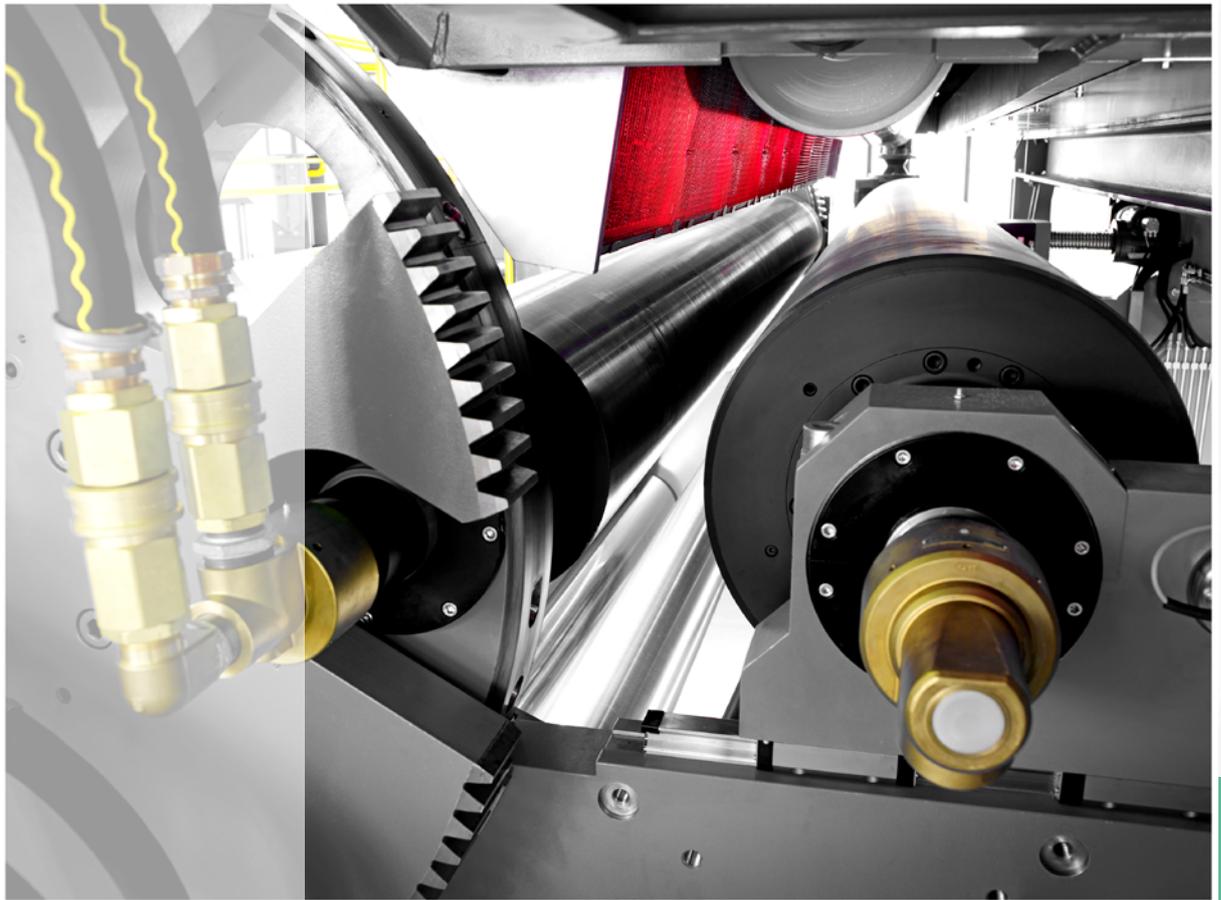


Bosstec



KKA embossing calender:
concept for high-quality embossing

KKA - Know-how right from the...

Teamwork – the key to success.

The custom design of his plant is a critical and important aspect for the customer. KKA therefore offers the necessary engineering and consulting for the manufacturing plant. Upon request, we can also offer our technology to support the manufacturing of the desired products. Furthermore, the planning can be accompanied by internal tests with customers' raw materials under production-like conditions.

Briefly said: We work out a complete solution for your problem from A to Z. A decisive aspect in this process are questions of product quality, feasibility, flexibility, and manufacturing capacity to be achieved by the new plant.

