

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.

- Different degrees of recyclates
- Compostable bio-film
- Mono-layer materials
- Bio-based thermoplastics
- Cellulose based packaging solutions
- Material saving



Application Segments



CONSUMER GOODS

Food & beverage
Personal hygiene
Infant care
Fem care



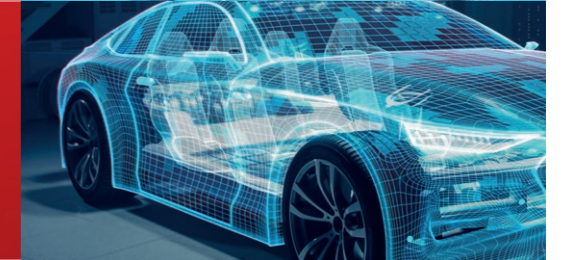
MEDICINE

Medical science
Pharma science
Life science



AUTOMOTIVE

Transportation
Aerospace



BATTERIES

Electric vehicles
Pouch cell
Other applications



DEVELOPING INDUSTRIES

Tech start-ups
Energy
Semiconductors



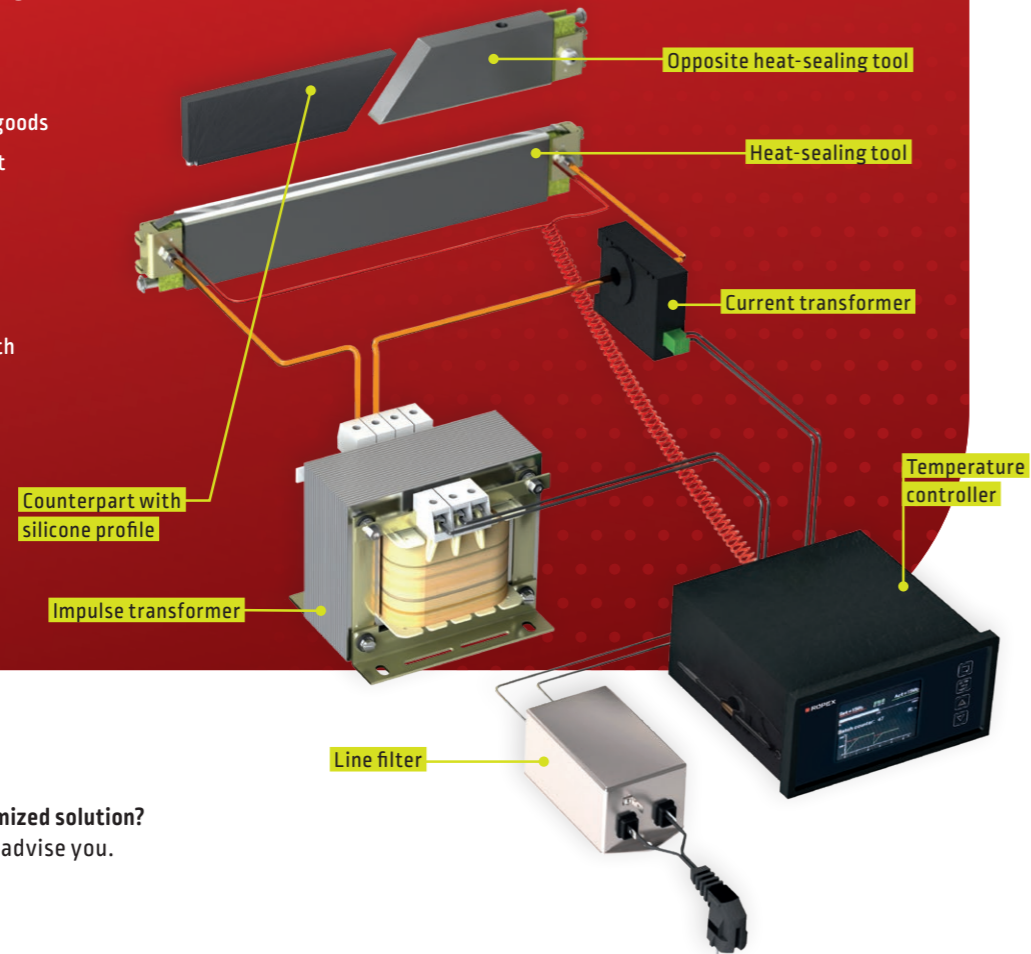
RESISTRON System

Heat-Sealing Band Solutions

With the **RESISTRON 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. With RESISTRON technology, we offer you 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 will be happy to advise you.

