K
A
R
L
S
T
E
I
N
E
R

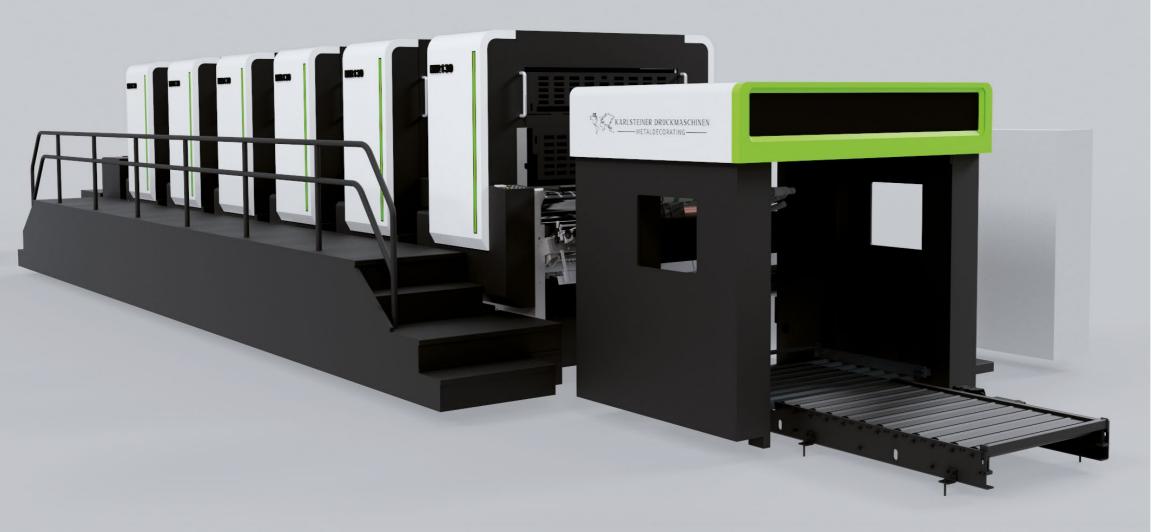
D
R
U
C
K
M
A
S
C
H
I
N
E
N

M
E
T
A
L
D
E
C
O
R
A
T
I
N
G

P
R
E
S
E
N
T
S
E
E
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I
I

MR130
"THE ROCK"

THE ONLY FORMAT 5 MULTICOLOR – WORLDWIDE



THE ROCK

Throughout the years, this machine has earned its name. With 500 printing units installed by 2023 in the general packaging segment, it has been consistently reliable, almost trouble-free. This achievement validates our commitment: we aimed for "solid," and indeed, we have "The Rock."

ON POINT

Semi-automatic plate changes are facilitated by pneumatic clamping devices. This design ensures very accurate register values of less than 0.05 mm over the entire sheet. The extremely robust gripper shaft has a diameter of 35 mm and an additional axial bearing. The compact gripper opening cam is also up to the task due to its strengthened design.

The MR 130 has been designed to have the highest uptime from the very beginning. For example, the grippers were designed as half-shell grippers. This gripper not only always has the perfect fit on the gripper shaft, it can also be changed very quickly in an emergency.





This stacker, renowned for its overhead stacking, boasts a proven track record spanning years. The technique used is based on the Bernoulli principle.

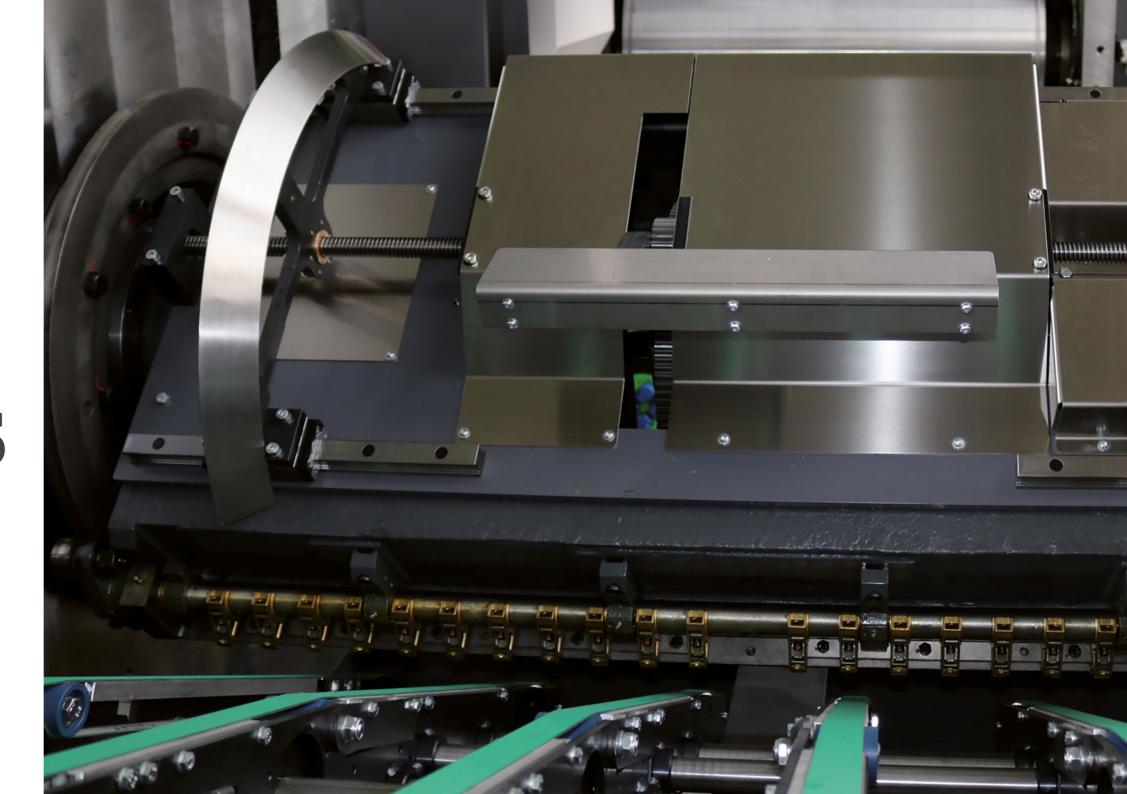
The control of the entire system is Our "Over the Rock" system ofbased on the latest Beckhoff technology. The control system will remain as an open system. This means that a component can be replaced very easily should it ever fail. You will not find cost-intensive assemblies and locked systems at Karlsteiner Druckmaschinen.