In order to reach maximum productivity of the plant from the beginning, we transfer our process technology know-how to the customer from the start of the project.

This means close cooperation with the customer in all phases of the project, including:

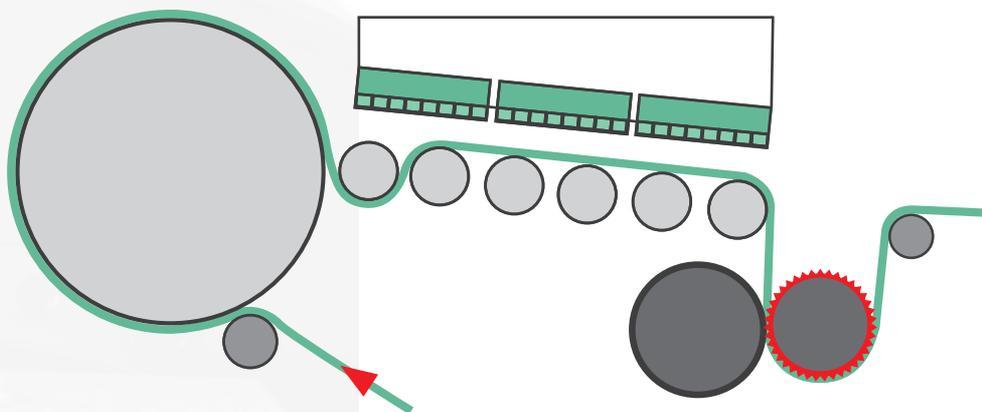
- Training during the engineering
- Training during the equipment production and pre-assembly
- Special on-site training during the final assembly and start-up
- Training inclusive
 - start-up
 - optimising of production conditions
 - fine tuning of the process

Complete service - worldwide.

- Competent consulting prior to purchase
- Competent, cost-conscious project management, even for provision of complete systems
- Pre-assembly at KKA, including cabling and functional testing
- On-site installation and commissioning
- Training of operating personnel
- Worldwide replacement parts shipping
- Preventive maintenance work
- Emergency help through dispatch of a service technician
- Retrofit: upgrading and overhaul of machines by experienced specialists

... planning stage until production.

KKA embossing technology



Process technology and operation

A well-tuned system of heating cylinders, roller units with infrared radiators as well as tempering and cooling zones provides for continuous heating up to the optimum processing temperature and allows a controlled cooling down. The web is heated up and subsequently embossed in the roller nip of the Bosstec between the engraved steel roller and a rubber-covered roller. At the same time the material is cooled down to such a degree that the embossed pattern remains permanently stable when the material leaves the nip. Options to allow roller combinations for special types of embossing are available to ensure meeting your requirements.

Our experience is the key to your success

For decades, KKA has been a synonym for know-how and innovation in embossing technology. Our calenders offer the highest efficiency and first-class quality. More than 100 embossing calenders supplied worldwide and a multitude of patents speak for themselves.

KKA is your competent partner for all fields of plastics embossing:

- ABS, PVC, TPO (PE, PP, EVA, CPE)
PMMA, PET, EPDM
- Film thickness from 20 µm up to 3 mm
- Individual machines, partial plants and entire embossing plants

Turret-type Bosstec - rapid roll changes and perfect embossing results

Due to the special design (turret-type) of the calender with turret disks that are directly mounted in the calender frame, the nip forces are completely absorbed by the calender frame. Unlike to a design involving an axis of rotation, there are no additional bending moments. Thus an absolutely consistent embossing result is achieved.

With this embossing calender it is possible to carry out pattern changes within 2 minutes. The new embossing roll is moved into the right position by the turret disks. This is made possible by means of a central cooling water connection and a pneumatic coupling. In addition, inactive embossing rolls can be removed from the Bosstec during production so that downtimes are reduced to a minimum.

Embossing plants



KKA Embossing plants combine long-standing experience in embossing technology with efficient heat transfer processes and modern drive concepts. Excellent embossing effects, in particular when embossing PVC/PUR compact and foam film, as well as film with carrier material can be achieved.

