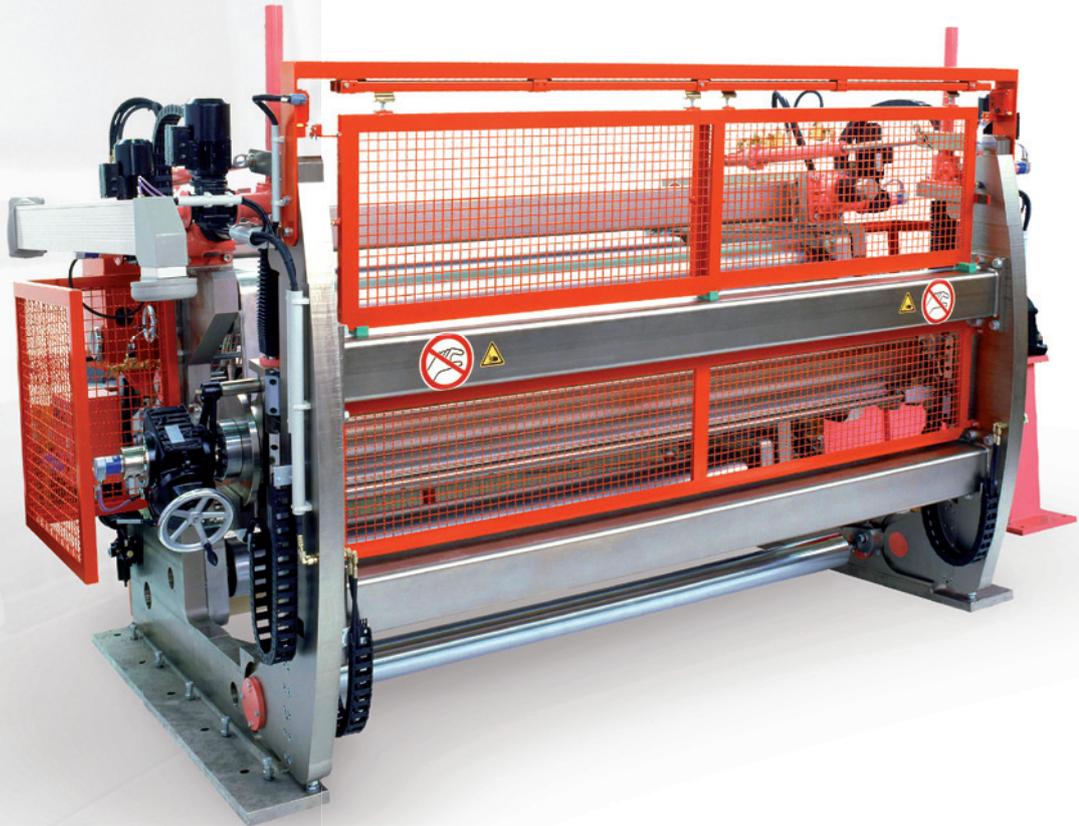


Coating



**KKA High Precision Coaters:
First-Class Coating**

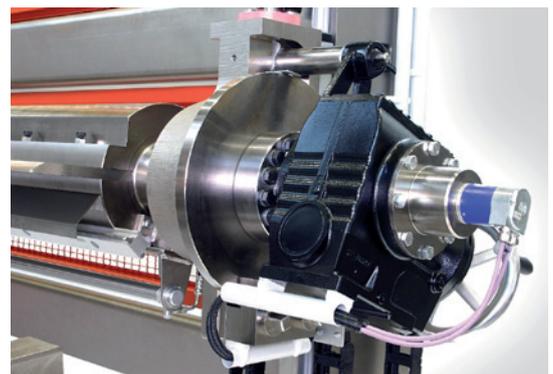
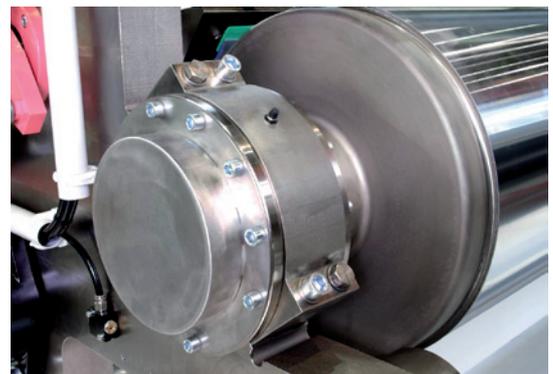
KKA - Know-how right from the...



