

# ProCom Automation

Company Brochure

Move fast  
and grow.



**ProCom**  
AUTOMATION

# MOVE FAST AND GROW

For more than four decades, we at ProCom Automation are developing high-tech CNC control solutions for our customers' cutting machines. In close cooperation with them, we create unique solutions that are personalised and perfectly tailored to each customer's specific demands. We utilise our many years of experience and profound market knowledge to create intelligent solutions that sustainably improve their machine performances. In doing so, we form an important basis for our customers' pursuit of continuous innovation and growth. We use the knowledge gained from customer projects as an impetus for continuous product development. This synergy enables us to build reliable and long-lasting partnerships, from which all sides can benefit both in terms of advancement and success.

**“WITH OUR CLEVERLY DESIGNED PRODUCTS, YOU GAIN THE ADDED VALUE THAT GRANTS YOU THE ESSENTIAL COMPETITIVE EDGE IN YOUR MARKET.”**

Dr Max Scheidt, Managing Partner

## OUR PRODUCT AREAS



### ► CNC Control Solutions

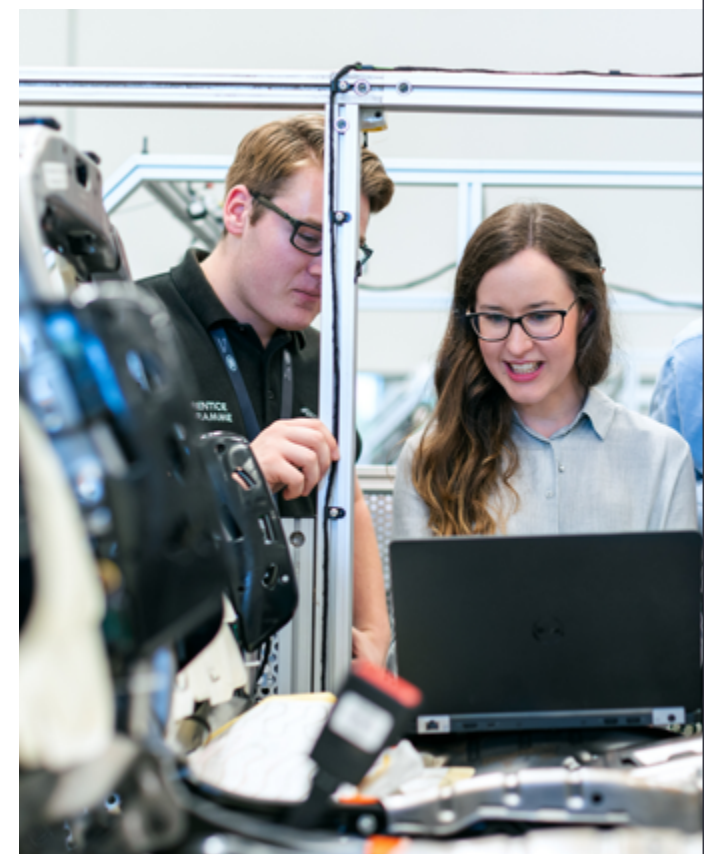
As an expert in CNC control solutions for various cutting technologies, you will find CAM and CNC software with optimised hardware, as well as adapted drive technology from renowned manufacturers.

### ► IIoT Production Monitoring

With Clouver, our IIoT production monitoring platform, you interlink your heterogenous machine parks and render the efficiency of your entire production transparent. Hereby, you uncover untapped optimisation potential and sustainably increase your productivity.

## OUR DNA

Remaining stationary is unknown to us. Courageously and curiously, we are digging our noses into new technologies and expanding our knowledge day by day. Our agile team incorporates a wide range of experience and qualifications, which we sophisticatedly combine to quickly respond to new opportunities. Well-founded, experienced know-how paired with a breeze of fresh air are the momentum to ensure that new ideas are put into practice in a hands-on manner. This way, you as our customer benefit from a consistent and open culture of innovation.