fers support through data goggles if there is a failure. All motorcontrolled functions also have a manual adjustment mechanism.

SYMBIOSIS

The transfer of the sheet from the press to the belt delivery is ensured by a transfer module. The machine degrees and speeds are precisely coordinated with the TEC delivery. Two companies, one idea:

100% QUALITY, 100% SERVICE



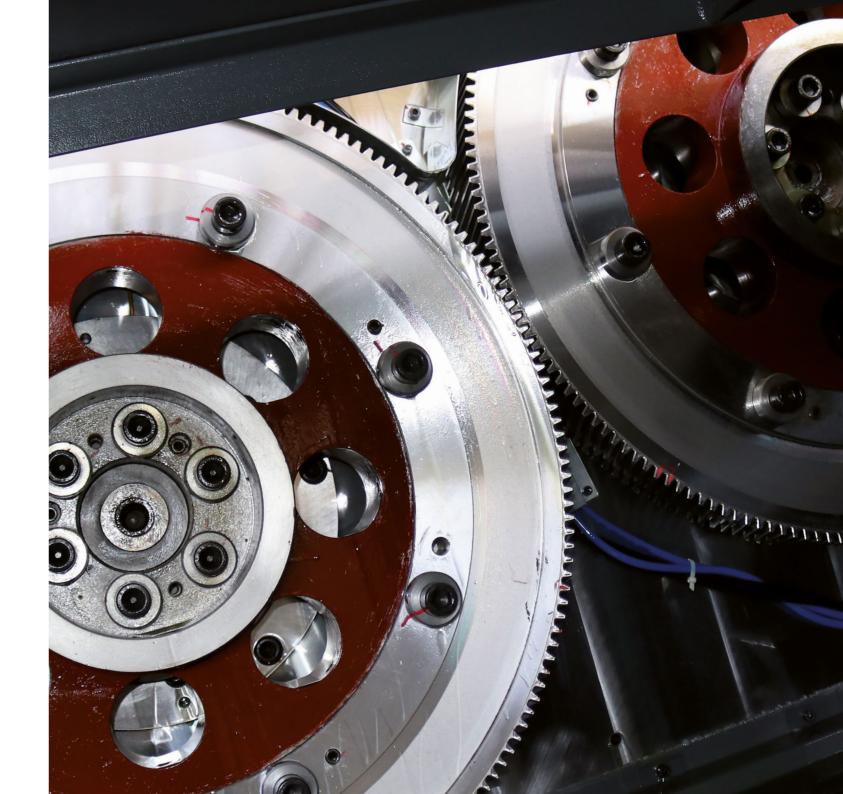


CONTROL CENTER

The state-of-the-art control center, based on Windows with preset functions, offers unparalleled convenience. The 60-inch wall screen makes the design visually perfect and provides an ergonomic overview. The remote adjustment of the lateral, circumferential, and diagonal registers is just one of its many features. The MR 130 has all the necessary automatic functions. Whether you are using roller washing or the blanket washing system, the entire system is operated from the control console.

MORE PRECISE THAN A SWISS WATCH

The gears of the transfer and impression cylinders are precision-manufactured to tolerances of less than 10 μm , leaving no room for error. Such meticulous precision is needed for achieving the required Fogra standard in print quality. Each machine undergoes testing in the factory, where printed samples are verified against in-house test forms to ensure compliance.





