

Your leading specialist  
**for cutting and joining  
thermoplastics.**

Shaping together.  
Growing together.  
**Being together.**

# Sustainable solutions.

## Sealing any type of film to maximize sealing speed and seam quality.

Our technology enables the efficient sealing of bioplastics and thus actively promotes sustainability. In this way, we are driving the change to environmentally friendly packaging solutions for a green and sustainable world.

- Compostable bio-film
- Different degrees of recyclates
- Joining of thin Mono-layer materials
- Bio-based thermoplastics
- Cellulose based packaging solutions
- Narrow seam to save material



# Application segments



## CONSUMER GOODS

Food & beverage  
Personal hygiene  
Infant care  
Feminine care



## MEDICINE

Medical science  
Pharmaceuticals  
Life science



## AUTOMOTIVE

Transportation  
Aerospace



## BATTERIES

Electric vehicles  
Pouch cells



## DEVELOPING INDUSTRIES

Tech start-ups  
Energy  
Semiconductors



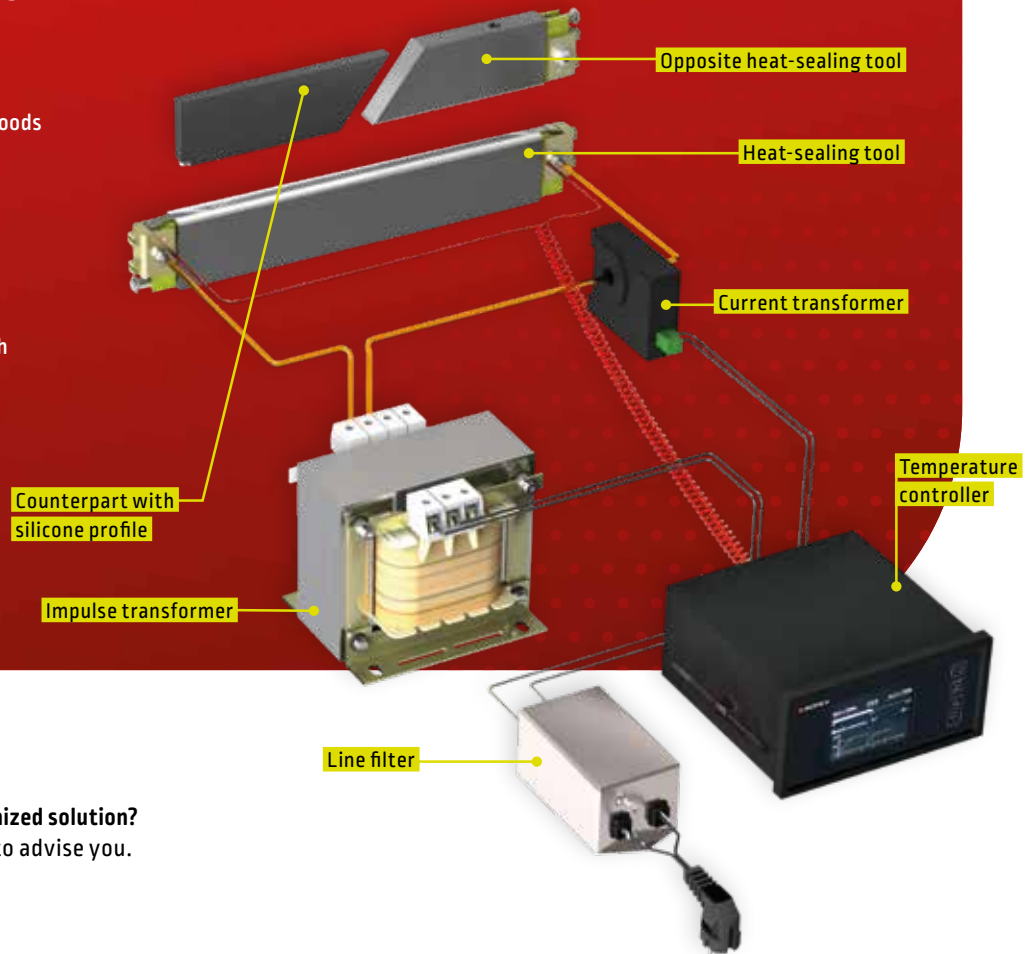
# RESISTRON system

## Heat-sealing band solutions

With the **RESISTRON heat-sealing system** we offer you ideal solutions for your sealing application. The tools are ideally matched to your requirements. Whether 3D sealing, spot sealing or creating a sealed seam over several meters, the RESISTRON technology allows for various solutions.

### THE FLEXIBLE SOLUTION

- Cut & seal in one step
- 3D contours
- Low heat input into packaged goods
- Active length and width almost without restrictions
- Spot sealing
- Suitable to layer jumps
- Cooling of the seam possible
- High speed sealing possible with both sided heating tools



Do you need a customized solution?  
We would be happy to advise you.

