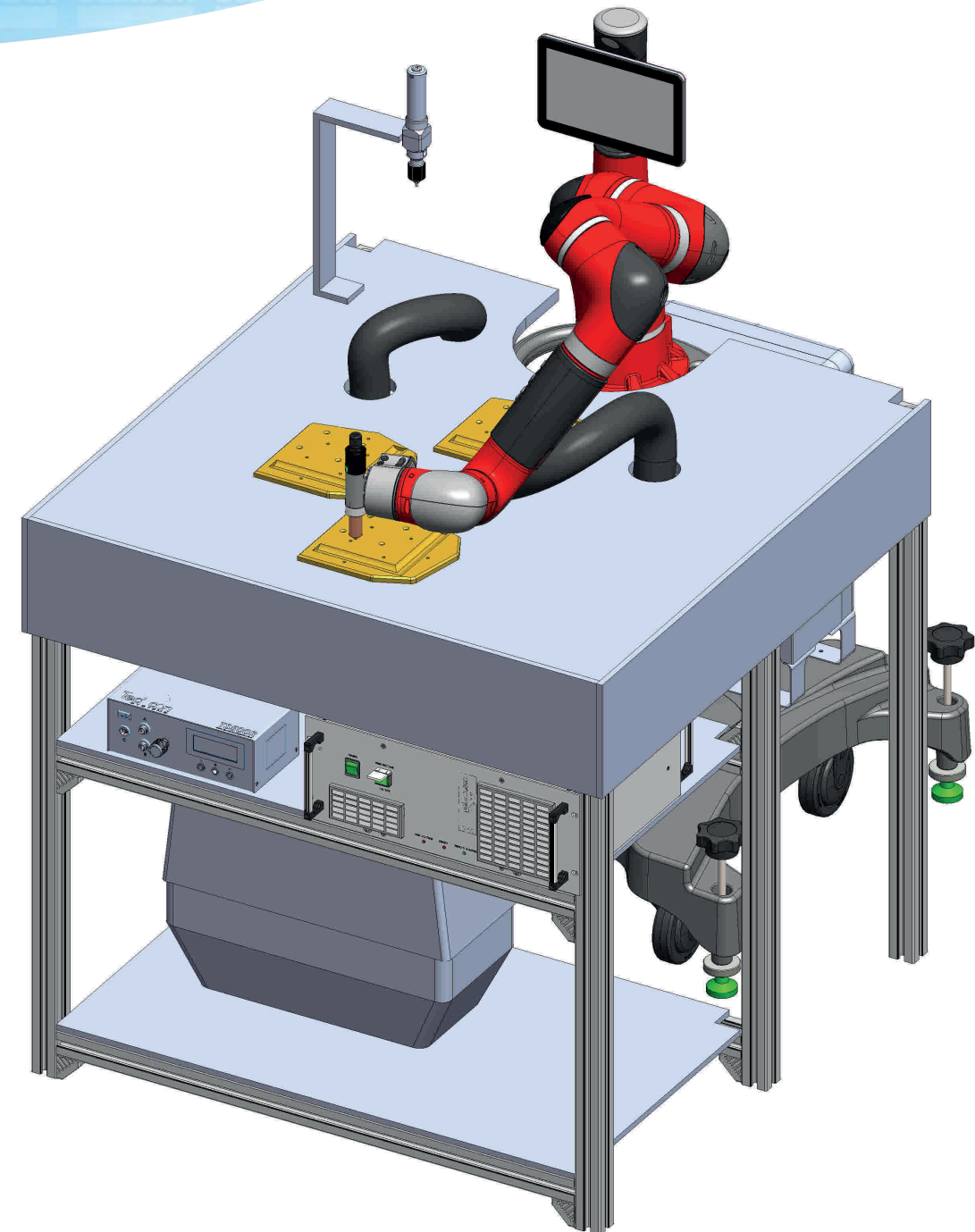
