations
- B-axis for main and sub spindle on the tool post



#### **KINEMATICS & TOOLS**

- 6 turning tools
- Each with 5 drilling tools (front and rear side)
- $5 + \alpha$  power-driven tools on the tool post
- 2 deep hole drilling stations
- 4 (type A) / 8 (type B) +  $\alpha$  power-driven tools for backworking
- 7 axes (type A) / 8 axes (type B)



- 7 turning tools
- Each with 4 drilling tools (front and rear side)
- $\blacksquare$  5 +  $\alpha$  power-driven tools on the tool post
- B-axis on the tool post with 3 power-driven tools
- 2 deep hole drilling stations
- 11 +  $\alpha$  power-driven tools for backworking
- 8 axes (type A) / 9 axes (type B)



Diameter

32 mm / 36 mm (option)

Headstock stroke

 $|\leftrightarrow|$ 

320 mm / 80 mm (fixed headstock lathe)

Machining possibilities



#### **ADVANTAGES**

- FANUC 32i-B control with electronic handwheel
- C-axis control as standard on main and sub spindle
- Fully independent backworking
- Changeable from sliding head to fixed headstock lathe
- Movable control panel



type B



#### **SPECIFICATIONS**

Diameter



38 mm / 42 mm (option)

Headstock stroke  $|\leftrightarrow|$ 



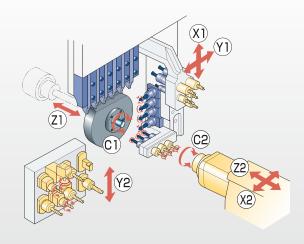
320 mm / 95 mm (fixed headstock lathe)

Machining possibilities



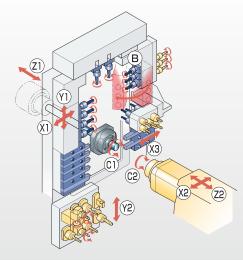
#### **ADVANTAGES**

- FANUC 31i-B5 control with electronic handwheel
- C-axis control as standard on main and sub spindle
- Fully independent backworking
- Changeable from sliding head to fixed headstock lathe
- Movable control panel
- Additional X3-axis for simultaneous turning on the front side
- B-axis programmable for main and sub spindle on the tool post



#### **KINEMATICS & TOOLS**

- 6 turning tools
- Each with 5 drilling tools (front and rear side)
- $5 + \alpha$  power-driven tools on the tool post
- $8 + \alpha$  power-driven tools for backworking
- 8 axes



- 7 turning tools
- Each with 5 drilling tools (front and rear side)
- $\blacksquare$  6 +  $\alpha$  power-driven tools on the tool post
- B-axis on the tool post with 3 power-driven tools
- 11 +  $\alpha$  power-driven tools for backworking
- 10 axes

# **12RII**



#### **SPECIFICATIONS**

Diameter

12 mm / 13 mm (option)

Headstock stroke  $|\leftrightarrow|$ 



135 mm / 30 mm (fixed headstock lathe)

Machining possibilities



#### **ADVANTAGES**

- FANUC 31i-B5 control with electronic handwheel
- C-axis control as standard on main and sub spindle
- Fully independent backworking
- Changeable from sliding head to fixed headstock lathe
- Movable control panel
- 2 tool posts for simultaneous machining on the front side
- Three fully independent tool systems
- Low space requirement



**SPECIFICATIONS** 

Diameter



20 mm / 23 mm (option)



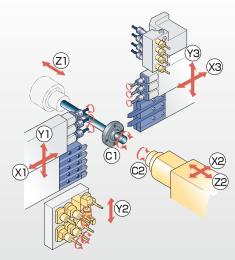
205 mm

Machining possibilities



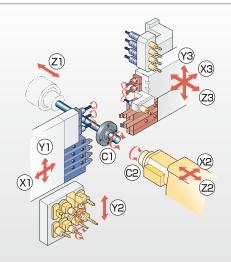
#### **ADVANTAGES**

- FANUC 31i-B5 control with electronic handwheel
- C-axis control as standard on main and sub spindle
- Fully independent backworking
- Movable control panel
- 2 tool posts for simultaneous machining on the front side
- Additional longitudinal axis on the tool post 3
- Three fully independent tool systems



