

KOENIG & BAUER

Mailänder 280



we're on it.



Reliable Technology for Efficient Production

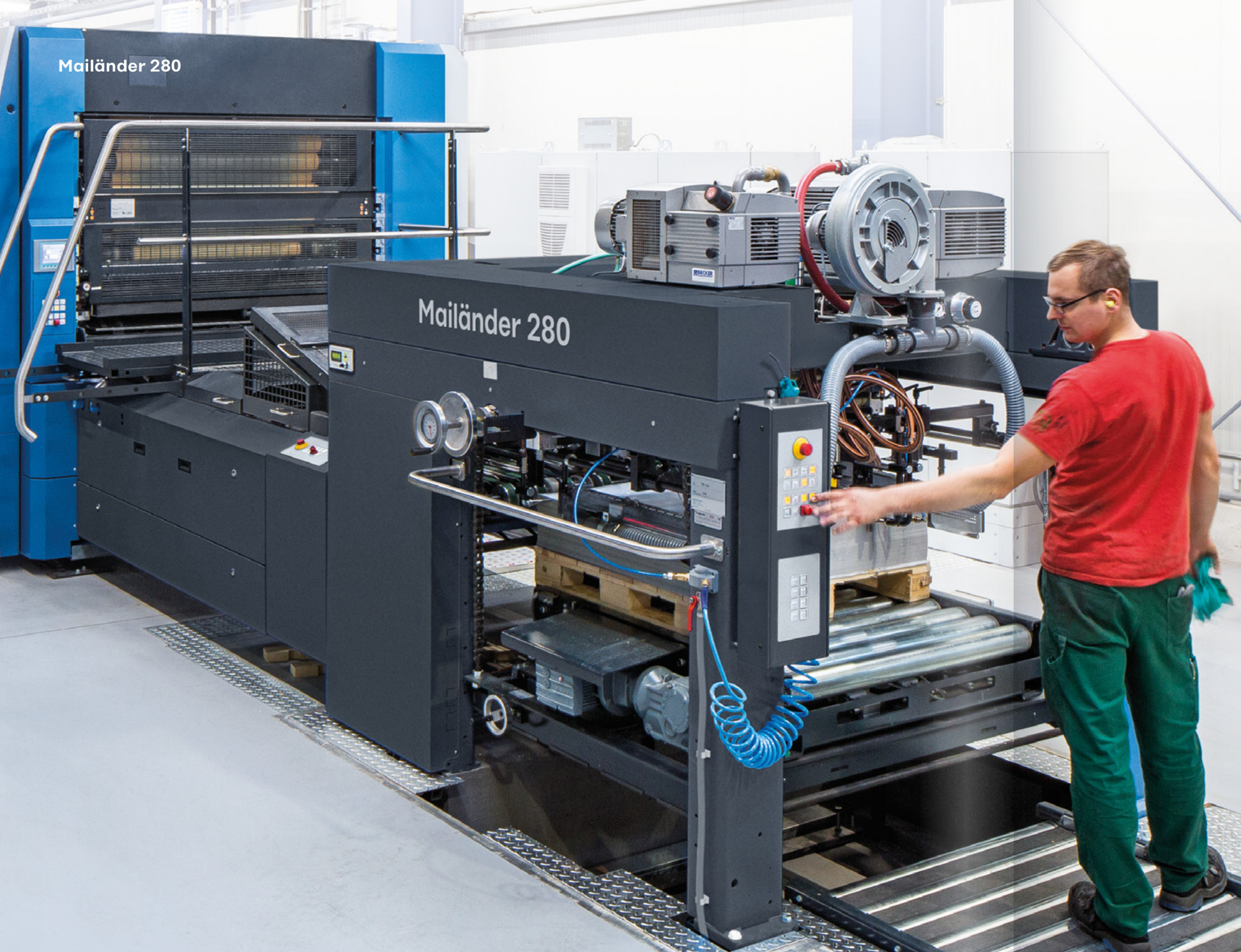
Combining the best of two worlds! Benefit from long established and widely appreciated Mailänder technologies, paired with the high-performance MetalStar 3 printing units. With the Mailänder 280, you can look forward to stable and reliable decoration of even the most challenging qualities of metal sheets, without foregoing the print quality and automation of the MetalStar 3 printing unit.

The Mailänder brand name has always been associated with robust and reliable metal decorating presses that are able to process all the different metal sheets in use on the market.

Thanks to a shared technology platform, the Mailänder 280 incorporates many design solutions from the MetalStar 3. This gives you the assurance that your press implements the very latest technologies, many of which are often lacking in other metal decorating presses. Whether modern multi-roller inking units,

application-oriented washing systems or state-of-the-art console technology – many details simplify the work for the operator.

Like all previous Mailänder metal decorating presses, the Mailänder 280 is also based on a modular concept, allowing you to extend or modify your line with a minimum of disruption. It can be supplied with UV, UV-LED or thermal drying systems, as well as with a variety of solutions for inline coating.