Our embossing technology combines an efficient energy transfer into the substrate with easy to use and to change embossing tools. Even the highest demands in end products used for automobile interior and decorative film are met to the entire satisfaction of customers.

PE/PP embossing calender



The KKA PE/PP embossing plant concept is perfectly tailored to ensure high-efficiency, optimal embossing of polyolefine film for various types of applications.

Technical data

- Film thickness range 20 - 120 μm
- Speed up to 450 m / min
- Finishes widths up to 2.500 mm

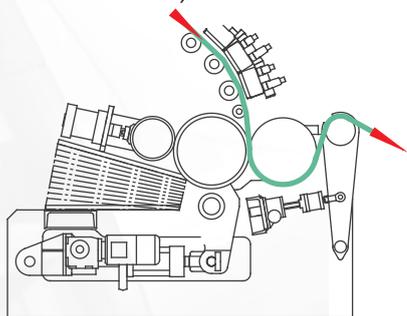
Areas of application

- Diaper films
- Hygiene product films
- Tire films
- Bag films
- Decoration films

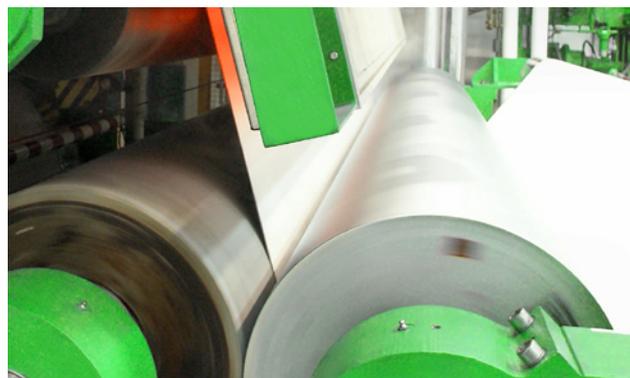
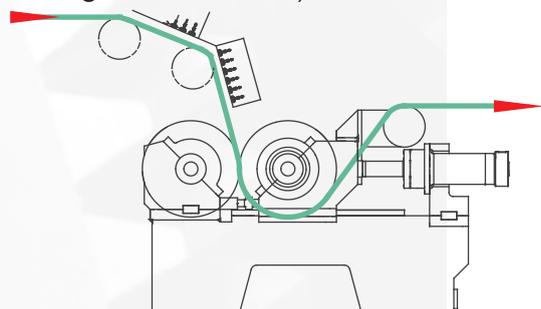