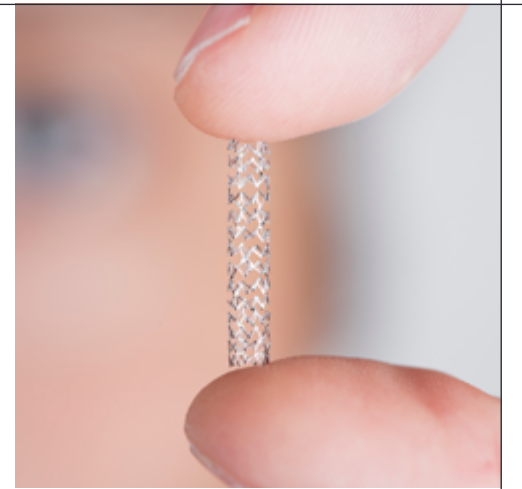
# SPECIALISED CONTROL SOLUTIONS FOR INCREASED MACHINE PERFORMANCE

## Optimised Algorithms and Capabilities for All Cutting Technologies

Whether you want to cut carbon, leather, steel, or foam – the CNC300 control solution convinces with perfect precision and maximum cutting speed for all materials. The adapted algorithm for coordinated multi-axis movements, as well as technology-specific capabilities, take all types of your cutting machines to top performance. The result: cutting outputs that convince you on the entire cutting line, whether for knife, waterjet, laser, or plasma cutting.

## All-In-One: CAM and CNC Software With Optimised Hardware and Adapted Drive Technology

As machine builder and operator of cutting machines with ProCom control solutions, you benefit from the integrated package in a single source, composed of CAM and CNC software with matching hardware and fitting drive technology. Numerous capabilities, combined with the intuitive user interface of the ergoCNC software, enable you to easily find the optimum parameter settings for any material and all technologies. The well-established drive technology from renowned manufacturers facilitates precise and smooth motion control of the machines. Thanks to the integrated IIoT production monitoring platform Clouver, with the CNC300 you gain a cutting-edge control solution for your cutting applications.





# CNC300 – THE BASIS

## CNC300 – Software

- ▶ Intuitive touch GUI ergoCNC
- ▶ CNC core, incl. real-time component
- ▶ Material and tool change assistant for managing specific parameters
- ▶ Integrated PLC – machine-specific controlling
- ▶ Role-specific user guidance
- ▶ Remotely controllable and operable with mobile devices

## CNC300 – Hardware

- ▶ Durable industrial PC mainboard
- ▶ EtherCAT (fieldbus system) and OPC UA interface

## Optional

- ▶ ergoCAM: fully integrated CAM software for job preparation
- ▶ Automatic or manual nesting
- ▶ Integrated IIoT platform Clouver



“AS A TEAM OF EXPERIENCED DEVELOPERS AND ENGINEERS, TOGETHER WITH US YOU WILL REALISE POWERFUL AND INNOVATIVE CONTROL SOLUTIONS THAT ARE ALWAYS SPECIFICALLY DESIGNED TO MEET YOUR VERY INDIVIDUAL REQUIREMENTS.”

Harald Müller, Key Account and Consulting Manager

## YOUR BENEFITS AS MACHINE BUILDER

Choose ProCom's control solution and enjoy numerous valuable advantages:

Intelligent, technology-specific motion algorithms ensure maximum cutting machine performance and deliver cutting results of the highest standard

All-In-One control solution: CAM and CNC software, control hardware, and drive technology – get them all in one package or choose only the component(s) you currently need

Individual adaptation of functions and customer-specific development according to your wishes and requirements

Fast commissioning within shortest time thanks to turnkey solution

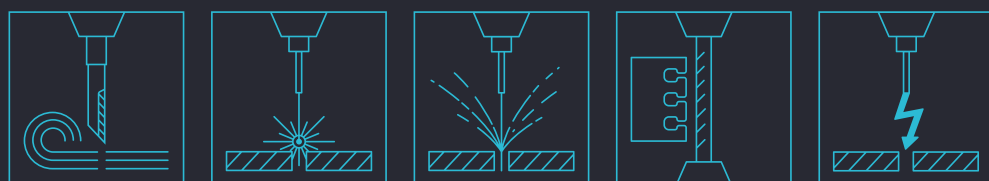
Advice and support from our experts after commissioning, guaranteed support for all technical questions

Continuous development of features and motion algorithms according to market requirements and customer needs thanks to decades of know-how and in-depth expertise

