

COATING AND METERING TECHNOLOGY

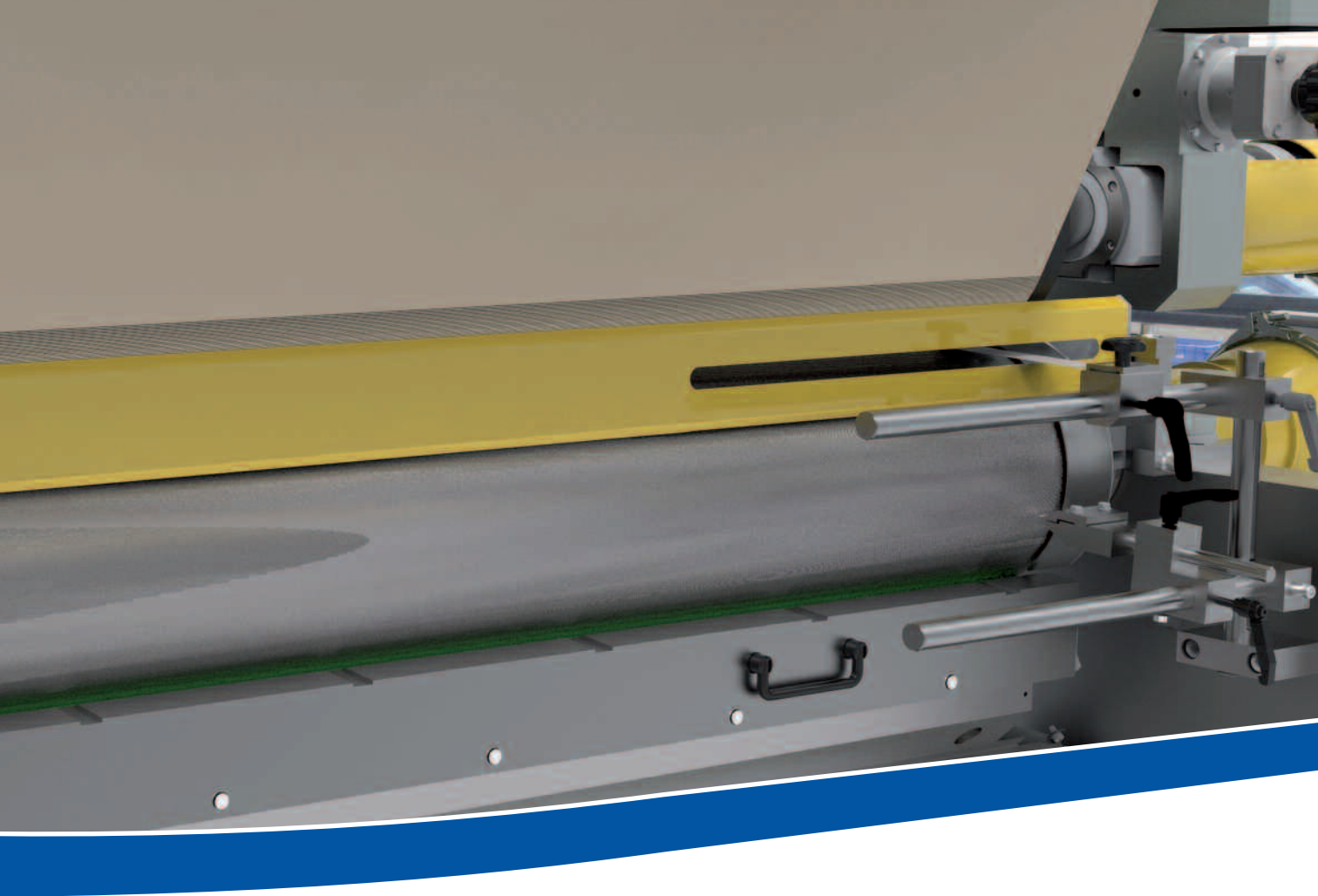
for gravure rollers with
pressurized chamber
doctor blade

MPG 600 CI



KROENERT

The Coating Machinery Experts



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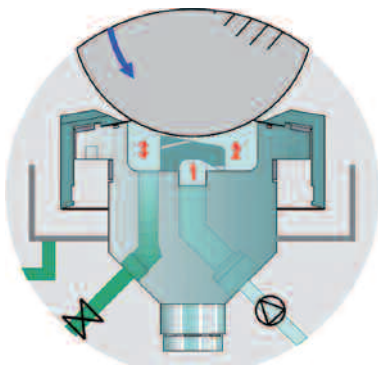
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MPG 600 CI

The MPG 600 CI (Multi-Pressure Gravure 600 Chamber Injection) uses gravure rollers to enable the highest quality coating processes for various applications and media.