Bosstec embossing calender

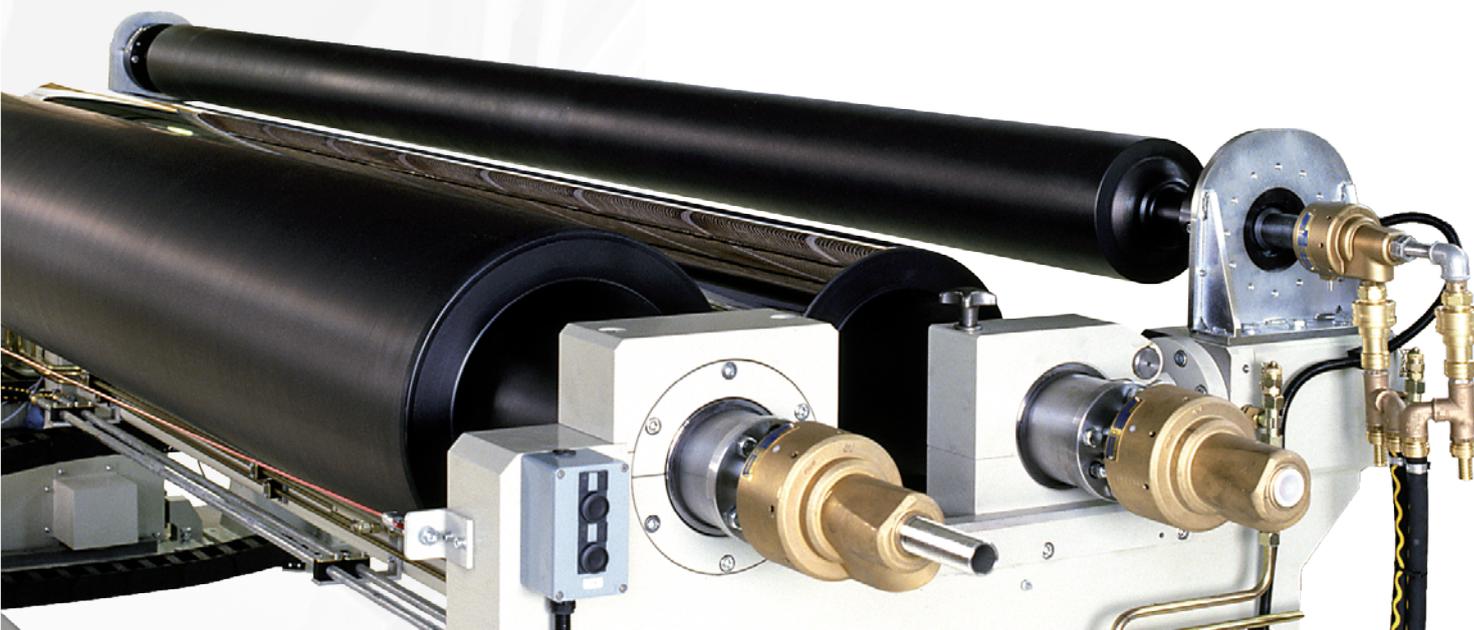
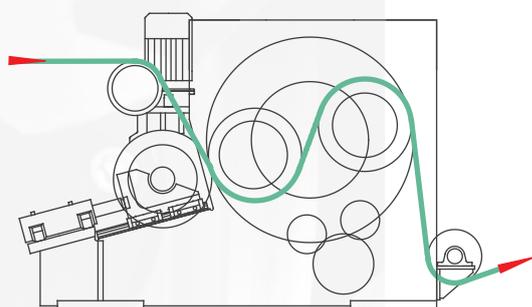
Embossing calender for floor coverings
(working width 4.000 mm)