Coating is the most common finishing process for web type materials. The industrial applications, the coating technologies and specific coating tools vary widely.

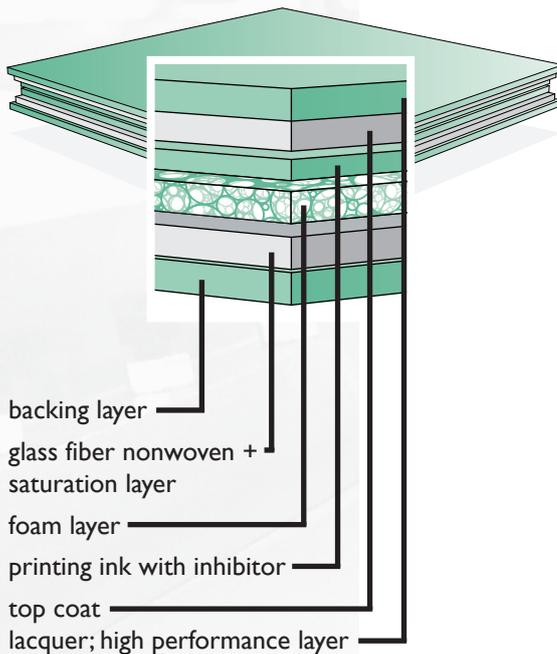
KKA coating systems and coating lines are very divers and used up to the highest sophisticated coating applications for processing functional products with coating solutions, dispersions, emulsions, plastisols, etc. With KKA's many years of know-how and extensive experience in designing coating lines, KKA is providing single units to turn-key installations from raw material processing, through dosing and coating to final converting of the product.

KKA is offering a wide range of coating technologies in order to adapt to the individual requirements of the specific products. The custom made KKA reverse-roll-coater, knife-over-roll, floating-knife and kiss-roll-coaters as well as there combinations cover the majority of applications. KKA's high precision coating system ensures highest uniformity of coating weight across the product width. The use of coating weight measuring system and automatic - close loop control of the coater adjustments guarantee highest product quality.



... planning stage until production.

Floor coverings



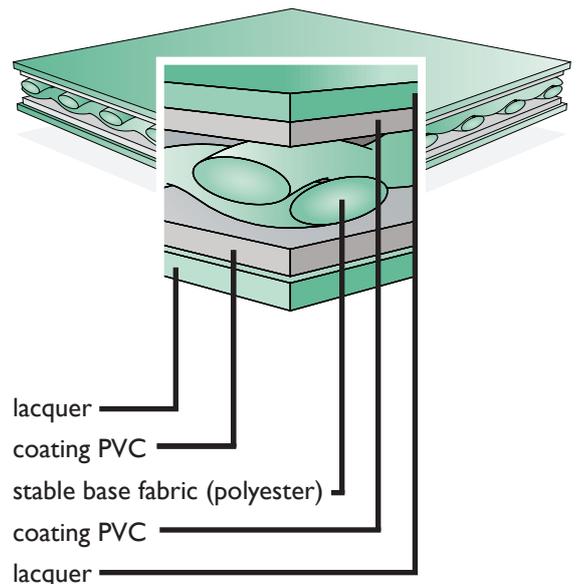
Floor coverings

PVC floor covering is a product with a multilayer structure and is, in the majority of cases based on carrier materials like glass fiber nonwovens and polyester nonwovens substrates.

The thickness of individual layers is determined according to the various fields of application and different classifications of requirements.

Generally, a distinction is made between CV floor coverings and compact floor coverings. The standard product width is 4,000 mm. Various fields of application are: residential structures, schools, hospitals, office space, public buildings, retail space, and gyms.

