

## Create intelligent solutions.

# **PRODUCTION LINES FOR FLOOR COVERINGS**



#### **ABOUT US**

Round about 70 years of experience and hundreds of installed flooring machines worldwide have made OLBRICH the first choice of the global flooring industry today.

The first 4m and 5m wide coating line for heterogeneous PVC coverings worldwide, the introduction of the consequent in-line production – from the substrate up to the saleable packaged roll or tile – or the embossing in-register technology for LVT or CV flooring are just some of the benchmarks we have set for the floor covering industry. Our specialists develop and design your individual machine for each process step – from the product construction to the surface finishing right up to converting the product into a roll or a tile that is ready for sale.

We develop new ideas and verify solutions in our own technical centre.

That is what we call "create intelligent solutions".



OLBRICH HeadquartersBocholt, Germany. Founded 1949

## High-efficiency Machines and Lines for the Production of Floor Coverings.

PROCESS ENGINEERING TECHNICAL CENTRE R&D **DESIGN PROJECT MANAGEMENT FABRICATION** TURN-KEY INSTALLATION SERVICE PROCESS ENGINEERING TECHNICAL DESIGN PROJECT MANAGEMENT FABRICATION TURN-KEY INSTALLATION SERVICE PROCESS ENGINEERING TECHNICAL CENTRE R&D DESIGN PROJECT MANAGEMENT FABRICATION TURN-KEY INSTALLATION PROCESS ENGINEERING SERVICE TECHNICAL CENTRE R&D DESIGN **PROJECT MANAGEMENT FABRICATION TURN-KEY INSTALLATION TECHNICAL CENTRE R&D DESIGN PROJECT MANAGEMENT PROCESS ENGINEERING** FABRICATION TURN-KEY INSTALLATION SERVICE **PROCESS ENGINEERING TECHNICAL CENTRE | R&D DESIGN** PROJECT MANAGEMENT FABRICATION









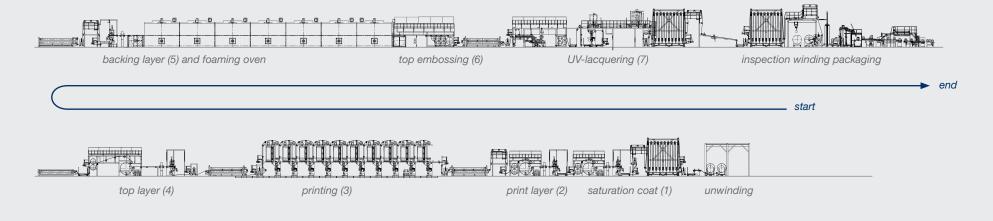
### OUR FLOORING CUSTOMERS' PRODUCTS:

- Heterogeneous floor coverings
- Homogeneous floor coverings
- CV flooring
- Safety flooring
- Acoustic flooring
- Carpet tiles
- Sports flooring
- Design flooring / LVT
- PVC-free flooring
- VCT
- SPC
- Linoleum
- Rubber flooring



## **CUSHION VINYL FLOORING | CV**

Today, modern cushion vinyls are produced by integrated in-line machines in standard widths of 2m, 4m and 5m. The complete product is manufactured in a single pass through the line. OLBRICH provides all required machines from a single source and is also well-equipped to offer turn-key solutions. A typical in-line production concept for CV-flooring is shown below:



Printing presses

Foaming oven



For the efficient production of flexible floor coverings, OLBRICH is your competent partner for all process steps today: from the product construction and the surface finishing all the way up to converting the product into a roll ready for sale.

Some of the decisive advantages that we offer are:

- Quick adjustment of the coating heads with highest-possible repeat accuracy and formulation management
- Printing line with up to 12 printing heads for quick design changes
- Quick change of embossing tools by turret embossers with 2 to 6 embossing rollers in the machine
- Lacquering units with double heads for a flying change
- High-efficiency winding and packaging lines for up to 2 rolls/min or 4 rolls/min in the case of a production of 2 x 2 m

With hundreds of machines installed worldwide, OLBRICH provides the sound basis for tailor-made machine configurations that satisfy our customer's individual needs.

#### That is what we call "inspiring engineering – convincing technology".

#### Winding area

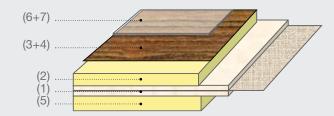


Packaging line



Drives & controls



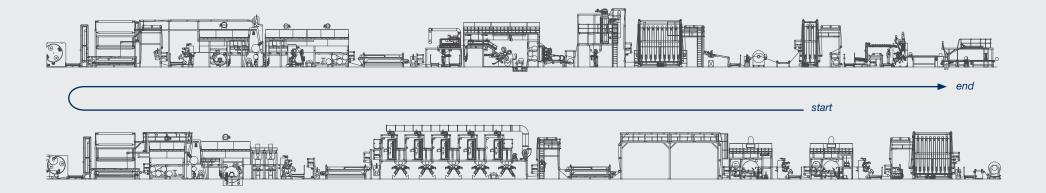


Typical construction of CV



## **HETEROGENEOUS FLOORING**

Multilayer flooring products come to market in many different variations these days. And most of them based on common layers – just in a new combination. This leads to a combination of different processes and that is where OLBRICH comes in to play with its broad experience: We create tailor made concepts based on proven machines and process technology by OLBRICH.



**Reference:** Example of an in-line production concept for heterogeneous flooring. 10-head print press for design changes on the fly, in-line coating machines and laminating stations for different layers. A compact, calendered backing sheet can be laminated as well as an external wearlayer, too. In-line top embossing and lacquering with a high performance UV varnish are included. All in 2m or 4m widths for maximum productivity. A high-efficiency production concept for our customer's benefit.