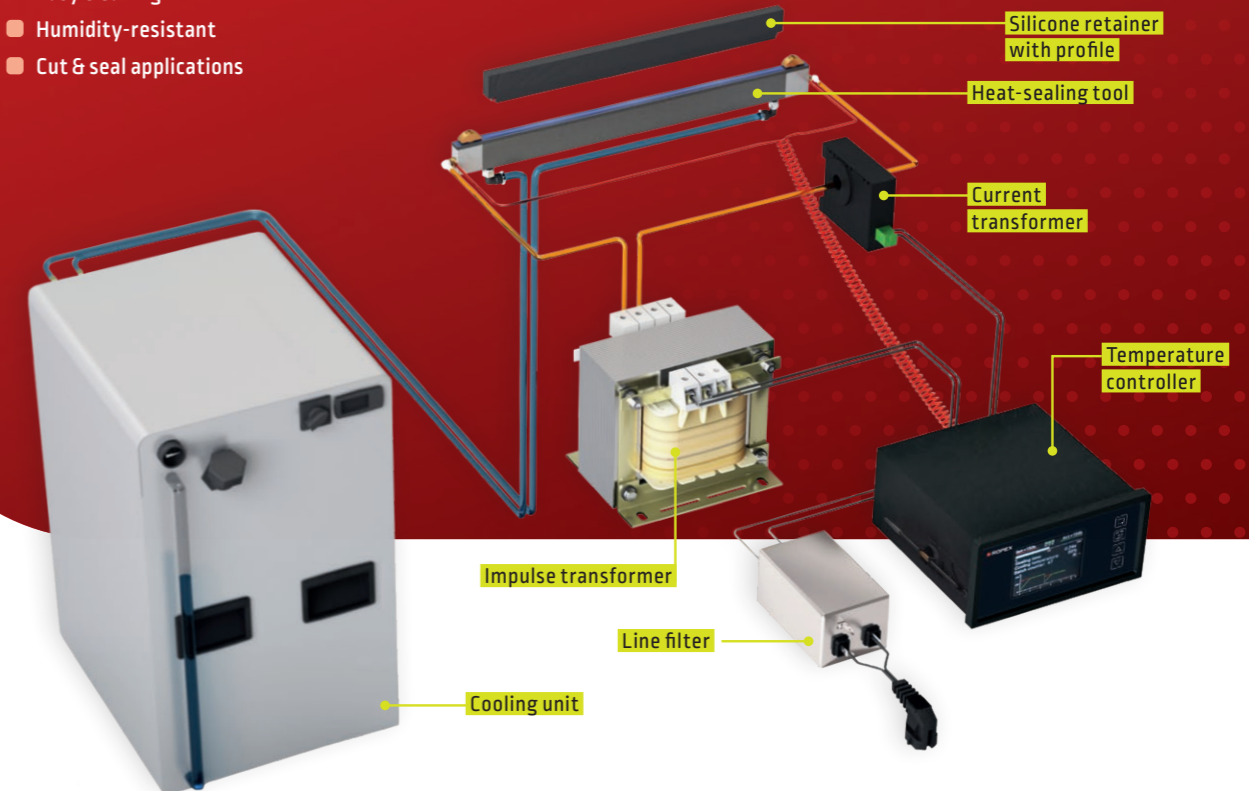
CIRUS System

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

- Efficient seam cooling
- Immediate load-bearing seam
- Minimal temperature impact on the product
- Easy cleaning
- Humidity-resistant
- Cut & seal applications
- No movable parts
- Ultrafast cooling of the seam
- Independence of format 1D and 2D possible