Technical textiles



Technical textiles

Coated fabrics are used for various applications in every day life:

- **Textile architecture:** textile constructions and buildings – for temporary or permanent use (trade fairs and exhibitions, open air and sports events etc.)
- **Transportation:** coated tarpaulins for trucks
- **Tarpaulins:** robust materials in numerous types and designs for various requirements (colour, width, flame retardance, etc.)
- **Advertising:** high quality printable advertising media and banner ads for outdoor and indoor use (frontlit, backlit, blackout)
- **Leisure:** various applications for leisure activities (tents, umbrellas, awnings, inflatable toys, swimming pool liners and covers, etc.)
- **Environmental protection:** materials for the production of flexible containers and tanks to store dry and liquid substances as well as gaseous media (oil- and waterresistant materials, air- and gas-tight materials)

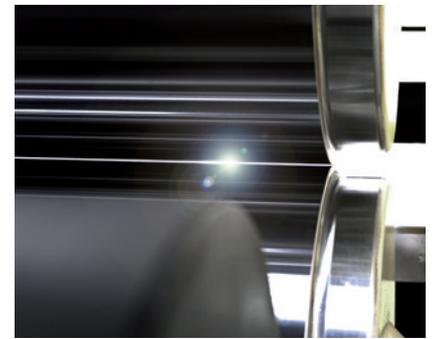
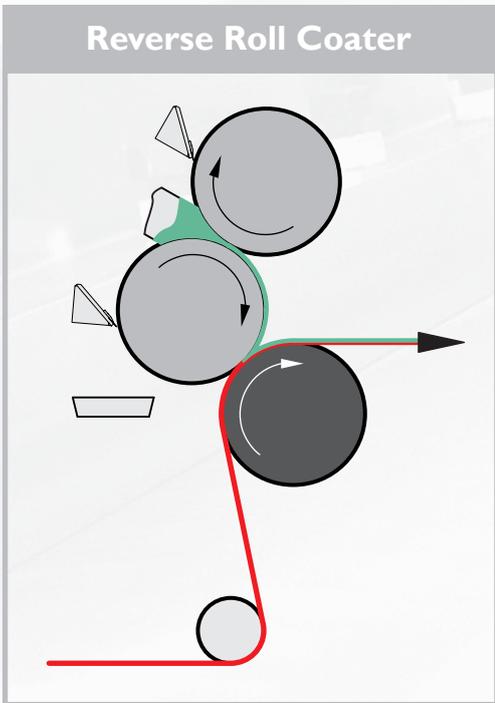
Reverse Roll Coater

The KKA Reverse Roll Coating System is using an applicator roll that turns in opposite direction to the moving web. In principle, the system contains three rolls in either vertical or in an s-shape arrangement. The coating is supplied into the upper nip between metering and applicator roll.

Advantages of the KKA - Reverse Roll Coater are :

The coating is applied uniformly, independent of carrier tolerances.

Further, the viscosity of thixotropic coating media can be influenced by varying the shear forces in the roll nip between metering and applicator roll.