#### **KINEMATICS & TOOLS**

- 7 turning tools
- Each with 4 drilling tools (front and rear side)
- $\blacksquare$  6 +  $\alpha$  power-driven tools on the tool post
- $8 + \alpha$  power-driven tools for backworking
- 10 axes



- 6 turning tools
- Each with 4 drilling tools (front and rear side)
- $6 + \alpha$  power-driven tools on the tool post
- $\blacksquare$  8 +  $\alpha$  backworking tools, power-driven on 6 stations
- 11 axes



Diameter

26 mm

260 mm / 65 mm (fixed headstock lathe)

Machining possibilities



#### **ADVANTAGES**

- FANUC 31i-B5 Plus control (type S/G) FANUC 32i-B Plus control (type E) FANUC 0i-TF Plus control (type C)
- C-axis control as standard on main and sub spindle
- Backworking: 8 stations and 2 turning tools
- Changeable from sliding head to fixed headstock lathe
- Movable control panel
- 2 additional deep hole drilling stations
- B-axis for main and sub spindle on the tool post (type S: additional second B-axis)



#### **SPECIFICATIONS**

Diameter



20 mm / 23 mm (option)

Headstock stroke  $|\leftrightarrow|$ 



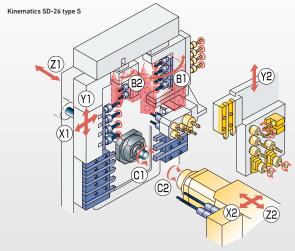
205 mm / 50 mm (fixed headstock lathe)

Machining possibilities



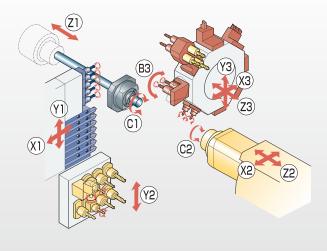
#### **ADVANTAGES**

- FANUC 31i-B5 control with electronic handwheel
- C-axis control as standard on main and sub spindle
- Fully independent backworking
- Changeable from sliding head to fixed headstock lathe
- Movable control panel
- Tool post and turret for simultaneous machining on the front side
- Additional longitudinal axis on the turret
- Three fully independent tool systems
- Turret drive power 4 kW



#### **KINEMATICS & TOOLS**

- 7 turning tools
- Each with 5 drilling tools (front and rear side)
- $10 + \alpha$  power-driven tools on the tool post (type C/E/G)
- 9 +  $\alpha$  power-driven tools on the tool post (type S)
- 2 deep hole drilling stations
- $8 + \alpha$  power-driven tools for backworking and 2 additional turning tools
- 8/9/10 axes (type C / type E+G / type S)



- 7 turning tools
- 5 power-driven tools on the tool post
- $8 + \alpha$  tools for turning, drilling and cross-machining on the turret
- 4 turret stations (programmable) for B-axis machining
- $8 + \alpha$  power-driven tools for backworking
- 12 axes

type A



#### **SPECIFICATIONS**

Diameter



38 mm / 42 mm (option)

Headstock stroke  $\mid \leftrightarrow \mid$ 



320 mm / 95 mm (fixed headstock lathe)

Machining possibilities



#### **ADVANTAGES**

- FANUC 31i-B5 control with electronic handwheel
- C-axis control as standard on main and sub spindle
- Fully independent backworking
- Changeable from sliding head to fixed headstock lathe
- Movable control panel
- Tool post and turret for simultaneous machining on the front side
- Additional longitudinal axis on the turret
- B-axis programmable for main and sub spindle on the tool post
- Three fully independent tool systems
- Turret drive power 4 kW



#### **SPECIFICATIONS**

Diameter



20 mm / 23 mm (option)

Headstock stroke ←



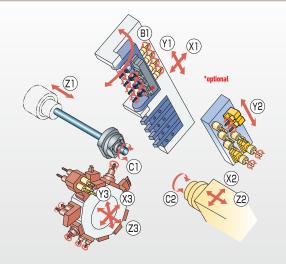
350 mm

Machining possibilities



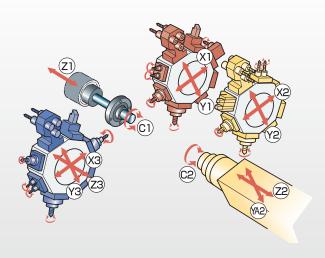
#### **ADVANTAGES**

- FANUC 31i-B5 control with electronic handwheel
- C-axis control as standard on main and sub spindle
- Fully independent backworking
- Movable control panel
- 2 turrets for simultaneous machining on the front side
- Additional longitudinal axis on the tool post 3
- Three fully independent tool systems
- Turret drive power 2,5 kW