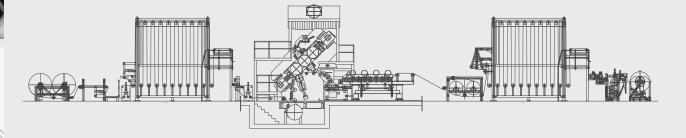
#### That is what we call "create intelligent solutions".





### **MELT ROLLER CALENDER LINES**

OLBRICH offers extensive experience in machine engineering and processing know-how. Calender lines are used to produce coarse, thick backing layers for flooring down to thinnest, clear optical films. The warm, soft films demand special handling between the last calender roll and the driven cooling roller station – OLBRICH benefits from its extensive experience in thin film handling technologies: Specific Annealing of the films via dedicated cooling temperatures and individual drive trains lead to decisive product advantages.





**Example:** Classical Melt Roller Calender Line, 3 rolls, 4m product widths. For the production of unsupported films (clear films, backing layers) and supported films with embedded glass fibre reinforcement for instance. The machine can be used to produce regenerated film from recycled post-industrial waste, for example for backing layers. The set-up shown is also suitable for laminating films to films (doubling of semi-products) or films to other substrates (such as reinforcements).

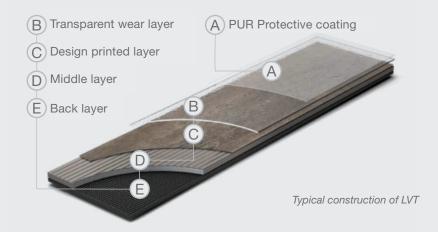


## LAMINATION AND EMBOSSING LINES FOR LVT FLOORING

OLBRICH lamination lines are well known for demanding, technical products such as decorative films and modern LVT or multilayer flooring.

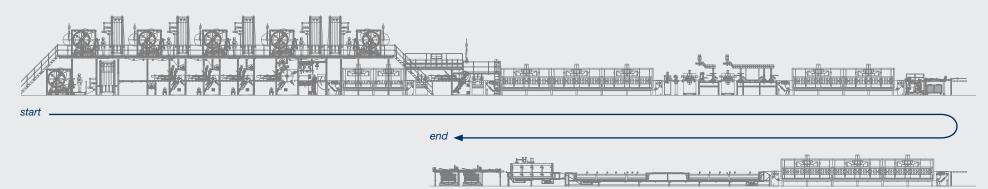
Highest efficiency is ensured by ideal web handling conditions for each film layer. Temperatures, tensions and for instance nip pressures are adjustable to the specific needs of each individual film. All data can be logged in the recipe book of the control system or scada system for optimum repeatability of all process conditions.

The level of automation is adopted to the customer's requirement – whether we start with a simple, manual let-off station or a fully automatic turret unwinder for decorative films, with automatic roll handling and even splicing to register marks. All-over embossing or embossing in register – please ask our experts.





The technologies that OLBRICH offers for LVT flooring include lamination, coating, printing, embossing, UV coating, annealing, winding as well as cutting and stacking. Products made on our machines include standard glue-down LVT, click LVT, PVC and PVC-free products, hybrid products laminated with bonding agents such as hot-melt glues. From single machines up to turn-key solutions – please feel free to ask our experts.





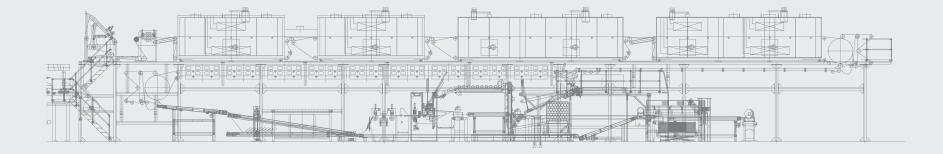
**Example:** 5-ply lamination line with single lamination steps for backing and central drum for print- and wearlayer:

- optimum control of web tension and
- temperature for each single layer.



## PRODUCTION LINES FOR HOMOGENEOUS PVC FLOORING

Our finishing lines for homogeneous flooring ensure the utmost product quality: embossing / smoothing calenders provide the right surface finish and the high performance UV top coating the desired wear resistance. The annealing process with its specific temperature profile treats the homogeneous PVC product in order to gently remove inner tensions created during the prior sheet making process. The final product is then rolled, wrapped and labelled or cut into slabs or tiles.

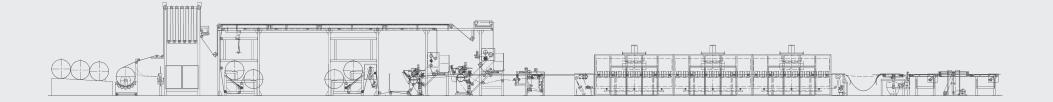




## **COATING AND LAMINATING LINES | CARPET BACKING**

OLBRICH coating and laminating lines for carpet backing have been proven in many different countries and provide a solid basis for our customers' benefit. The commercial carpet tile business is not only based on classical bitumen type backings anymore, but also increasingly often on different polymer backings.

The associated challenges include requirements of pol bonding but also the increasing demand to recycle waste materials which typically leads to an increase in filler content of the coating compounds. OLBRICH's broad coating and laminating experience in the most diverse applications is there for customers to utilize. Whether new product concepts require Bitumen, APP and other hot-melts or TPO, TPU, PVC and PVC-free polymers – please feel free to ask our experts.





**Example –** Typical coating and laminating line: Coating onto non-woven backing, lamination of glass fiber reinforcement, second coating layer and subsequent lamination of the carpet.