Reliable and personal on-site support during commissioning



# FUNCTIONAL CLEVERNESS FOR EVERY CUTTING TECHNOLOGY



## Textile Knife Cutting

- ▶ Intelligent SmartKnife for knife stabilisation in high-ply cutting
- ▶ Selection of different notch methods and strategies
- ▶ 6% increase in productivity thanks to ModernBlendTime algorithms for marker processing with highest precision
- ▶ Individual determination of cutting sequence and direction
- ▶ ZeroBuffer: precision, flexibility, and resource savings, even with high-ply cutting
- ▶ Integrated clearing graphics: user-friendly and fast handling in the clearing zone
- ▶ Matching: perfect pattern and repeat transition in the finished textile
- ▶ Barcode scanning: seamless integration of data into the control unit

## Laser Cutting

- ▶ Speed-dependent laser power control (PWM)
- ▶ Flying Cut (Fast Cut)
- ▶ Automatic skew correction via edge detection
- ▶ Ping-Pong Cut (Leapfrog Cut)
- ▶ Toolpath simulation (online and offline)
- ▶ Integrated dynamic height control
- ▶ Various pierce-in and stopping strategies
- ▶ Integrated dedusting and gas pressure control
- ▶ Service mode for laser and gas system

## Waterjet Cutting

- ▶ Applications with pure, abrasive, or suspension waterjet
- ▶ Waterjet-specific corner and radius treatment
- ▶ Alternative pierce-in methods and strategies
- ▶ Parametrisable abrasive dosing
- ▶ Dynamic kerf and bevel compensation
- ▶ Bevel cutting with freely definable angular transitions
- ▶ 3D cutting with five axes
- ▶ Multi-head cutting
- ▶ Fully automated resuming on abort position
- ▶ Graphic-interactive start position determination
- ▶ Dry-run mode for accelerated test run without waterjet
- ▶ Job order costing
- ▶ Support of 3rd party CAM tools

## Band Knife Cutting

- ▶ Unique cutting line generation for revolving knife
- ▶ 2.5D cutting
- ▶ Automatic knife resharpening
- ▶ Knife guidance outside the contour
- ▶ Resuming after knife breakage within the material
- ▶ Fully automated or manual material transfer
- ▶ Automatic fixation of the block
- ▶ Material-specific speed regulation
- ▶ Integration into production lines via OPC UA

## Plasma Cutting

- ▶ High-definition and conventional plasma cutting
- ▶ Parametrisable ignition interval
- ▶ Integrated height control
- ▶ Determination of nozzle change by monitoring the number of ignitions and effective cutting time
- ▶ Fully automated resuming with automated lead-in after beam breakage
- ▶ Graphic-interactive start point determination
- ▶ Slope correction of the material via joystick and laser pointer
- ▶ Activation of different tools
- ▶ Equipping the machine with different cutting heads





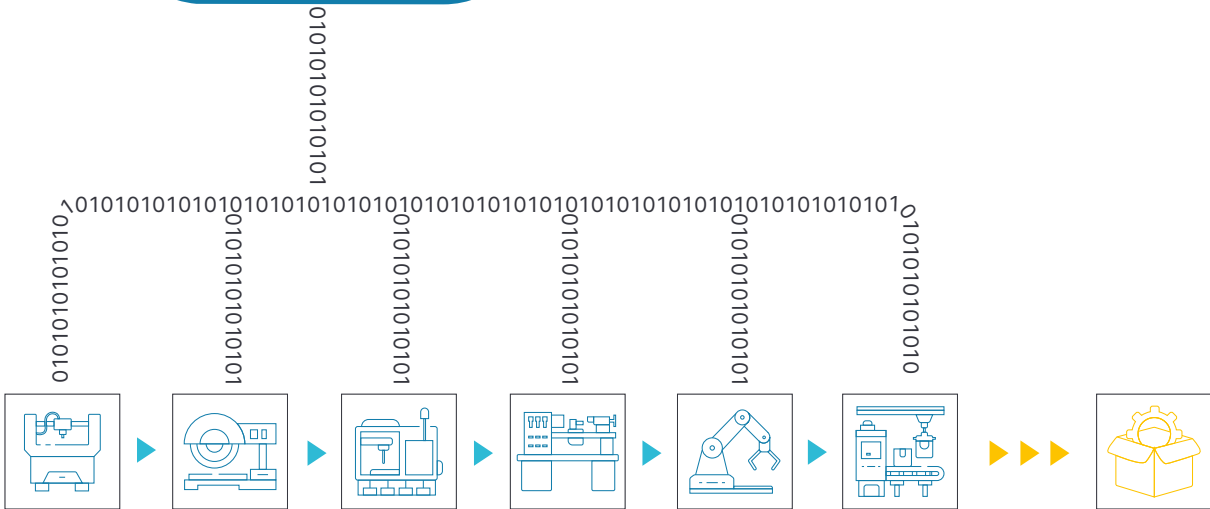
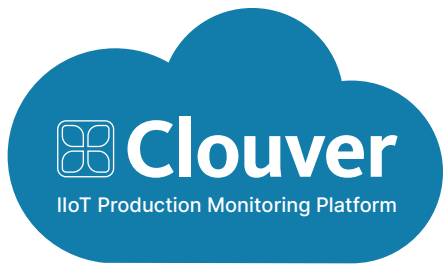
# SHARPEN YOUR VIEW:

## Your Production in Your Hands!

Industrial production processes are often complex and include a variety of different machine types along the production chain. Even more, it is important to synchronise all machines and set up seamless production without bottlenecks.

With Clouver, the IIoT Production Monitoring Platform, it is possible to collect, visualise, and analyse the data from every machine in your production chain, from raw material to finished product! By sharpening the visibility of each machine, you can recognise downtimes that cause bottlenecks and detect potential to optimise processes in the long term.

Don't let your production run by itself, put business profitability in your own hands. Having a holistic view of your production process is the key to success. Start today with Clouver and complete the change to smart manufacturing.



# HIGHLIGHTS

Customisation for you: Our experts will develop new features and apps to adapt Clouver to your individual requirements!

Connect all your machinery in your production with Clouver: new ones as well as old ones – without costly retrofits.

Made for everyone: Clouver provides business managers as well as machine operators valuable information to improve and ease their daily work.

Digital and sustainable: Keep track of all downtimes and discover long-term optimisation possibilities – in a paperless and user-friendly way for everyone.

Easy start, big effect: Your machinery can be connected to Clouver within a few hours. Starting a digitised production couldn't be easier.

Get valuable information from your machinery, in real-time, securely, and accessible from anywhere.

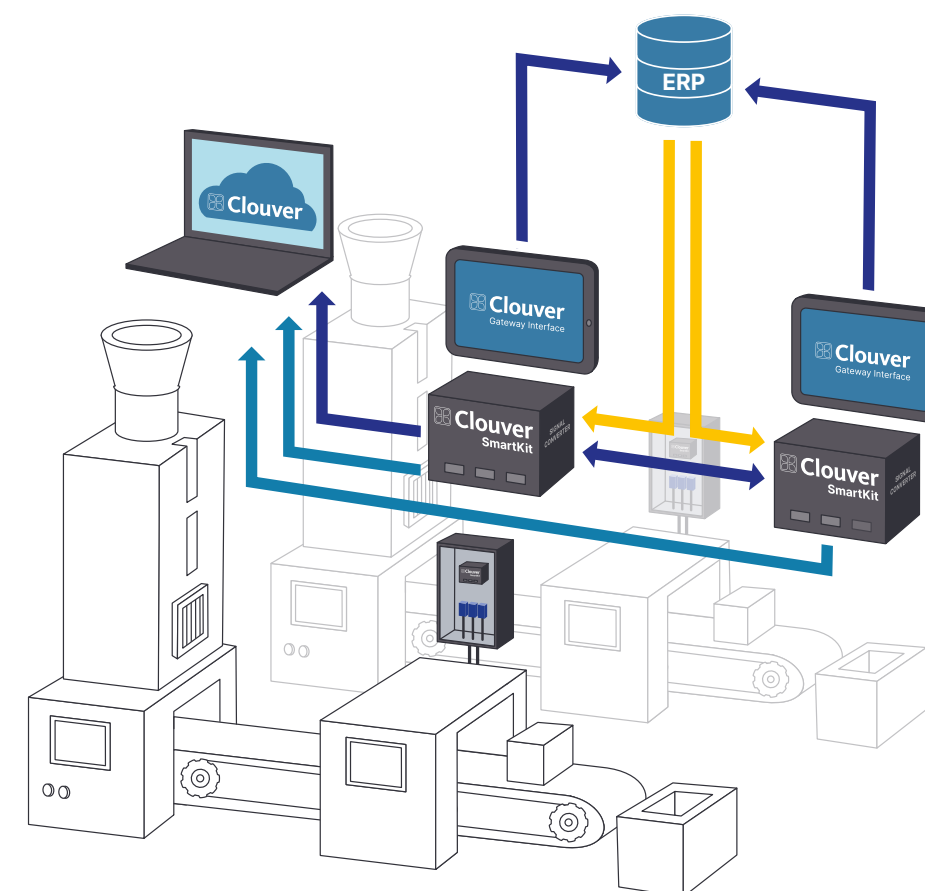




## Many Different Machine Types, but Only One Solution to Connect Them All

Thanks to the unique solution of Clouver SmartKit, your step towards IIoT will succeed, even with old and heterogeneous machines: It is now possible to connect any kind of machine and to visualise all data of your production process. The installation will be completed within 60 minutes and can be carried out easily and quickly by your company electrician. If support is needed, the ProCom Automation experts will help you anytime.

## EASY INFORMATION TRANSFER TO THE CLOUD



- ▶ The production order list is sent from the ERP system to the machines' SmartKits and TouchPanels.
- ▶ The SmartKits transfer the order list to Clouver, where it is then displayed on the dashboard.
- ▶ As soon as a job is being processed, the operator taps the job on the TouchPanel. The SmartKit then sends the information about the job that has been started to Clouver, the other machines, and to the ERP system.
- ▶ As soon as the job has been completed, further information on the production order – such as the number of parts produced – can be entered into the TouchPanel with a simple click.



# PERFECT PRODUCTS – NOW AND TOMORROW

Dynamic changes in the industry require companies to promptly respond to market demands with innovation and provide technological solutions: As a ProCom customer, you can be confident that new technologies will be developed and implemented quickly. The combination of in-depth market and technology expertise, agile software development, and close customer dialogue ensures that you receive a lasting product that will secure you a leading position in your market. By working closely with you, we can precisely understand your needs and deliver customised solutions that exceed your expectation across the entire cutting line.