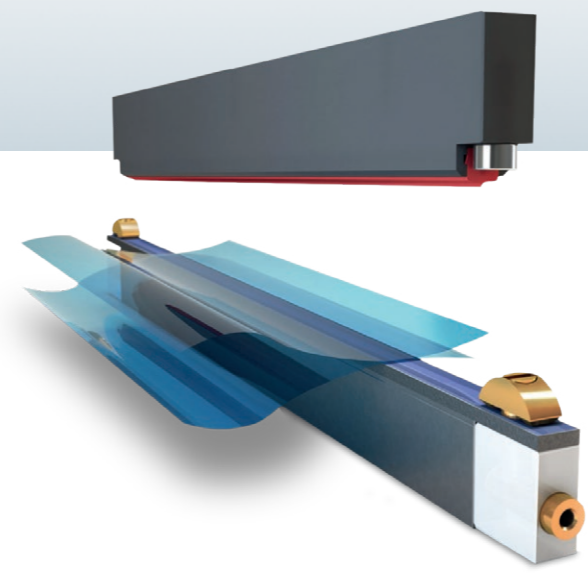


IMPULSE SEALING

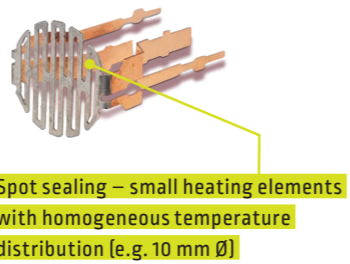
The perfect solution for complex heat-sealing applications

ROPEX is the leading specialist for joining and cutting thermoplastics. Its core competence is to develop and design project-specific applications and system solutions for companies from various industries.

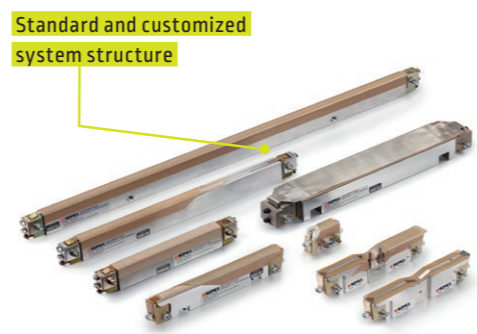
Impulse sealing is a thermoplastic sealing process based on the generation of heat by electric current. A thin metal strip on the tool serves as a heating conductor. The plastic is placed between the heated sealing tool and a counterpart and joined together by the heat generated by the current pulses. 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. This process ensures a repeatable seam quality and high machine output.



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



Lower power consumption
Our ROPEX impulse technologies minimize energy consumption, which is both environmentally friendly and cost-saving.



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.



CANopen

PROFI BUS

PROFI NET

EtherNet/IP

EtherCAT

INDUSTRIAL ETHERNET

ADVANTAGES CABIN MOUNTED:

- Installation in the control cabinet of top-hat rails
- Control via PLC
- No direct operation possible, as protection against unauthorized access

ADVANTAGES DISPLAY VERSION:

- Installation in a control panel
- Direct input of the relevant sealing parameters
- Display of current settings and temperature achieved
- Can also be installed in the machine

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.

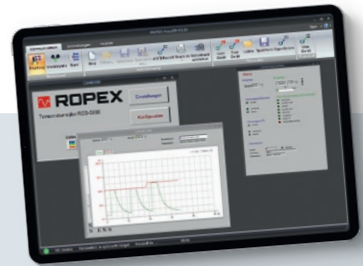
SEALING SAMPLES

Let us test your film with the specifications of your application. This reduces your risk and gives you the certainty of feasibility before you commission us to manufacture the products.

VALIDATION & VERIFICATION TOOLS

ROPEXvisual

- Display of settings and configuration data
- Transfer configuration data to another device
- Display of set and actual temperature in real time (burst mode)
- Storing data on a data carrier (e.g. hard drive)
- Event log readout available for diagnostic purposes
- Compatible with Microsoft Windows 7, 8, 10



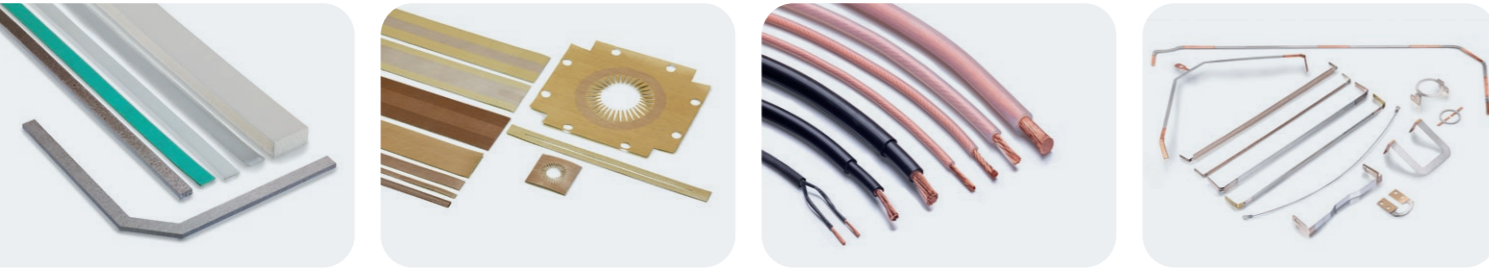
Download ROPEXvisual software for temperature controllers

ROPEXupdate

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

Consumables

Everything from a single source: We supply all the consumables you need for your system. This includes PTFE and cover strips, wiring or the appropriate heat-sealing band underlay.