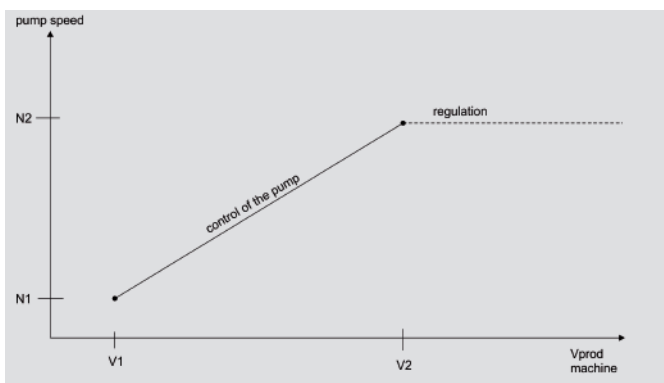
This is achieved by using a pressure-filled chamber doctor blade vertically positioned against a gravure roller, with linear guides, in the 6 o'clock position. The compound chamber is enclosed and bordered by two doctor blades.

In this way, differences in coating weight are possible by pressure variance alone and with a high degree of consistency. In comparison to conventional coating and metering processes the MPG 600 CI represents a quantum leap.



3-chamber coating head

1. Compound distribution chamber
2. Gravure roller filling chamber
3. Controlled overfilling of gravure roller



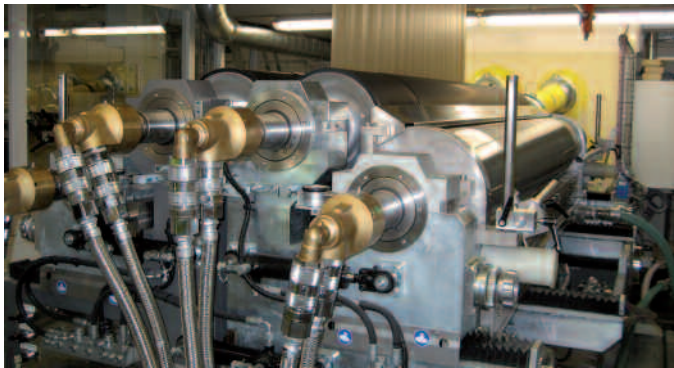
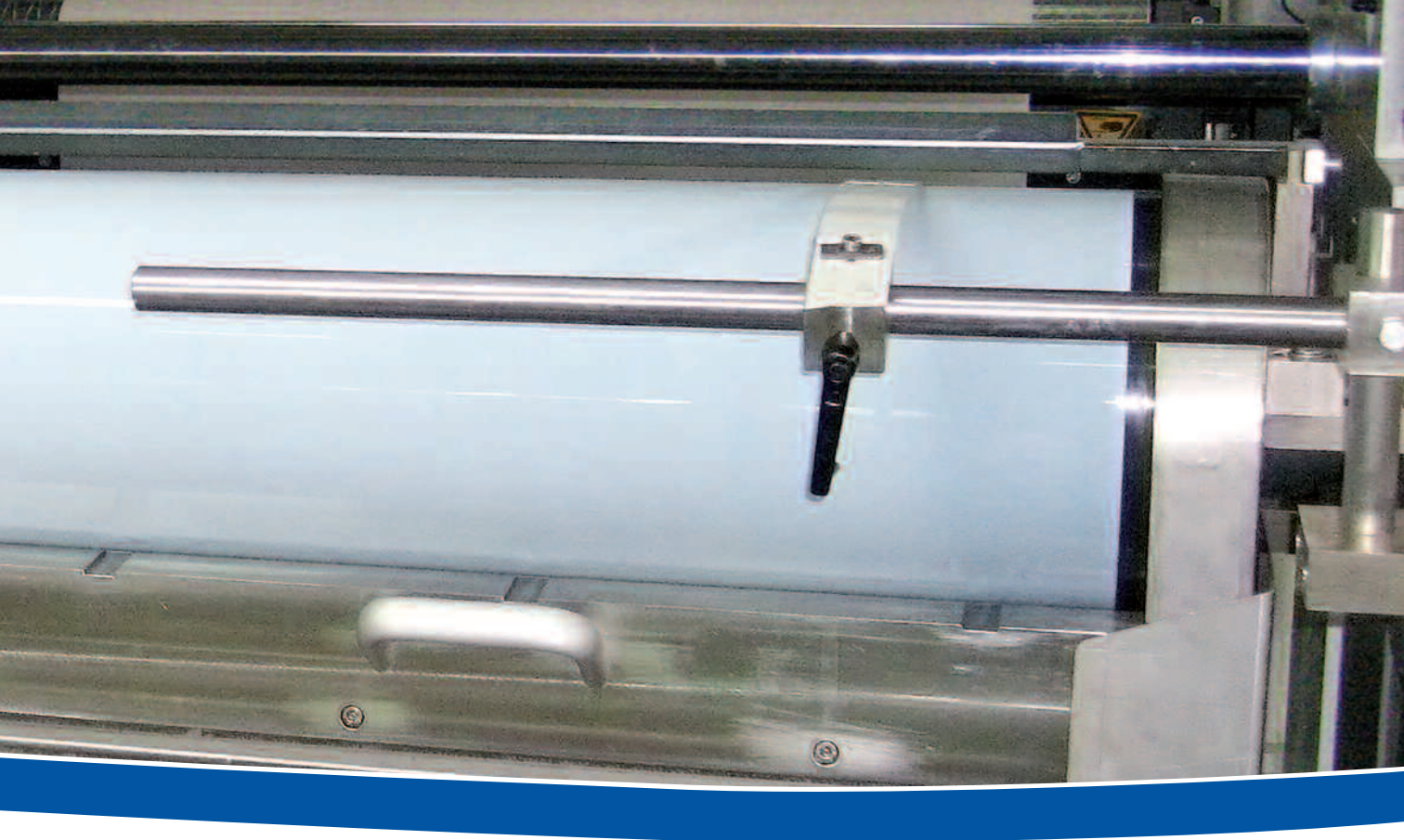
Constant coating weight during line acceleration or deceleration