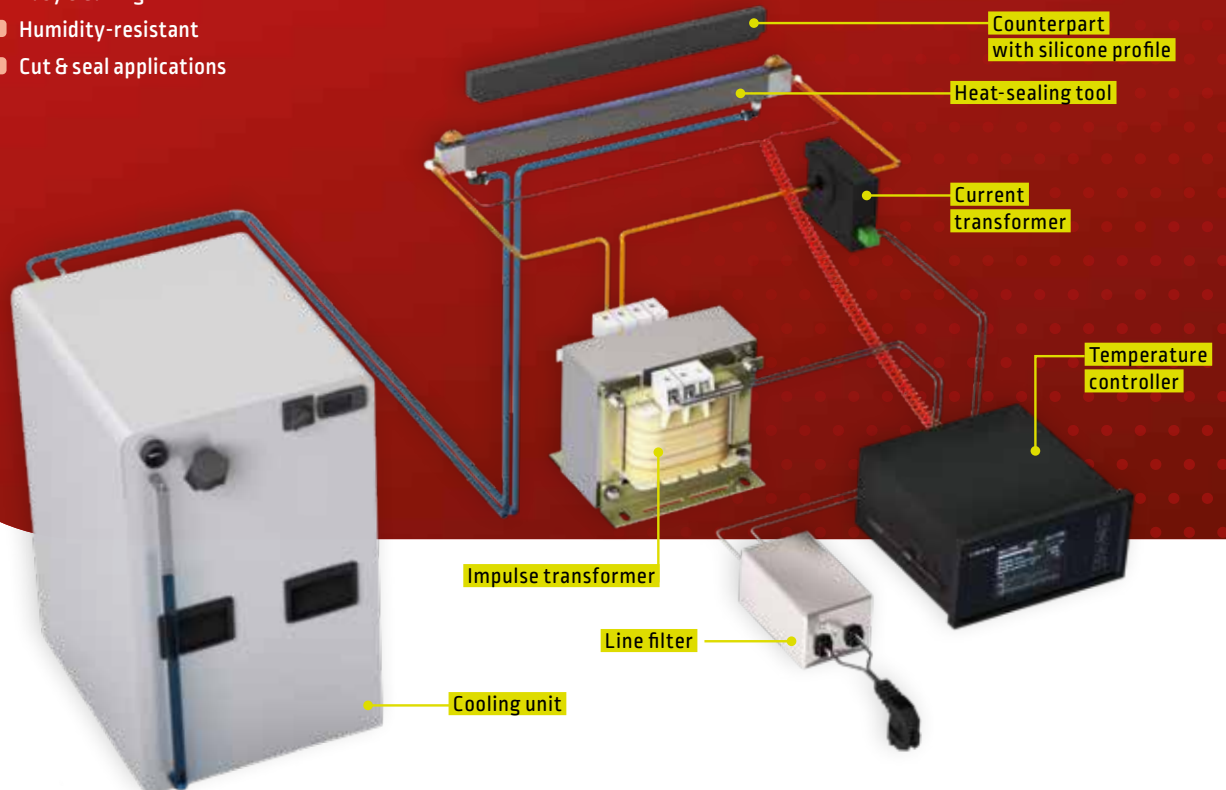
# CIRUS system

## Ceramic heat-sealing solutions

Our **CIRUS heat-sealing system** is the optimal solution for the packaging and medical industry. CIRUS meets the highest demands concerning efficient cooling of the sealed seam, implementation of seam line and contour of pouches, while minimizing heat stress to the packaged goods.

### THE PERFECT SOLUTION

- Ultrafast seam cooling
- Immediate load-bearing seam
- Minimal temperature impact on the product
- Easy cleaning
- Humidity-resistant
- Cut & seal applications
- No movable parts
- Independence of format

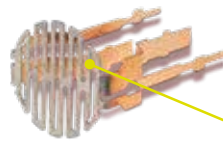




## IMPULSE SEALING

**The perfect solution**  
for complex heat-sealing  
applications

Standard or water resistant  
version (Fluid Secure) available



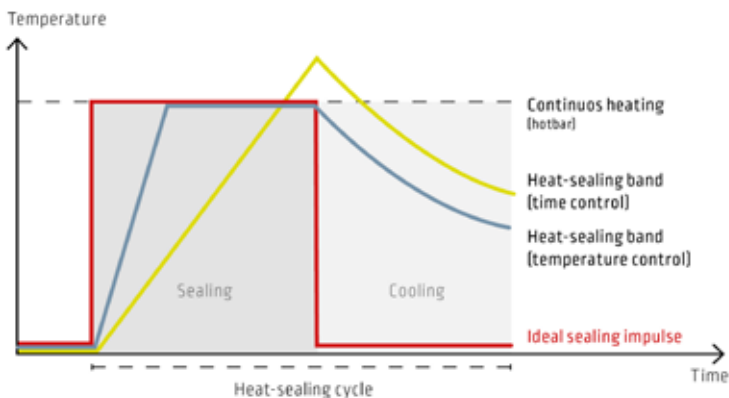
Spot sealing – small heating elements  
with homogeneous temperature  
distribution [e.g. 10 mm Ø]