## ALWAYS BY YOUR SIDE

As our customer, you benefit from professional service and support. We are by your side in all areas relating to installation, maintenance, and contractual adjustments. Ongoing advice and support guarantee that your machines achieve optimal production with our solutions. The result: With all our customers, we maintain a long-term partnership on an equal footing. This has resulted in many success stories over the years, demonstrating how agility, determination, and innovation can go hand in hand – something we are proud of.

## Book a Free and Non-binding, Initial Consultation:

We are happy to give you an insight into our products – individually and without obligation. Do get in touch with our sales team directly or scan the QR code and simply book yourself an appointment so that we can get to know each other. The choice is yours:

- ▶ Consultation session on our CNC300 control solution with specialised algorithms for coordinated multi-axis movements.
- ▶ Live demo of our Clouver IIoT solution with insight into the platform as well as the dashboards, functionality, and handling – including a brief analysis of your production and initial ideas for your customised Clouver solution.



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## 5 REASONS FOR PROCOM:

1. Your success is our motivation. We work in close partnership with you to develop your perfect, customised solution – whatever the challenge.
2. With over 40 years of company history, our experts have in-depth knowledge that translates into an indispensable force of innovation. The result is a product that is tailored to your needs and continually developed further with a forward-looking mindset.
3. You get to employ the power of technology-specific control solutions with integrated algorithms and functions for a wide range of cutting processes that are unparalleled on the market.
4. With Clouver, ProCom's smart IIoT production monitoring platform, you gain complete transparency into your production processes and discover important trigger points for continuous and lasting efficiency improvements.
5. "Handshake quality" service and support: You receive what we promise!



# ABOUT PROCOM AUTOMATION

ProCom Automation is a specialist in automation solutions in the cutting and separating industry. For more than 40 years, the experts at ProCom are developing high-tech control solutions featuring CNC- and CAM software, high-quality hardware, and an optimised IIoT solution.

Machine manufacturers all over the world benefit from cutting-edge automation solutions for a wide range of cutting technologies such as knife, laser, waterjet, plasma, and foam contour cutting. With product development focused on market and customer needs, ProCom Automation delivers unique features with significant added value to provide customers with a key competitive advantage for their success.

The company with its headquarter in Aachen is well-established in the European and Chinese markets and continuously invests in the ongoing development and expansion of its product portfolio as well as in future-oriented technologies like digitalisation for maximum efficiency and flexibility.



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