Perfect sheet handling is decisive for top performance. Accordingly, the new high-performance Feeder 780 was engineered specifically to complement the Mailänder 280. One of the highlights is its dedicated drive technology, which provides for reliable, uninterrupted sheet transport while, at the same time, requiring much less maintenance. The feeder features an automatic double-sheet ejector and can process sheets up to a thickness of 0.5 mm.

The flat sheet transport in combination with an optimised infeed frame guarantees particularly stable and precise sheet travel. Together with lateral registration control, the newly designed front lays contribute to high register accuracy and permit the Mailänder 280 to be configured with up to 6 printing units. The infeed frame is convenient to adjust from the console.

Proven Technology, Born in Metal Decorating

A name that stands for reliability and robustness. This is not least due to the fact that the sheet transport along the entire press has been developed and configured specifically for metal decorating. Whether thin or thick, small- or large-format, metal sheets of all kinds are processed with ease.



Printing Unit – The Key to Absolute Print Quality

Productivity is meaningless without quality.
The modern inking unit of the Mailänder 280 ensures top quality.

MetalStar printing units manufactured by Koenig & Bauer have stood for ultimate print quality and automation of the printing process for many years. The Mailänder 280 now also makes the corresponding technologies available in a Mailänder press. The exceptional torsional rigidity of the box construction lends the printing units maximum stability and precision. In conjunction with heavy-duty antifriction roller bearings, this adds up to a uniquely robust, low-maintenance printing unit.

In the inking units, the bleed-free ink keys of the ColorTronic ink ducts provide for exact reproducibility and extremely precise ink

metering. The speed setting of the ceramic-coated duct roller is compensated in accordance with the press speed and thereby guarantees a stable ink supply at all production speeds. The short-train inking unit of the Mailänder 280 reacts quickly and dynamically to changes in colour setting. To get you straight back into colour after a press stoppage, the Mailänder 280 features an ink train separation function. This function splits the ink train while production is interrupted and therefore ensures the fastest possible return to stable inking conditions upon resumption. The speed-compensated film-type dampening unit guarantees a stable ink/water balance.



Inking unit of the Mailänder 280

Quickly Changing the Job

Make-ready on a metal decorating press can be a lengthy process. But not on the Mailänder 280 – thanks to a wide range of time-saving features.

Ink roller wash-ups are often a time-consuming and dirty process. The automatic roller washing programs that are a standard feature on the Mailänder 280 handle the task cleanly and fully automatically. Washing programmes are convenient to start from the console. The Mailänder 280 then takes care of solvent metering and activation of the wash-up blade. The operator can simply rely on the press to do the job.

Manual blanket washing is very convenient on the Mailänder 280 because the operator has unhindered access to the blanket cylinder. The whole process can also be automated, of course – with the automatic blanket washing system CleanTronic. The blankets are washed by a washing cloth, onto which a defined amount of washing solvent is sprayed automatically – simultaneously in all printing units!

If this still isn't fast enough, there is the option of washing the ink rollers during blanket washing in order to save even more time. The DriveTronic SRW function (Simultaneous Roller Washing) uses a separate drive on the inking unit to enable the Mailänder 280 to perform roller washing parallel to blanket washing. It doesn't get much faster than that.



Mailänder 280

Technology at a Glance

Layouts

Customer-oriented line configuration

- Application-oriented configuration options
- Equipment packages available for UV and UV-LED applications
- Flexible configuration
- Sheet management systems in numerous variants for reliable sheet ejection
- Proven dryer solutions for UV, UV-LED and conventional printing

Console technology

Made by Koenig & Bauer

- State-of-the-art operating concept on the ErgoTronic control console (including touchscreen for intelligent, straightforward handling)
- Job profiles can be saved for repeat jobs
- Integration into the LogoTronic production data management system
- Convenient remote maintenance access from the console

CleanTronic

For outstanding washing results

- Roller washing programmes for automatic washing of the ink rollers
- CleanTronic: automatic blanket washing
- CleanTronic UV: blanket washing with the UV lamps in standby mode
- DriveTronic SRW (Simultaneous Roller Washing): roller washing parallel to blanket washing

Inking unit

Perfection in colour

- High repeat accuracy thanks to bleed-free metering in the ColorTronic ink duct
- Stepless adjustment of the oscillation timing from the control console during production
- Maintenance-free pneumatic ink ducts for UV-LED production
- EasyClean ink duct plates for fast ink changes
- Ink train separation with impression-off
- Individual disengagement of unused inking units to reduce roller wear and makeready times
- Temperature control for the duct roller and oscillating distributors
- Speed-compensated VariDamp film-type dampening units for a stable ink/water balance

Plate changing

Application-oriented automation

- Semi-automatic plate changing system SAPC (Semi Automatic Plate Change)
- No tools required
- Precise plate positioning
- Automatic plate tensioning

Infeed frame

For ultimate precision

- Extremely flat sheet transport
- Automatic format setting
- Side guides for precise alignment of rectangular and scroll sheets, both tinplate and aluminium
- Air knives in the delivery for thin and lightweight sheets

High-performance Feeder 780

Solid as a rock

- Proven sheet feeder
- Specifically for difficult and challenging materials
- Electrical synchronisation with the entire line
- Straightforward handling
- Robust construction

Logistics

An ideal system for all needs

- Roller and chain conveyors available in different lengths
- Stop & Turn function at the feeder for gentle pile alignment without damage to the sheet edges
- Intermediate feeders and stackers for maximum flexibility

Printing Made Easy

Thanks to a clearly arranged and intuitive user interface, work on the Mailänder 280 is amazingly easy. The operator at the console has all functions under control at all times.

