



FLEXIBILITY

IMPULSE

**TECHNICAL CENTRE**

**REALISING  
INNOVATION**



## Since 1949 Passion for Technology – where Tradition meets Innovation

Developing innovative cutting-edge technologies has been our principle for more than six decades. With interdisciplinary project and engineering teams since then we have developed experience and expertise which is appreciated all over the world. On this basis, we develop customer-specific and intelligent machine solutions and plant concepts for the manufacture of web-like products such as wallpapers, floor coverings, films/foils and technical textiles. As an innovation leader, we are continually searching for advanced innovations in this context which offer our customers the highest levels of precision, efficiency and clear added value. Standing still would be a step backwards: that is why OLBRICH continues to take matters in hand itself, actively anticipating the future with research and development. Together with our customers, we want to develop new opportunities and possibilities for the future with our process and production technology. Advanced technology is and remains our inspiration.

**OLBRICH – put your faith in the expertise  
of a technology leader**

## Our Mission: Designing the Future of Technology together with you.

Components which are perfectly matched to one another ensure maximum levels of reliability and easy handling. In doing so, the individual solution forms the central element of everything we do.

### **Our particular strength:**

In our Technical Centre, we check your individual plant or component concept together with you under real production conditions and provide you in advance with reliable results for your planned investment. Wherever innovative technologies are required for the production and finishing of wallpapers, floor coverings, textiles, films/foils and papers, our tried and tested solutions guarantee systems which are not only economical, but also extremely reliable. Not only do we focus on cutting-edge technologies, we also develop them for you. Why not take us at our word and set us a challenge?

**Technical Centre –  
Workshop for the Future.**

[www.olbrich.com/pilotplant](http://www.olbrich.com/pilotplant)



## Technological Fields of Expertise

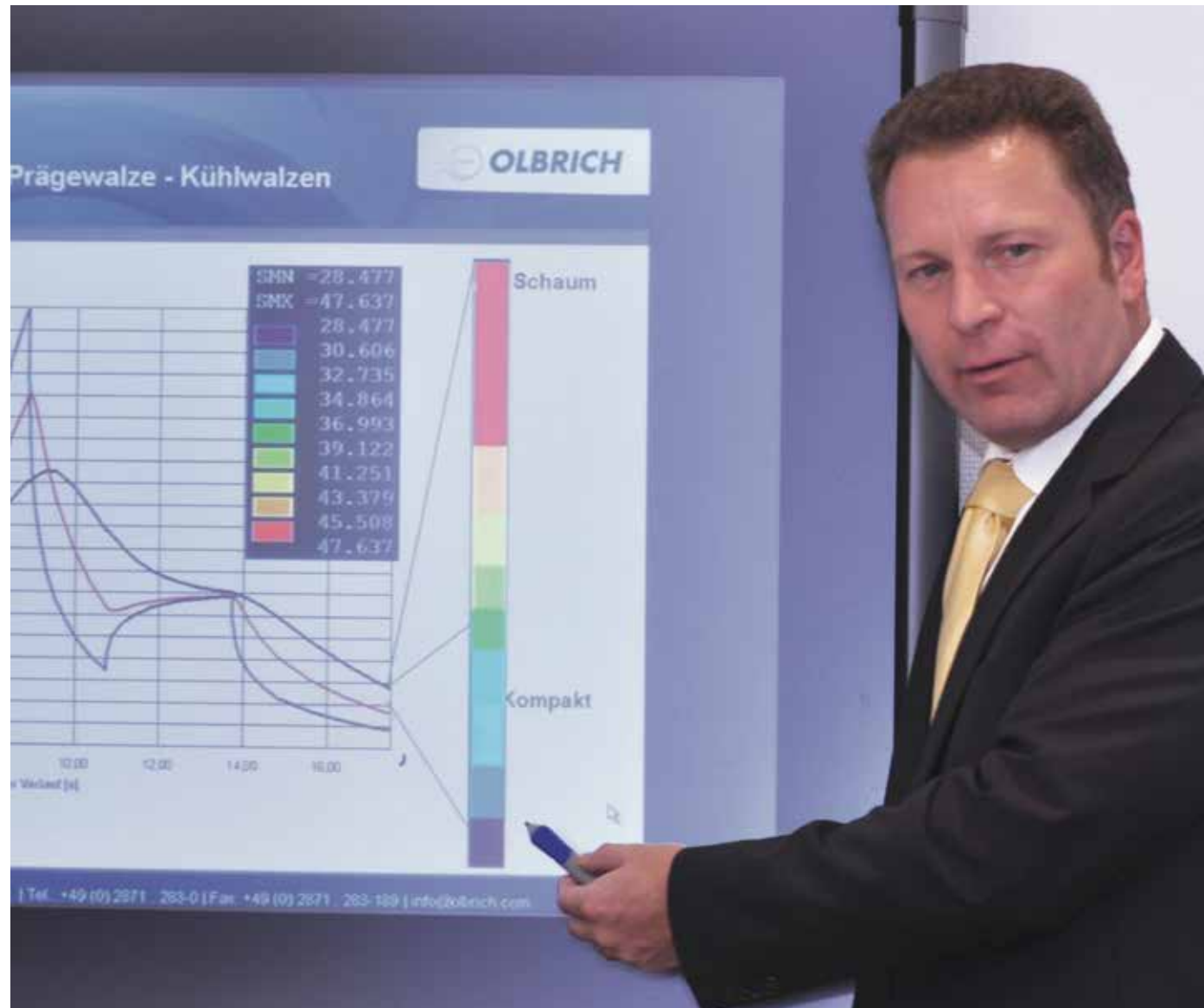
Plants made by OLBRICH set the standards in many industries. The reason for this is our extensive range of technological expertise, which we continually expand in our Technical Centre.