Standard and customized  
system structure



**ROPEX is the leading specialist for joining and cutting thermoplastics. Its core competence lies in developing and designing project-specific applications and system solutions for companies from various industries.**

Impulse sealing is a thermoplastic sealing process based on the generation of heat by electric current. A thin metal strip on the tool serves as a heat conductor. The plastic is placed between the heated sealing tool and a counterpart and joined together by the heat generated by the current pulses. The pressure, temperature and time of the impulse are decisive parameters for achieving an optimum seam. This is monitored and controlled by a temperature controller. As a result, this process ensures a repeatable seam quality and high machine output.



### Consistent seam quality

The impulse sealing process guarantees repeatable, high-quality results that always meet the high quality standards of the end product.



### High performance

Robust and durable, our machines handle heavy workloads with ease, resulting in optimized operations.



### No waiting times

Our machines are ready for immediate use with very short heat-up or cool-down phases, resulting in higher productivity and fewer delays.



### Minimal temperature input

Impulse sealing limits heat transfer to packaged goods, which is ideal for heat-sensitive products and ensures their quality and safety.

# Connected to the world

Our temperature controllers have a wide variety of connections. They communicate with your control system via analog, digital, field bus or EtherNet-based interfaces and are suitable for your machine requirements.



## ADVANTAGES OF CABIN MOUNTED:

- Compact control cabinet integration
- Control via PLC
- Central operator interface via the machine HMI
- No direct operation possible, as protection against unauthorized access
- Industrial bus connection (optional)
- Adjustable parameters for the user can be limited by the designer

## ADVANTAGES OF DISPLAY VERSION:

- Stand alone applications: no PLC needed
- Direct input of the relevant sealing parameters
- Display of current settings and temperature reached
- Display of parameters and operating states via the integrated display
- Installation in a control panel or in the machine possible

CANopen

PROFI  
BUS

PROFI  
NET

EtherNet/IP

EtherCAT

# Our services

## IN-HOUSE OR ONLINE TRAININGS

Use the expertise of ROPEX application engineers to expand your employees' knowledge and achieve the best results. Our training courses are tailored to your needs and questions.

## SEALING SAMPLES

Get certainty about the feasibility of your application before you place an order by carrying out feasibility tests with your materials. As a result, you will receive sealing samples and a comprehensive report with the relevant parameters from our laboratory.



## SOFTWARE FOR TEMPERATURE CONTROLLER



### ROPEXvisual

- Display of settings and configuration data
- Transfer configuration data to another device
- Display of target and actual temperature in real time
- Storage of data and events for diagnostic purposes
- Compatible with Microsoft Windows 10 and 11



Download **ROPEXvisual** software for temperature controllers

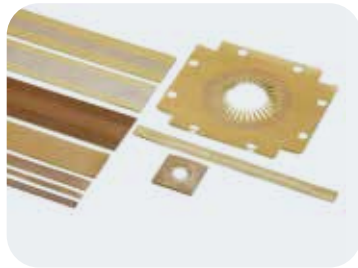
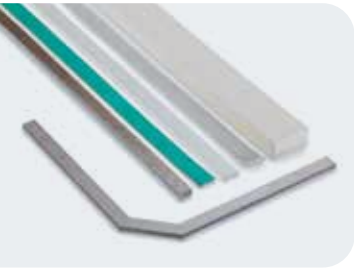


### ROPEXupdate

- Keep your temperature controllers up to date with the latest firmware
- Carry out updates independently
- Compatible with the 5000 and 6000 series controllers

# Consumables

Everything from a single source: We supply all the consumables you need for your system.



## HEAT-SEALING BAND UNDERLAYS

- Underlays also compensate mechanical and closing tolerances to achieve a homogeneous contact force
- Hard, non-flexible underlays are ideal for cut & seal applications
- Flexible and non-flexible silicone underlays with various shore hardnesses are available

## PTFE AND COVER STRIPS

- Used as an anti-stick covering and insulating material
- Allows the heat-sealing band to slide in case of linear expansion without sticking to the underlay
- PTFE are directly adhered to the underlay
- Cover strips are PTFE glass fabric tapes that prevent the foil from sticking to the heat-sealing band

## WIRING

Cables with different cross sections are optimized for our control loop.

