## Roll-to-Roll technologies at work – for functionalized surfaces

First Workshop of the European Network for Roll-to-Roll-Surface Technologies, R2R-Net

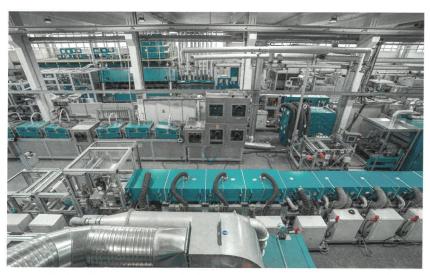
Committing to European goals of the Green Deal for climate neutrality requires on one hand that the use of regenerative energy sources has to be significantly increased and on the other hand that all resources (energy and materials) have to be used more efficiently. All possibilities to reduce the energy demand must be exploited. Highly efficient industrial processes are one element on this path. In order to follow the roadmap all manufacturing processes will be evaluated regarding their potential to contribute to these goals and become a building block for climate neutral industries.

Many products used in our daily life are shaped two-dimensionally from materials such as polymeric films, membranes, textiles and metal bands. The adoption of their surface properties can be performed very effectively by continuous treatment during winding. Even if the films are cut in final parts later on, such prior in-line treatment contributes to process effectiveness. Due to the fact that such kind of processes are applied in many different fields it makes sense to compare such processes with respect to a common challenges and development.

## R2R-Net

Doing this, the first step is to support communication and exchange among people working in these fields for common development. Thus, the foundation of a network of companies and institutes working along the production line like machine supplier, job coater and user as well as groups dedicated to applied research are involved. All aspects of surface treatment and coating are considered by participation of institutes experienced in handling of films, membranes, textiles, non-woven and fibers based on polymers, metal as well as glass. Although the materials processed are very different the technologies used show many commonalities. Bunching the skills of the partners in the network will disclose new fields for common activities.

Development of new production processes including their scale-up requires a broad range of experience,



Host of the first R2R-Net workshop: Coatema's R&D centre, called Technikum. (Bild: Coatema Coating Machinery GmbH)

technologies and equipment available within this network. But not only processes will be optimized also new products will be realized by innovative combinations of coating processes and materials.

The intended cooperation will open new horizons for increase of process efficiency as well as new products.

The network is open for interested partners. For more information please have a look at <a href="https://www.r2r-net.eu">www.r2r-net.eu</a>.

## The First Workshop

To launch R2R-Net and initiate exchange with interested parties a public workshop is scheduled September 7<sup>th</sup>, 2021. This workshop will be a hybrid event due to the contemporary situation and is hosted by Coatema GmbH in Dormagen, Germany.

Registered participants will receive comprehensive information on all aspects of R2R-Technologies in four technology clusters. The state of the art and perspectives will be given in the fields of plasma technologies, physical vacuum-based technologies, flame treatment and wet coating.

Our host Coatema and partners of R2R-Net will concisely present their abilities before everybody is invited to listen to some actual success stories of new products, which were realized by R2R technologies. The concept of our R2R-Net will be elucidated and oppor-

tunities for partners will be pointed out.

Finally, in a round table discussion comprehensive challenges will be picked out as central themes.

For details of the program and for registration please follow our website mentioned above.

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