Our areas of expertise include the following fields:

- Coating
- Printing/lacquering
- Drying
- Laminating
- Embossing/smoothing
- Calendering
- Winding
- Packaging and preparing for sale
- Drive and control technology

For each of these areas of expertise we offer you tried and tested solutions in our Technical Centre – for use in any combination.

Are you also looking for new processes, machine concepts or product ideas? With our technological skills and state-of-the-art equipment in our Technical Centre, we ensure that your everyday production process is filled with innovations.



# TECHNICAL CENTRE

## Workshop for the Future

### Realising Innovation – Our Technical Centre!

We are often asked why OLBRICH systems are so successful worldwide. Is it due to the experience/expert knowledge of our engineering teams and the reliability of our machines or a willingness to think outside the box and take chances pursuing new ideas?

Especially for the development of new machine concepts and innovative processes or product ideas it is important for planned investments to gain vital data under real production conditions.

Using our own Technical Centre we are in a position to combine established technologies to develop new machine concepts or processes resulting in the development of innovative new products creating a competitive advantage for our customers.

Apart from the three multi-purpose lines in our Technical Centre, our experienced process engineers use comprehensive computerbased simulations and process analyses to address customers' individual requirements.

**Come, look and see!**

#### Our services – your benefits:

- Individual high-performance components and plants
- High level of reliability based on know-how, experience and brand quality
- Process and engineering expertise, as well as application-related technical consulting and support in all project phases
- Computer-based numerical calculations and process analyses
- Guaranteed results thanks to real production conditions in the test process
- Flexibility and speed of execution

#### Our Technical Centre:

- Multi-purpose coating and laminating line  
Web width max. 500 mm
- State-of-the-art laminating and embossing line  
Web width max. 1.000 mm
- Precision coating line  
Web width max. 1.050 mm



## Multifunctional coating and printing line

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Working widths up to 500 mm, partly up to 1.000 mm  
Mech. line speed: 1 – 75 m/min., partly up to 150 m/min.  
Web tensions from 25 N to 500 N  
Explosion protection: yes

### Field of applications

Validation of process technologies and R&D support for products such as decorative films, artificial leather, technical films, vinyl wallpapers, PVC flooring (for example cushion vinyl, luxury vinyl tiles, homogeneous flooring, safety flooring), PVC-free floor coverings, conveyer belts, technical textiles, tarpaulins, billboard material, adhesive tapes and films, packing films and many more.

The conception of the line BA1 comes with our proven modular design which enables us to adapt the line not only to a wide variety of individual web paths but also to various process technologies.