#### **KINEMATICS & TOOLS**

- 4 turning tools
- B-axis programmable on the tool post with 4 power-driven tools (front and rear side)
- 3-station sleeve holder for high speed spindles on the B-axis
- $10 + \alpha$  tools for turning, drilling and cross-machining on the turret
- $\blacksquare$  8 +  $\alpha$  power-driven tools for backworking
- 12 axes



- $\blacksquare$  24 +  $\alpha$  tools for turning, drilling and cross-machining on 3 turrets
- 8 power-driven tool stations per turret
- 12 axes

Diameter

38 mm / 42 mm (option)

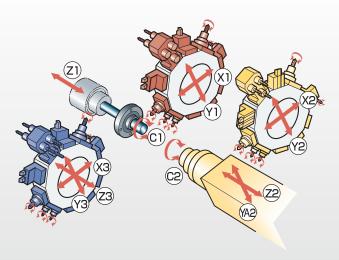
350 mm

Machining possibilities



#### **ADVANTAGES**

- FANUC 31i-B5 control with electronic handwheel
- C-axis control as standard on main and sub spindle
- Fully independent backworking
- Movable control panel
- 2 turrets for simultaneous machining on the front side
- Additional longitudinal axis on the tool post 3
- Three fully independent tool systems
- Turret drive power 4 kW



#### **KINEMATICS & TOOLS**

- 30 +  $\alpha$  tools for turning, drilling and cross-machining on 3 turrets
- 10 power-driven tool stations per turret
- 12 axes

## **HSL II**

High Speed Loader -Everything from a single supplier



#### LOW SPACE REQUIREMENT, HIGH SPEED AND STABILITY

We have now developed a loader that combines all of these advantages with a forward-looking design. Footprint space can become critical because various kinds of accessories may need to be positioned next to a machine. With its spacesaving form factor and stable, low-oscillation design plus a bar feeding time of less than 26 seconds, the star\* High Speed Loader is the perfect solution for our customers.



#### **ADVANTAGES**

- Compact, stable form factor (LxWxH: 4,005x875x1,398 mm, weight >1,500 kg) with fully integrated transformer, electrical enclosure, high-pressure subsystem with cooler (optional), scrap bin and channel insert bin
- Completely sealed tray in underbody area
- Extremely short mounting between machine and loader
- Common supply line for electrical connections and highpressure supply - no untidy cables/piping on and around the machine
- New type of steady rest system for guiding the bar
- Also suitable for smaller diameters than 6 mm
- Loading time under 26 seconds
- Channel change under 10 min.
- Control via machine
- Bar length visually displayed with integrated LED strip or per digital display
- Sliding device (Hybrid)

## **TPM**

### **Tool Process Monitoring**



Reproducible process and tool monitoring has long since been essential for companies looking to ensure their long-term productivity and quality. With its Tool Process Monitoring (TPM), STAR has developed a retrofit solution for process monitoring. The system permits the simultaneous monitoring of more than 50 tools. TPM has now been successfully deployed at more than 20 customers. This close collaboration with our customers has been a crucial factor in the constant improvement and lasting success of our TPM solution.



#### **ADVANTAGES**

- Monitoring of D=2 mm drilling tool (process-dependent)
- No need to stop during the measurement cycle
- Integrated tool and program management
- Freely selectable number of teach cycles
- Automatic saving of measurement data for tool optimisation and error analysis
- Simultaneously multi-monitoring of up to 12 tools / axes
- Display of history data to improve process
- User interface intuitive and easy to use
- Retrofit possible from FANUC 30i (all types from approx. 2008)
- Option: network connection to display process data in office

## **HFT UND SCP**

High Frequency Turning and Step-Cycle-Pro – Our metal cutting innovations

CHIP PROBLEMS? WITH **HFT** FROM STAR THESE PROBLEMS ARE A THING OF THE PAST.