Application Weight as a Function of Viscosity and Application Method

5 g/m²

to

2.000 g/m²

Nozzle Application

of:
thermoplastic / viscoelastic masses

10,000 – 100,000 mPas

Doctor/ Roller Application

of:
plastisols, solvent and water based
lacquers / solutions / dispersions

500 – 50,000 mPas

Calender Application

of:
thermoplastic / viscoelastic masses

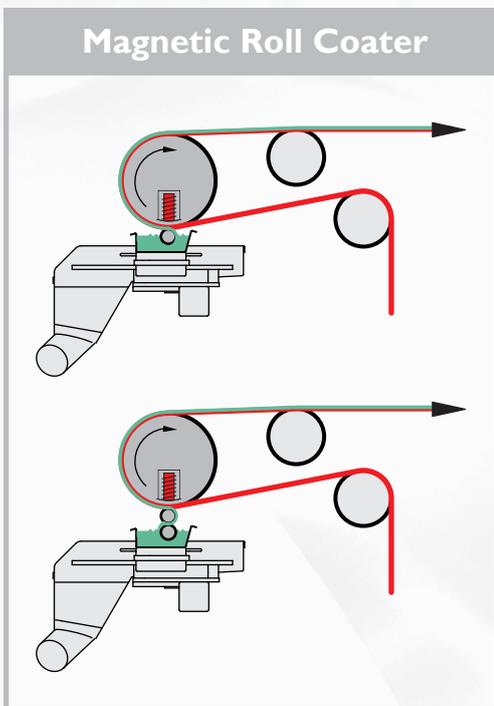
10,000 – 1,000,000 mPas

Magnetic Roll Coater

The Magnetic load-controlled Roll Coating System guarantees low and uniform coating application up to beyond 5.000 mm working width with no side to side variations.

The coating can be applied via transfer roll coating in two different processing modes, either direct or indirect, in horizontal or vertical web direction. The magnetic load system is adjusting the nip pressure and controlling the coating application across the web.

Magnetic roll coaters are also available individually and can be retrofit to the machine later on. The compact machine design allows an easy integration into existing production lines.



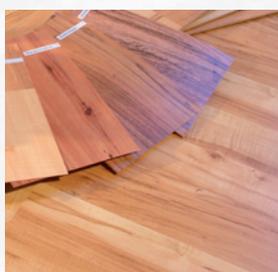
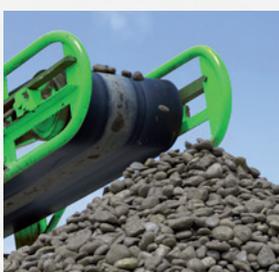
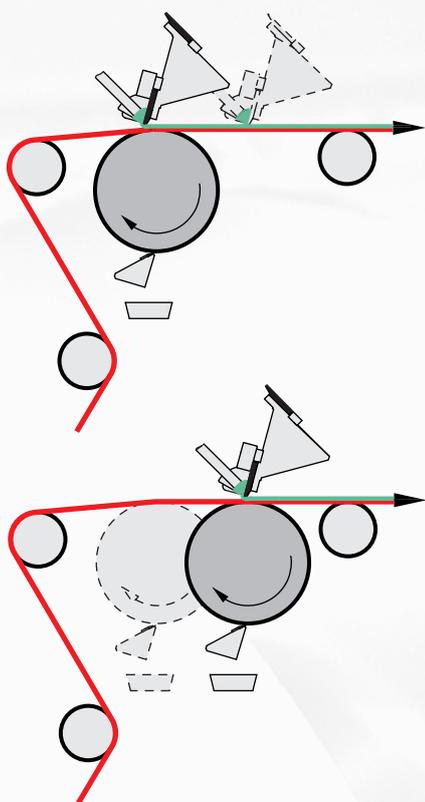
	Reverse Roll Coater	Magnetic Roll Coater	Knife-over-Roll & Floating Doctor	Kiss-Roll Coater
Formulation	emulsions, dispersions, plastisols and organiscals; solutions; water and solvent containing lacquers, natural rubber and synthetic rubber	emulsions, dispersions, plastisols and organiscals; solutions; water and solvent containing lacquers, natural rubber and synthetic rubber	emulsions, dispersions, plastisols and organiscals; solutions; water and solvent containing lacquers, natural rubber and synthetic rubber	emulsions, dispersions, plastisols and organiscals; solutions; water and solvent containing lacquers
Carrier Substrate	woven fabric, knitted fabric, coated fabric, nonwoven	woven fabric, knitted fabric, coated fabric, nonwoven, paper, scrim fabric	woven fabric, knitted fabric, coated fabric, nonwoven	knitted fabric, nonwoven, scrim fabric
Coating Weight	approx. 50 - 500 g/m ²	approx. 10 - 300 g/m ²	approx. 50 - 1.200 g/m ² approx. 30 - 250 g/m ²	approx. 25 - 500 g/m ²

Techtonys

Offering the highest degree of flexibility, Techtonys Coating Systems also guarantee convincing coating results and can easily be adapted to very different production requirements.