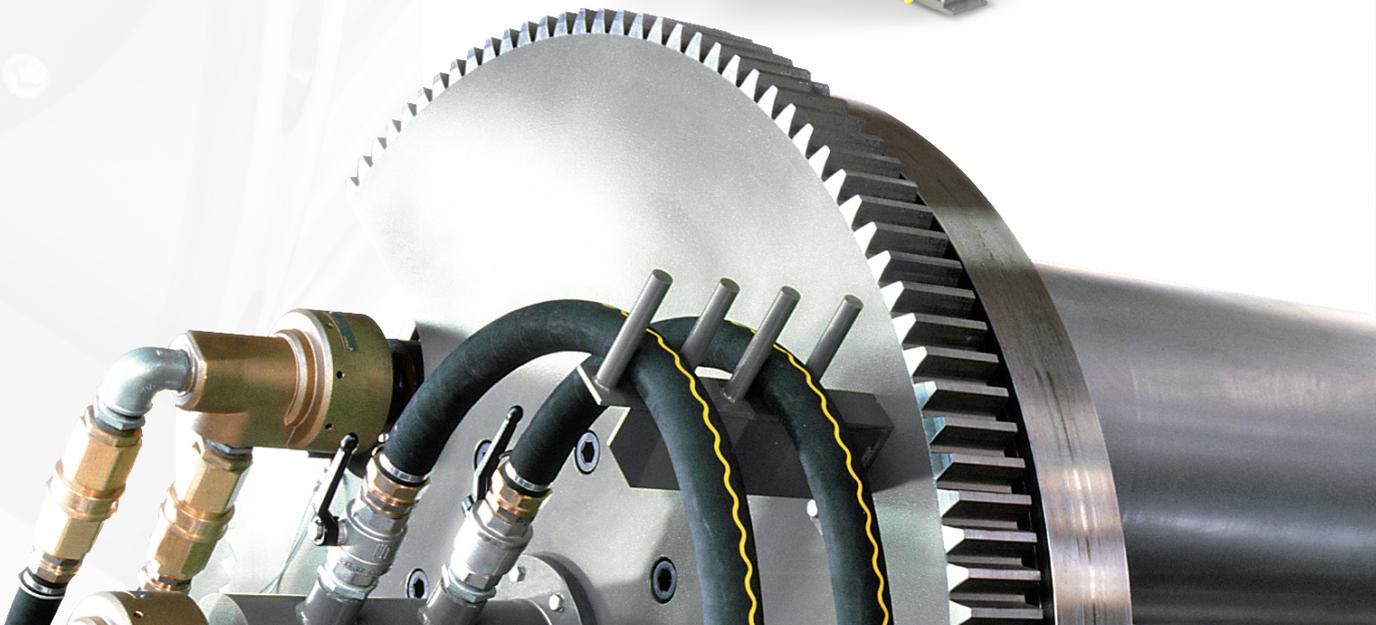
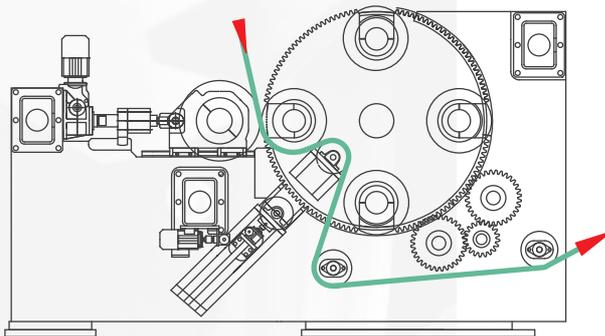
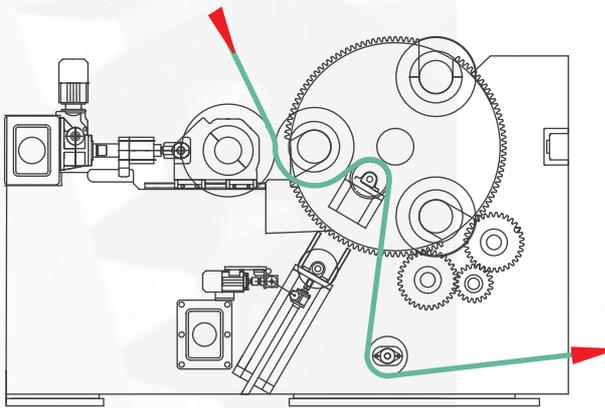
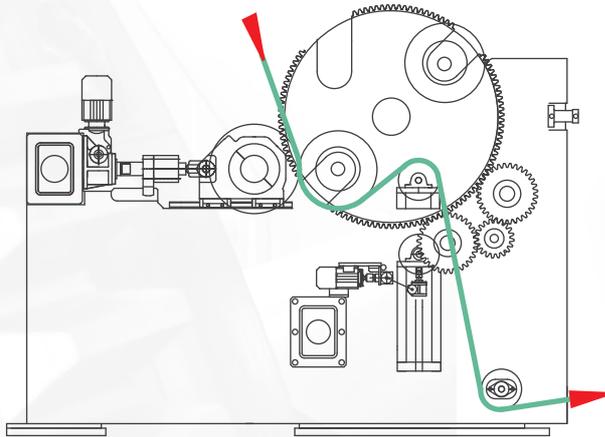
Embossing calender for technical textiles
(working width 4.000 mm)



Two-station embossing calender for technical textiles (working width 4.000 mm)

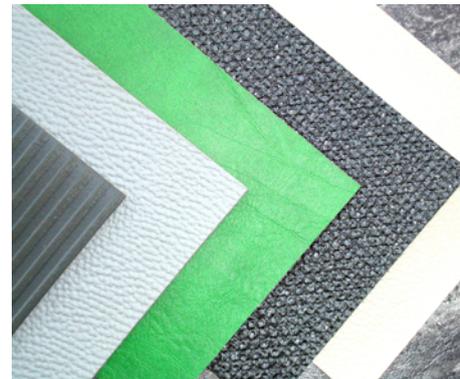


Turret-type Bosstec



Areas of application

- Automotive films
- Artificial leather
- Floor coverings
- Textile tarpaulins
- Roof liners
- Protective covers for transport and automotive industry
- Protective clothing
- Furniture films
- Wall papers
- Book covers
- Bag films
- Decoration films
- Diaper films
- Hygiene product films etc.



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.