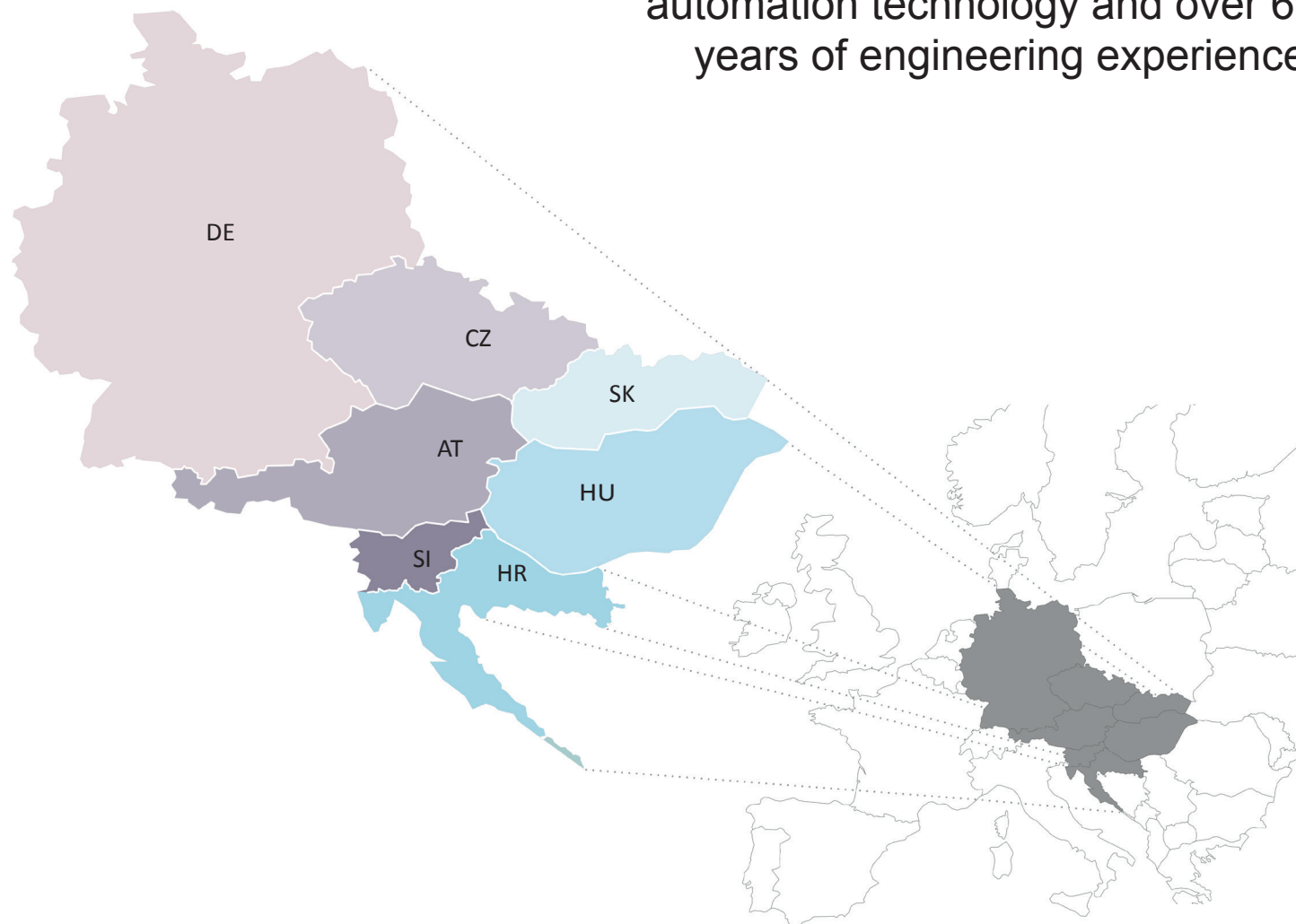