- Available wiring:
  - C-HF-xx: Highly flexible high-current cable with silicone sheath
  - C-TC-xx: High-current cable suitable for cable carriers
  - UML-1: Twisted cable for voltage measurements
  - UML-2: Twisted cable for voltage measurements, suitable for drag chains

## HEAT-SEAL BANDS

Custom contoured heat-seal bands are designed according to your request.

- Contours available:
  - Open and closed-contours (simple to complex shapes)
  - Precision large and miniature bands
  - Surface mounted cutting wires for cut & seal
  - Precisely located fixture tabs and welded location pins
  - Terminal options: inside/outside tabs (or both), surface sealed tabs, brass tabs
  - Isolated heat zones, copper plated (zebra bands) and or welded zones
  - Copper, or copper + nickel plated band tabs for improved heat-seal band life



## ROPEX Company

With its unique expertise and passion ROPEX develops trend-setting solutions and sets new standards for innovative power. Since 1976 our employees have been contributing their expertise to ensure that ROPEX remains the first place to go for cutting and joining thermoplastics.

### COMPANY VALUES



#### PIONEERING SPIRIT

With unique expertise and passion we develop trend-setting solutions and set new standards for innovative power.



#### TEAM SPIRIT

We work with each other in an appreciative manner and maintain an open exchange across all levels.



#### SOLUTION FOCUSED

We interact with customers as equal partners and master challenges competently and reliably.

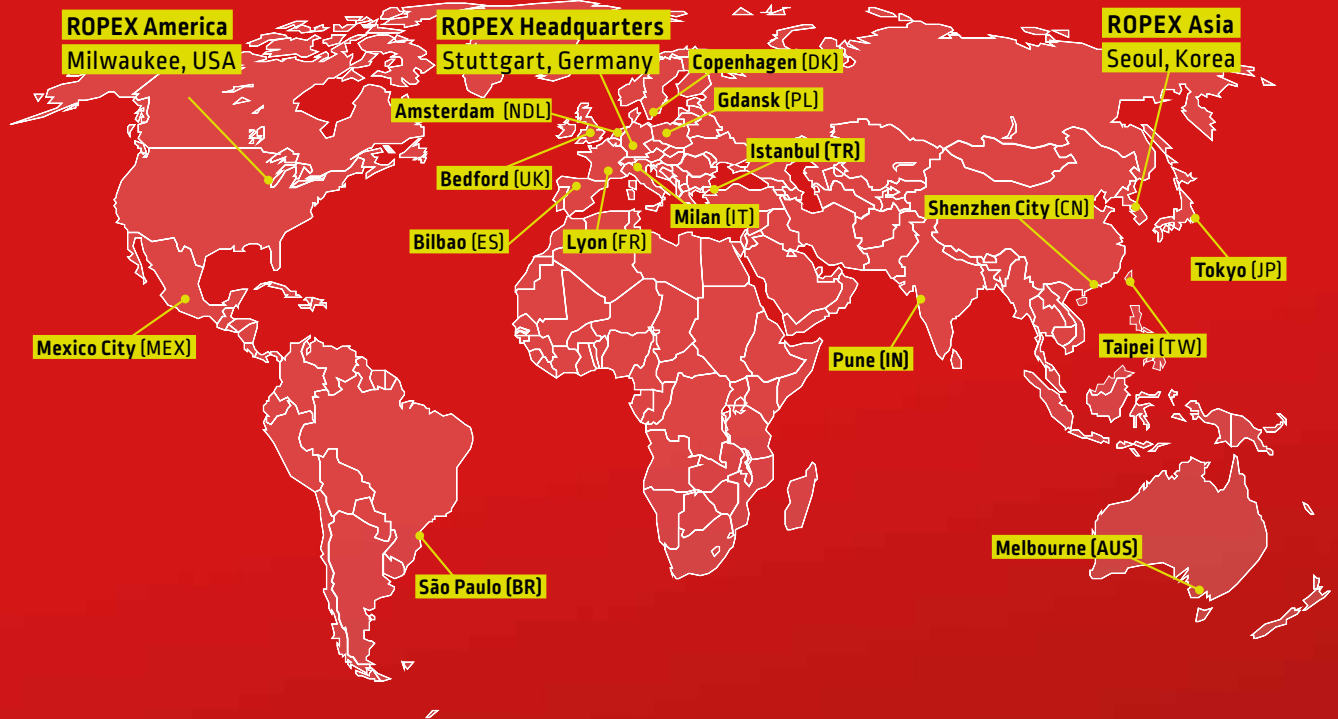


#### COMMITMENT

We question our processes critically and optimize the future with creative drive.

# ROPEX worldwide

In addition to our international subsidiaries, ROPEX has a global network of sales partners as solution providers.



ROPEX is your leading specialist for cutting & joining thermoplastics. Our solutions are used in a wide range of industries and we look forward to implementing our applications in new industries.

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**Do you need a customized solution?**  
We would be happy to advise you.

[ropex-group.com](http://ropex-group.com)