MPG 600 CI Features

- 3-chamber design for extremely accurate compound distribution and metering
- Reverse and forward operation without turning the coating head
- Bending-compensated coating head
- Quick blade and seal changes without tools
- Flow-optimized displacer to separate the chambers
- Compound supply systems for foam elimination (especially for clear-on-clear films, top coats etc.)
- Option of negative or positive settings for metering blade (on request)

Other Features

- Consistent coating weight by calibrating the pump speed related to the web speed
- gravure coating in direct or offset mode
- No electrochemical corrosion of application head during processing of alkaline or acidic aqueous compounds
- Optimal cooling of the drain and overflow channels (e.g. PVdC)
- Appropriate compound circulation systems for different rheologies and viscosities
- MPG 600 CI pressurized doctor chamber blade system is suitable for installation in other manufacturers' coating stations



Double-sided coating station



Coating station with pressurized doctor chamber blade and gravure roller. Also available as a trolley system

Double-sided coating head

Silicone or wax emulsions, primers and release coatings as well as varnishes or functional coatings are applied simultaneously on both sides of the substrate.

MPG 600 CI and the environment

Conserving resources and improving the workplace (threshold limit values and ergonomics) are given top priority.

Overflows are avoided by the use of foam settlement and degassing tanks of minimal volume. The enclosed pressure chamber doctor blade and compound circulation system reduce solvent evaporation to a minimum.