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
- Directly adhered to the underlay, which can be made out of silicone
- Cover strips are PTFE fiberglass with a non-adhesive zone

WIRING

Cables with different cross sections which 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

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 (cut & seal)
 - Precisely located fixture tabs and welded location pins
 - Surface and identification marking
 - Terminal options: inside/outside tabs, surface sealed tabs, brass tabs
 - Isolated heat zones, copper plated (zebra bands) and/or welded zones
 - Copper, or Copper and 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 contribute with their expertise to ensure that ROPEX remains the first address 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.

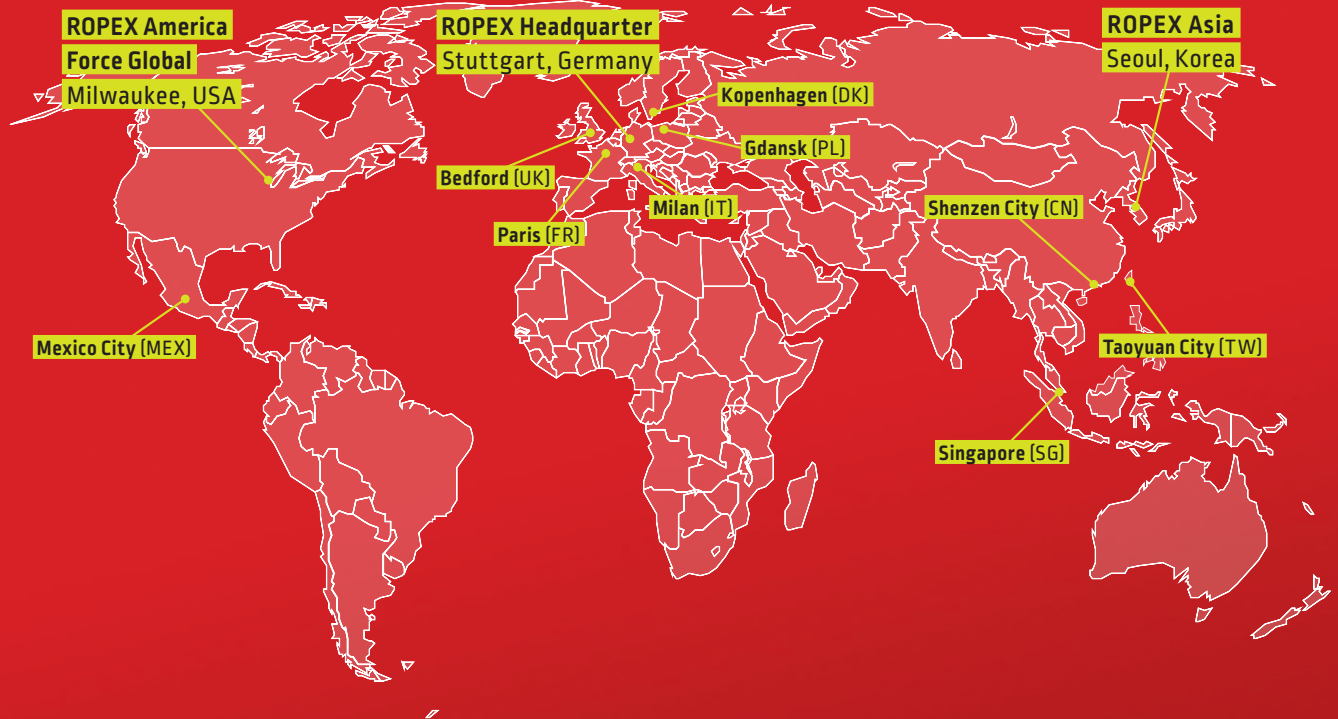


COMMITMENT

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

ROPEX worldwide

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



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 will be happy to advise you.

ropex-group.com