The main focus is on efficiency and product quality. This type of coating lines can be used to manufacture a variety of products and widths ranging from 500 to beyond 5500 mm.

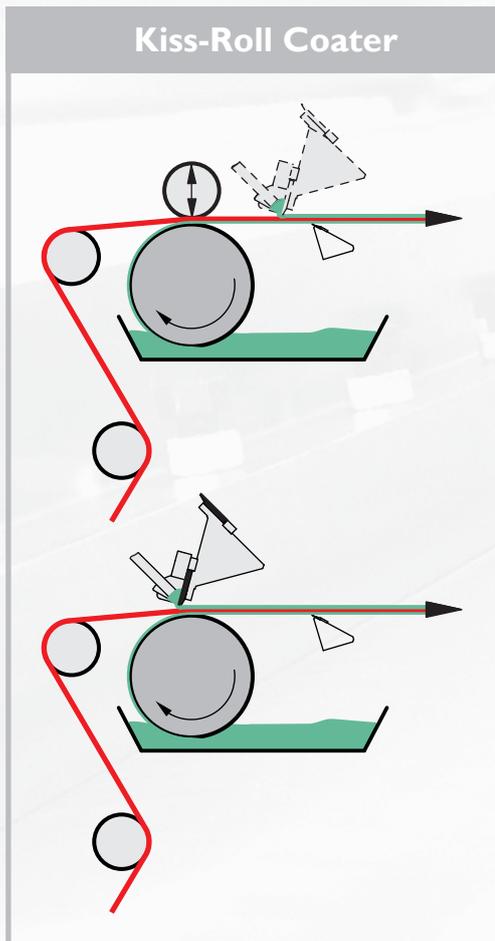
Knife-over-Roll & Floating Doctor



Kiss-Roll Coater

Kiss-Roll Coaters are being used in their majority for thin coatings with low viscosities. The application of the coating is applied via kiss-roll out of a pan in co- or counter rotation.

According to the requirements of our customers KKA Kiss-Roll Coaters can be equipped with support roll, floating knife or even with an additional coating head.



Areas of application

- Adhesive Film
- Advertising Media
- Conveyor Belts
- Covers for Transport
- Dashboard Film
- Textile Architecture
- Non-slip Mats
- Floor Coverings
- Tarpaulins
- Leisure Products
- Pool Liners
- Roof Liners
- Synthetic Leather
- Technical Textiles

KKA Kleinewefers Kunststoffanlagen
The whole world of finishing technology - all from one source!

Kleinewefers Kunststoffanlagen has been demonstrating high class performance in finishing web type materials for more than 140 years by providing innovative and reliable technical solutions as well as an excellent service.

Today's core competences of this long-established German company include turn-key plants, single components, peripheral manufacturing equipment and a comprehensive service offer. KKA GmbH's complete business activities range from plants for the automotive industry and for furniture decoration to a broad field of applications for technical textiles, as well as to the production of adhesive tapes and floor coverings. In addition to that, the company's profile is completed by special applications in the field of mobile energy sources and services related to process engineering, including machine upgrade services and equipment modifications.

Due to high vertical integration, a direct influence on all development and manufacturing steps is always guaranteed.



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Using the latest engineering tools (3D-CAD, FEM analyses, static and dynamic simulation) and on the basis of our fully integrated, sizable production capability with in-house control engineering division we are able to offer efficient services from the first sketch to delivering first-class plants.

We care for your equipment - from planning the design study to commissioning, integrating and servicing all components. As our customer, you can tap into the wealth of experience offered by our experts which, together with a qualified team of professionally trained service technicians, forms an integral part of our services.

Among our customers are renowned, worldwide operating corporate groups, companies and research institutes who produce first class products on Kleinewefers Kunststoffanlagen equipment. Many of these powerful and enriching business relationships have been cultivated for decades.

Our strength lies in providing comprehensive solutions for the producing industry.