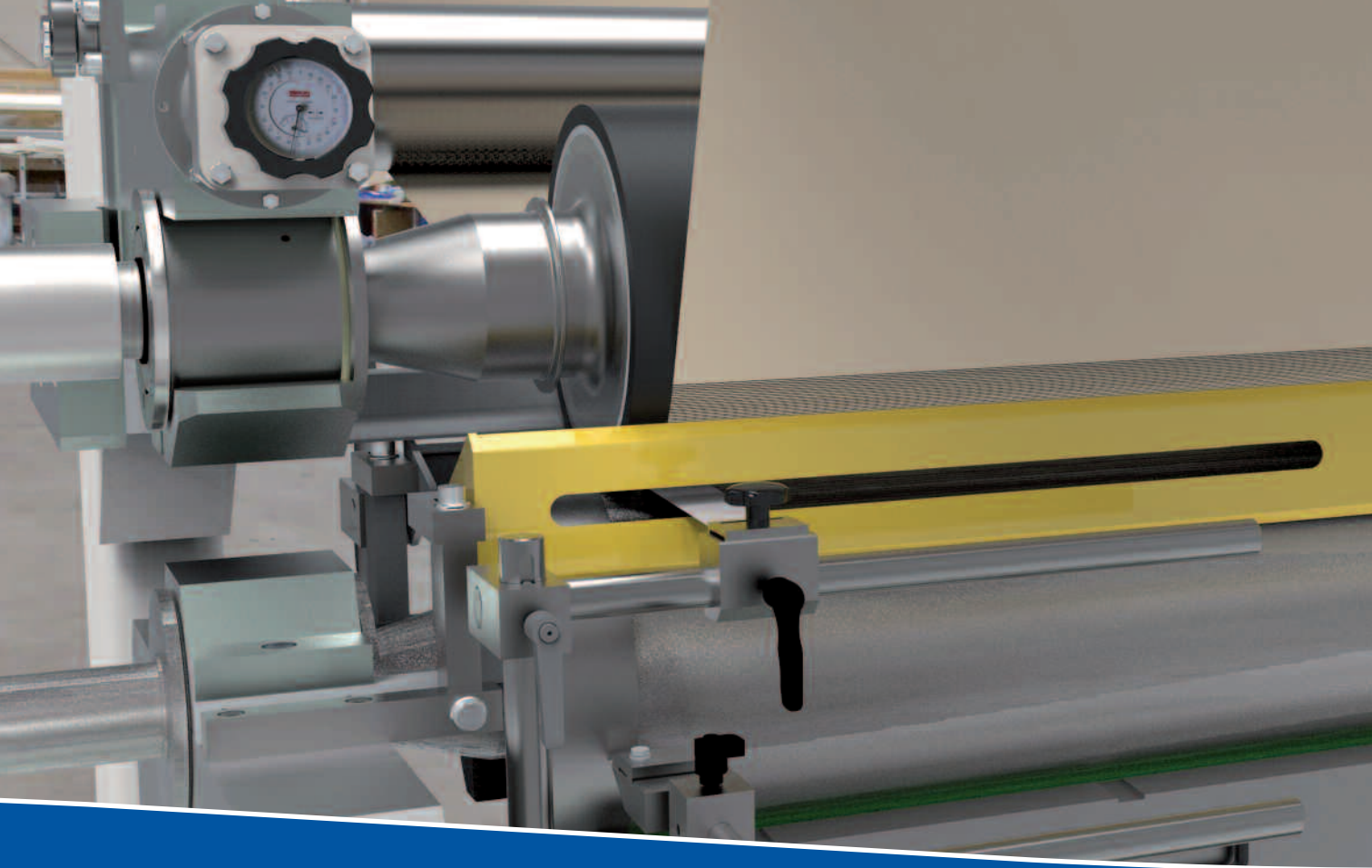


Technical data

- Working width 500 - 2.900 mm
- Production speeds of up to 1.000 m/min
- Coating variance without changing gravure roller from 40 % up to 125 % is possible, depending on the speed, the viscosity and the selection of the gravure roller
- Very high coating weight consistency at continuous running speed in the longitudinal and transverse profiles of $\leq 3 \%$
- Coating of high-solids media with solids content $> 40 \%$ possible
- viscosities up to 2.000 mPas (depending on shear behavior)

Applications

- Acrylate adhesive of up to 800 m/min
- Varnishes up to 1.000 m/min
- Emulsion silicone coatings at 1.000 m/min
- Solvent-based pigmented varnishes at 400 m/min
- Solvent-based and dispersion laminating adhesives at 600 m/min
- Inkjet applications at 600 m/min
- Thermo, CF and CB coatings at 800 m/min
- PVdC applications for sealing layers at 600 m/min and multilayer applications on rigid PVC for deep draw blister packs at 250 m/min
- UV curable solvent-free silicones at 1.000 m/min
- UV and EBC curable varnishes at 300 m/min



Applications



Clear-on-clear labels



PVdC coatings



Adhesive tapes



Aluminum foils



Inkjet papers



Protective films

KROENERT ◆ **BMB** ◆ **DRYTEC**

KROENERT GmbH & Co KG · Schützenstr. 105 · D - 22761 Hamburg
 Tel. +49-40/853 93 01 · Fax +49-40/853 93 171 · www.kroenert.de · info@kroenert.de