**Come, look and see!**

### Technologies

Unwinder, single station design, for up to 800 mm reel diameter

#### Coating technologies:

- Reverse roll coater RRC
- Roll coater RC
- Knife over roll coater, direct and indirect
- Knife over air or over rubber blanket
- Mayer bar
- Slot dies with extrusion-/curtain-/bead-mode
- Gravure printing, Flexographic printing
- Screen printing (rotating)
- Doctor chamber system
- Pressurized doctor chamber system PGS or HM
- Gravure coating direct/indirect with lacquer pan

#### Dryer:

- High performance convection oven for all coating compounds
- 4 x 3 m zones with upper- and lower air, max. 250° C
- variable nozzle systems and flexible web support

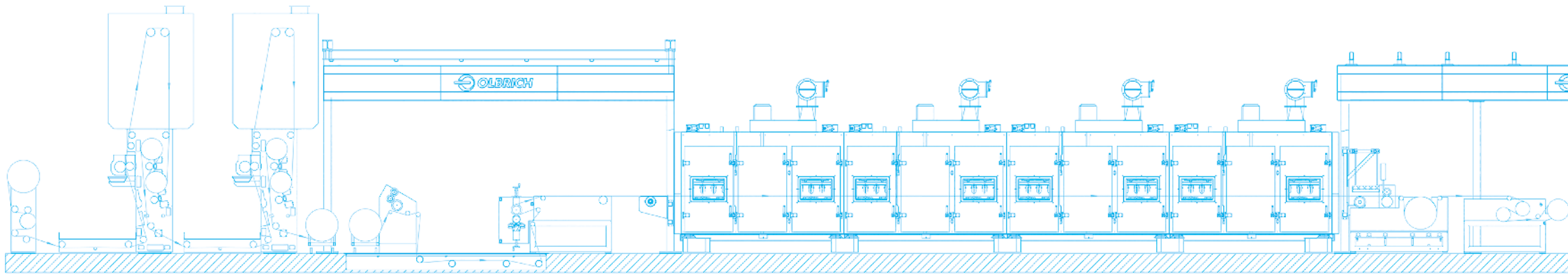
#### Embossing:

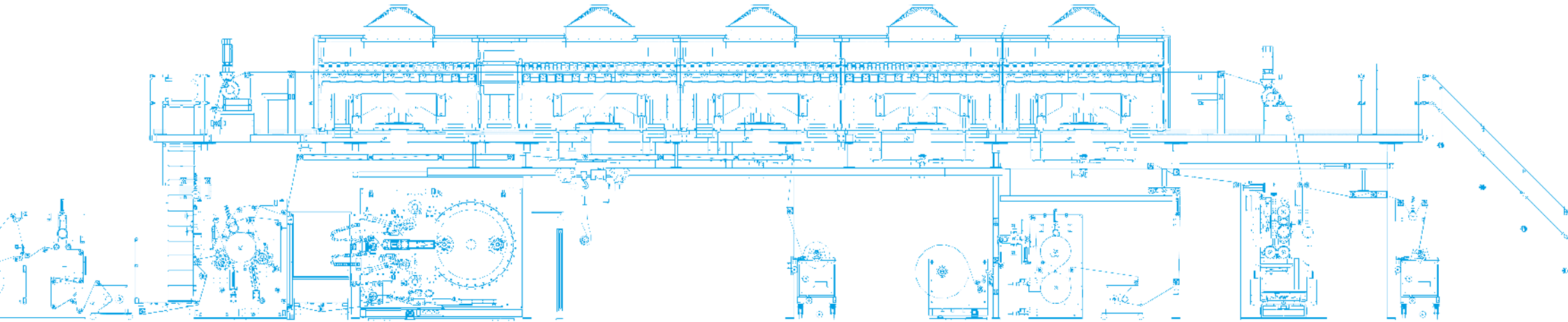
- Embossing technology with IR-heating and temperature controlled idler rollers

#### Further features:

- Corona pre-treatment
- UV-lamp system
- Gelling processes (for instance for E-PVC) with gelling cylinder
- IR-heating or gelling oven
- Wet-/dry-lamination for multilayer products

# COATING LINE BA 1







## Precision coating systems and advanced winding technology for high-end products!

Working widths 500 mm to 1.050 mm  
Mech. line speed: 2,5 – 500 m/min.  
Web tensions from 5 N to 800 N  
Explosion protection: yes

### Field of applications

- Adhesive tapes
- Protective films
- Films for the packaging industry and the hygiene industry
- Primary material for labels
- Films for the photo-voltaic industry
- Composite films for the printing industry
- Films for the electrical industry, displays
- Films for the automotive industry
- Films for the construction industry and building technology
- Technical papers for insulation technology
- Inkjet papers
- Siliconised papers and films

Whether it's coating with dispersions, with solvent systems, hot-melt or 100% (UV) systems, whether it's open, multi-layer or special-function coatings – we can supply the versatile technology to meet the varying requirements of our many different customers.