#### **ADVANTAGES**

- Controlled chips
- Higher machine availability
- Less action required by operating personnel
- More stable process reliability
- Less heat development

Suitable for all types of machining and materials (internal and external machining)



before
Chip generation
with conventional machining



afterwards
Chip generation
with high frequency turning

# **SCP** STEP-CYCLE-PRO – A PIONEERING DEVELOPMENT FOR THE MANAGEMENT OF CHIPS

#### **ADVANTAGES**

- Prevents chip problems and considerably reduces scrap
- Even surface finish
- Cycle time easy to control
- Reduces machine downtimes
- Shortens setup times
- Easy to retrofit for a reasonable price
- Easy to handle using the G codes

SCP (Step-Cycle-Pro) is the latest breakthrough in the fight to deal with the challenges of awkwardly long cutting chips found with the machining of difficult materials such as aluminium, stainless steel, copper and plastics.

## NC-FOX

Programming software for star\* CNC automatic lathes

## SSC

star\* Service Connect – Quickest Service 24/7

# NEW

#### NC-FOX from STAR

The software used to program CNC machines needs to be straightforward and intuitive to use. For over 20 years, NC-FOX has been the software of choice when it comes to the rapid and efficient programming of star\* CNC automatic lathes. Featuring a modular design, this programming system consists of six modules. In addition, it can be used together with the NC editor (FOX Edit) and the respective applications for the management of NC programs, for data transfer (PC to machine and vice versa), and as a tool database.

When used together with an optionally available CAD system, even complex contours can be programmed quickly and easily. Sales and service for NC-FOX – only for companies based in the Federal Republic of Germany.

Fast internet and high-performance data servers let us access any information needed in a matter of seconds – which is ideal for you, the customer, when you need reliable support to help you work with your star\* machines. This has led us to launch our new STAR Customer Portal for you: SSC star\* Service Connect.





#### Focused on practice

The overall package is rounded off by professional advice and application-based training from STAR.

#### **ADVANTAGES**

- Always available 24 hours a day, 7 days a week
- Personal login area in the Customer Portal, for viewing and managing your data and your star\* machines
- Create and view the current status of service tickets on any topic from maintenance to machine faults
- Save typing with clicks: wide range of smart selections available for machine data and descriptions of potential faults – plus the option of uploading photos, videos or analysis reports
- Know-how from a single source: thanks to our comprehensive, searchable knowledge base, you can find all of the information you need about servicing and repair work that you can carry out yourself
- Individual configuration of your Info Cockpit to suit company-internal requirements
- Special area for supervisors: direct, at-a-glance access to key data on servicing, shutdowns and costs

## **YOUR CONTACTS**

Sales at STAR

## SALES MANAGER NORTH



Herbert Kohlenbeck

Tel. +49 (203) 7297076 Mobile +49 (151) 4021 9062 herbert.kohlenbeck@starmicronics.de

## SALES REPRESENTATIVE BAVARIA



**Denis Knapp** 

Tel. +49 (7082) 7920-28 Mobile +49 (151) 4021 9028 denis.knapp@starmicronics.de

## SALES REPRESENTATIVE BW SOUTH-WEST



#### **Dennis Reiser**

Tel. +49 (7082) 7920-32 Mobile +49 (151) 4021 9032 dennis.reiser@starmicronics.de

## SALES REPRESENTATIVE BW SOUTH-EAST



#### Witali Friedrich

Tel. +49 (7082) 7920-46 Mobile +49 (151) 4021 9046 witali.friedrich@starmicronics.de

#### **Star Micronics GmbH**

Robert-Grob-Straße 1 · 75305 Neuenbürg Tel. +49 (7082) 7920-0 · Fax +49 (7082) 7920-20 info@starmicronics.de www.starmicronics.de

#### Service-Hotline:

Tel. +49 (7082) 7920-30 Mon. to Thur. 8 am to 4 pm Frid. 8 am to 1:30 pm

#### Spare parts:

Tel. +49 (7082) 7920-17 Mon. to Thur. 8 am to 4 pm Frid. 8 am to 1:30 pm

#### Visit us at:



11. - 14. March 2025 · Leipzig



09. – 11. April 2025 · Villingen-Schwenningen



22. – 26. September 2025 · Hannover



Star Micronics GmbH

Robert-Grob-Straße 1 75305 Neuenbürg

Tel. +49 (7082) 7920-0 Fax +49 (7082) 7920-20

info@starmicronics.de

www.starmicronics.de