Printing presses made by Koenig & Bauer are known for their ultimate productivity and automation. To be able to exploit the full potential, centralised and intuitive control is essential. The new ErgoTronic console was designed specifically to meet this challenge.

The clear and tidily structured user interface is presented on a 24" touchscreen. All relevant production parameters can be accessed and modified simply by tapping on the screen. The ErgoTronic console facilitates convenient control from a central workplace and thus defines new standards for press operation.

New print jobs can already be set up while current production is still in progress. The CIPLink interface allows the predefined ink profiles for each printing unit to be loaded automatically and then transferred to the corresponding inking units upon confirmation by the operator.





A Matching Line for Every Application

As individual as your production. The Mailänder 280 is suitable for a broad spectrum of products and applications. Tailored precisely to your requirements.

Each Mailänder 280 line is tailored precisely to the customer's requirements. Starting from the logistics elements, where you are able to choose from a range of roller conveyors in different lengths, lateral chain conveyors and turntables. Regardless of the layout of your particular production hall, we can supply a suitable logistics solution.

The Mailänder can also be customised for the use of UV, UV-LED or conventional printing inks, and optionally also to incorporate a UV, UV-LED or conventional inline coating machine. The potential is practically unlimited. Which-ever configuration you choose, every Mailänder is tailored precisely to your needs and preferences.

Always at Your Service – The Koenig & Bauer MetalPrint Service

We at the Service of Koenig & Bauer MetalPrint support our customers with a comprehensive range of services to ensure that the coating and printing lines of our customers all over the world run smooth and trouble free day in and day out throughout the complete service life.

And we supply much more than "just" original spare parts. The expert problem solvers of Koenig & Bauer MetalPrint are there to provide assistance and support whenever it is needed, at any place of the world.

Of course this includes also the latest Mailänder 280 peak performance press.

We support you with a comprehensive range of services.

Time and productivity gains by Remote Service & Hotline support

- Competent problem solving around the clock
- Interactive live video assistance directly on your mobile device
- Almost 80 percent of all cases can be solved successfully by remote maintenance
- No unplanned costs thanks to an attractive flat rate

Only original spare parts

- are manufactured to the highest quality standards
- ensure the legendary reliability of your production line
- safeguard the value of your press throughout the complete service life

The cornerstone to prevent unplanned downtime: preventive inspections

- Detailed evaluation by qualified and experienced technicians
- Early detection of maintenance deficits, wear or damage
- Enhanced press availability

Our consumables: specifically geared to metal decoration

- Tried and tested products, e.g. blankets, ink and dampening rollers, UV lamps and chemicals
- For a stable and consistent product

We would be pleased to define a service package to match your individual requirements. You can reach us by e-mail to: service-metalprint@koenig-bauer.com or by phone at: +49 711 699 71-300

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Technical Data

Sheet format				
Maximum	1200 x 1000	mm	47.24 x 39.37	inch
Minimum	710 x 510	mm	27.95 x 20.08	inch
Thickness	0.13 – 0.50 for tinplate	mm	0.0051 – 0.0197	inch
	0.18 – 0.50 for aluminium	mm	0.0071 – 0.0197	inch
Sheet material				
	Tinplate and ECCS (TFS) complying with EN 10202			
(optional)	Aluminium complying with EN 541			
Sheet cut				
	Straight			
(optional)	Scroll			
Print format				
Maximum printing area	1200 x 995	mm	47.24 x 39.17	inch
Gripper margin	3	mm	0.1181	inch
Print start	5	mm	0.1969	inch
	from edge of sheet		from edge of sheet	
Plate and blanket dimensions				
Size of printing plate	1220 x 1095	mm	48.03 x 43.11	inch
Plate thickness	0.40	mm	0.0157	inch
Blanket size	1275 x 1220 x 1,95	mm	50.19 x 48.03 x 0.0767	inch
Production speed ¹				
	5500 – 7500	sheets/h	92 – 125	spm
Feeder pile				
Maximum weight	3500	kg	7716.18	lbs
Operating environment				
Electric power supply	3 x 400 V +/- 5 %, 50 Hz			
(optional)	Other voltage and /or frequency on request			
Compressed air	6 bar (constantly applied to conditioning unit)			
Relative humidity	45 – 60 %			
Ambient temperature	Max. 35 °C			
(optional)	Max. 40 °C with cabinet climate control			
Installation altitude	Max. 1000 m above sea level			
(optional)	Above 1000 m sea level on request			
Remote maintenance				
	via internet connection			

¹ Depending on quality, format and thickness of sheets, inks, etc. as well as drying oven specification.

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