### Technologies

Unwinder, single station design, for up to 1.000 mm reel diameter

Pre-conditioning of the product by heating-/cooling rollers

Corona system for optional pre-treatment of products

Combined coating machine with sleeve roller and OLBRICH cartridge technology:

- direct and indirect mode,
- forward or reverse coating,
- Cartridge with RRC system and smooth rollers,
- Cartridge with RC system and smooth rollers,
- Gravure coating cartridge with hachure roller and
- OLBRICH pressurized doctor chamber system

High performance convection oven (4 zones) and additional heating-/cooling zone, each zone of 3m length,

- variable nozzle systems,
- flexible web support systems,
- humidity detection and control of recirculation air

Integrated online multilayer thickness measurement system (optical)

Laminating station for two material webs, with lowest web tensions

Automatic turret rewinder with orbital function and contact roller

## Production-related laminating and embossing line

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Working widths up to 1.000 mm  
Mech. line speed: 1 – 100 m/min.  
Web tensions from 50 N to 1.000 N  
Explosion protection: no

### Field of applications

Validation of process technologies and R&D support for laminated and embossed products such as functional multilayer films, decorative films, artificial leather, luxury vinyl tiles (LVT) flooring, conveyer belts, wallcoverings, technical textiles, PVC flooring and PVC-free flooring, packaging films, tarpaulins and many more.

Our production-related laminating and embossing line PLA1 is designed to replicate various web paths for multilayer laminates and features individual control of web temperature and web tension for each layer.  
Challenge us and benefit from proven OLBRICH know-how that was gained from countless applications for multilayer products.

### Technologies

- Unwinder, single station design, for up to 800 mm reel diameter, with web guiding,
- three auxiliary unwinders for reel diameters of up to 500 mm

### Coating system:

- Coating unit for adhesives (with gravure roller) in case of wet lamination

### Laminating:

- thermal lamination of multilayer products via central laminating cylinder,
- individual path for each material web and independent control of web tensions,
- temperature control via separate pre-heating rollers,
- Main heating cylinder as central laminating cylinder for up to three layers, with IR support

### Embossing:

- Embossing technology with IR-heating and temperature controlled idler rollers (driven),
- Individual drives for embossing roller and back-up roller,
- OLBRICH in-register embossing technology with camera system for visual control

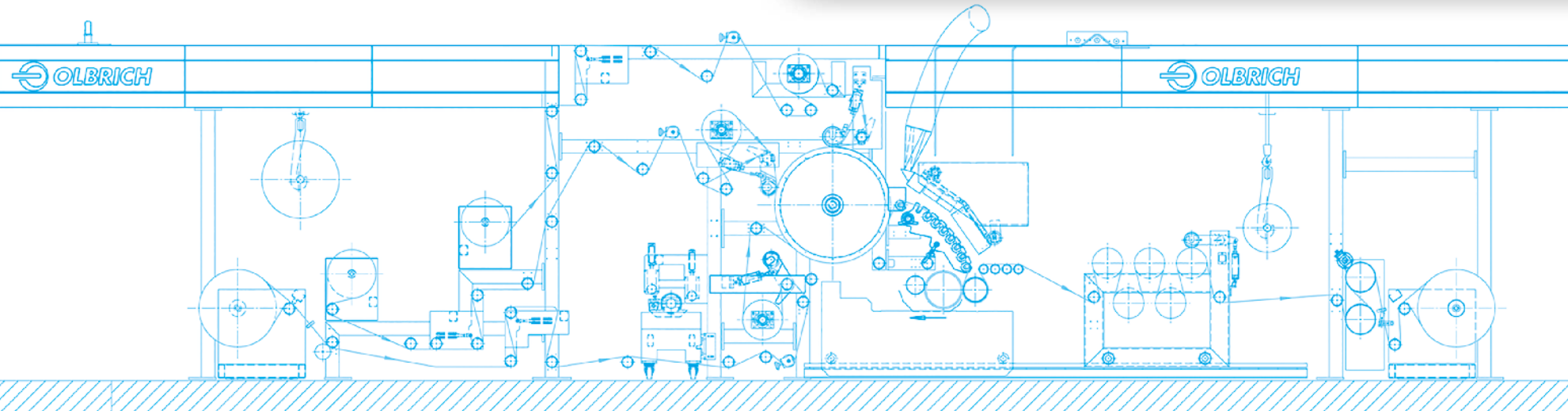
### Conditioning:

- Cooling train with separate temperature control loops and drive systems

### Rewinder:

- for reel diameters up to 800 mm, with web guiding

# EMBOSSING AND LAMINATING LINE PLA 1



PARTNERSHIP

EXPERIENCE

MOTIVATION