ULBRICH Bond & Seal Application Technology

ULBRICH Automation Plasma Technology

ULBRICH delivers technical competence, automation technology and over 60 years of engineering experience.



Chem.-Techn. Products



Plasma Treatment



Dispensing Technology



UV Technology



Cleaning Machines

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ULBRICH Automation combines technical competence, automation technology and over 60 years of engineering experience.

The partnership with Relyon Plasma enables **ULBRICH Automation** to integrate innovative plasma technology together with robotic handling, adhesive dispensing, UV curing technology - either as a stand alone cell or integrated into fully automated production lines.

Together we offer complete solutions for **plasma applications** in manufacturing processes, eg. improvement of **adhesion for bonding & sealing, surface cleaning & removal of oxidation.**

Optional: integrated dispensing process

positive displacement valve for adhesives & sealants

The new TS8100-100 PC pump is a continuously volumetric pump based on Progressive Cavity technology.

- Accurately dispenses a wide range of adhesives, from 1 – 300.000cps
- Dispensing volume per rotation: 0.012ml
- Flow rate: 0.15 – 1.04 ml/min
- Min. dispense amount: 0.001ml



Application fields for atmospheric pressure plasma:

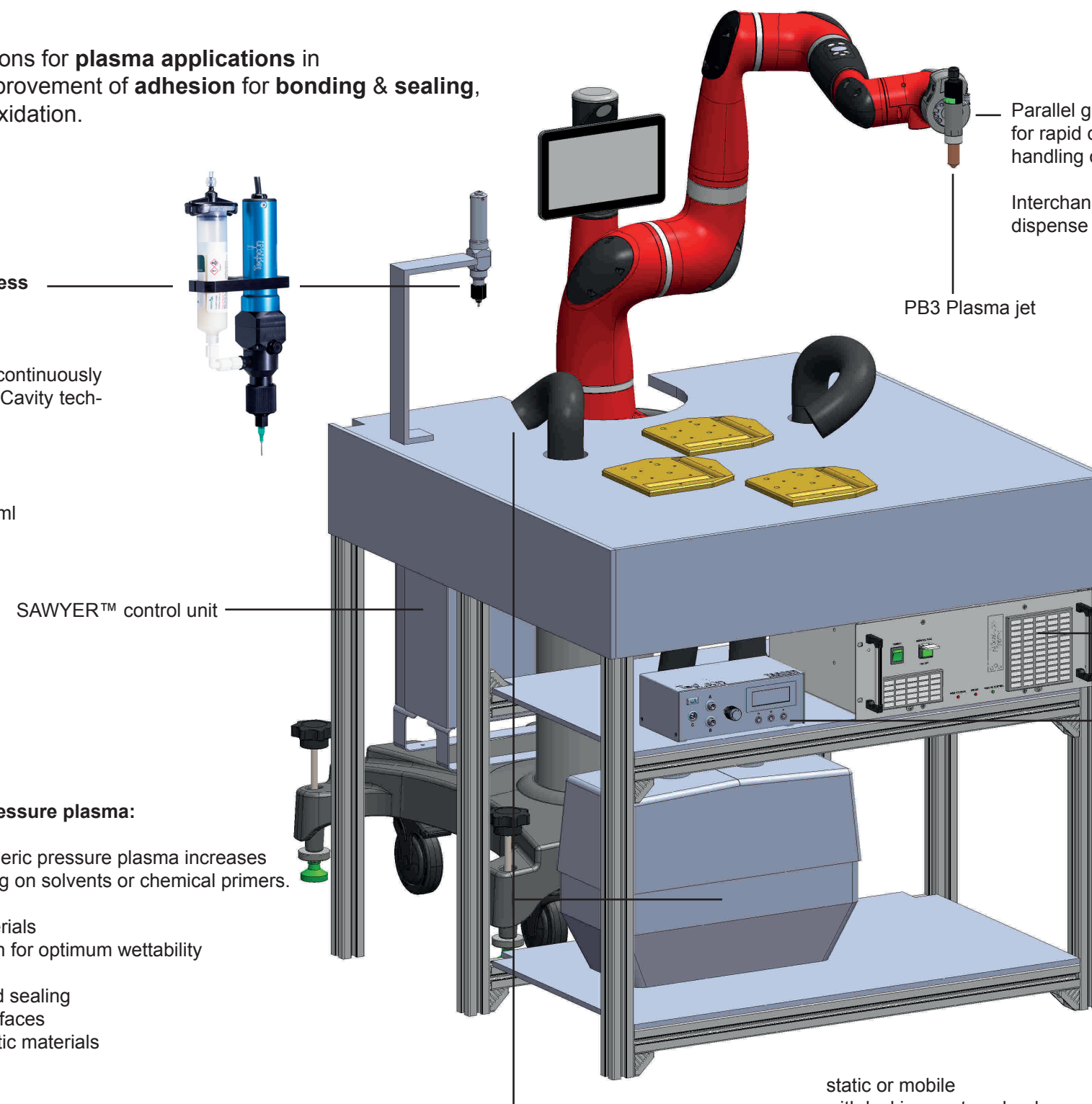
For many industrial processes, atmospheric pressure plasma increases throughput while at the same time saving on solvents or chemical primers.

- Cleaning metal, glass and plastic materials
- Surface activation and functionalization for optimum wettability
- Coating for new surface properties
- Plasma supported adhesive bonds and sealing
- Plasma induced reduction of metal surfaces
- Sterilization of thermally sensitive plastic materials
- Multicomponent injection molding

Virtually **every technical class of materials** can efficiently be treated under atmospheric pressure.

- Metals, metal alloys
- Plastics and composite materials
- Glass, ceramics, inorganic composite materials, natural stone
- Natural leather, imitation leather
- Natural fiber, wood, paper

collaborative - no protective covers required



Parallel gripper / Vacuum gripper for rapid changing of tools or handling of production components

Interchangeable - from plasma to dispense valves

PB3 Plasma jet

SAWYER™ control unit

19" High voltage unit

TS500R controller for dispense valves

Universal power supply fully 'plug and play' system Integration into semi-automatic and automatic machinery is made easy with the interface connector, on the rear of this system.

- Controls all Pneumatic, Spray, and Rotary Auger Valves (inc. encoder motor Valves)
- Clear 20 X 4 segments LCD display
- Digital timing from 0.008-60.000 seconds
- +/- 0.001% Repeat timing tolerances
- 10 Programmable Memories
- Adjustable low pressure warning feature

static or mobile with locking caster wheels

Fume extraction for ozone & adhesive solvents etc. - active carbon filter for NO, NOx, NO2, O3 and other gaseous pollutants

The revolutionary new, **collaborative high-performance robot SAWYER™**

- Designed for highest precision, while offering flexibility, safety and compliancy
- Two integrated high-end cameras enable a variety of complex optical tasks
- Compact design with long range, ideal for use in manufacturing islands
- Ideal for industrial, medium-sized and small business
- Robot-assisted automation with lower technical requirements
- Easy handling, assembly and maintenance of sawyer

Basic information **SAWYER™**:

Weight (without base):	19 kg
Degrees of freedom:	7
Maximum range:	1260 mm
Bearing capacity:	4 kg
Task repeatability:	0,1 mm

PB3 Plasma System - an atmospheric plasma system which is unique in terms of power density and function. In the development of this plasma unit which can be used for many different applications, focus was placed on easy integration into industrial processes and communication ability. Whatever you require - from ultrafine cleaning, surface activation, coating, right through to germ reduction processes, this system will fit into every processing environment: safely and reliably.

PS2000 - High voltage supply unit

Unipolar pulsed voltage ensures that no hotspots are focused on the PB3 nozzle. Power 0-1000 watt variable. CanOpen format (CIA 301)

Our company's philosophy is to deliver a customer specific technological solution for your customer specific manufacturing innovations and technical demands.