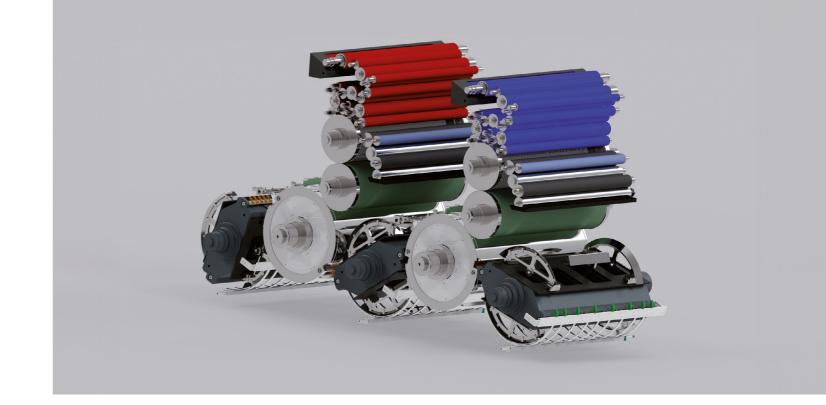
MR 130

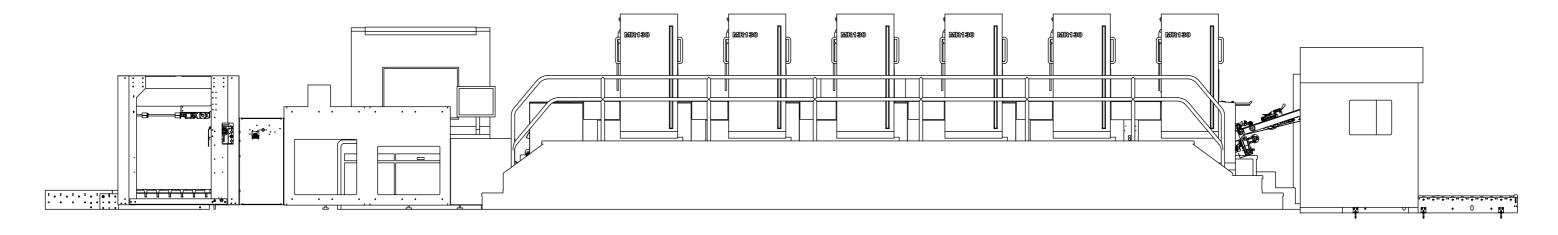
Introducing the world's only format 5 multicolor metal decorating machine! With a production speed of 7,000 sheets per hour, the machine delivers the highest print quality on material thicknesses of up to 0.38 mm. Scroll or aluminum can also be processed on the machine.

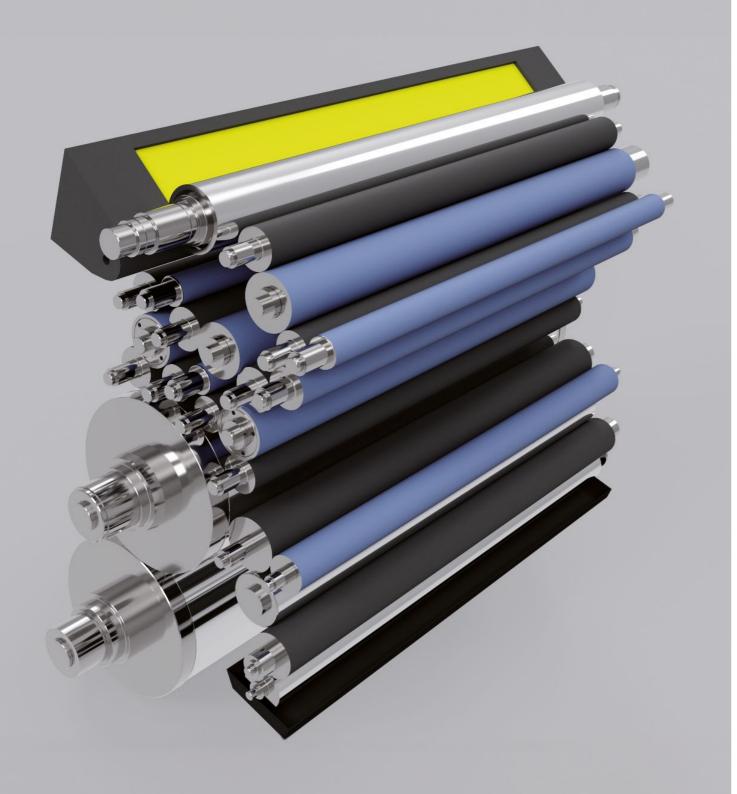
WITH ITS UNRIVALLED PRICE, THE MACHINE IS A TRUE R.O.I. CHAMPION!

BASIC DESIGN

The system features double-sized impression cylinders and transfer systems, along with an optimized seven o'clock position. This is complemented by a reinforced frame and cylinder shaft ends, guaranteeing a stable structure. Additionally, the cylinders are fitted with high-precision roller bearings that were made in Germany. These bearings, which have zero play, ensure a robust counter pressure. This combination of features results in a highly efficient and reliable system.







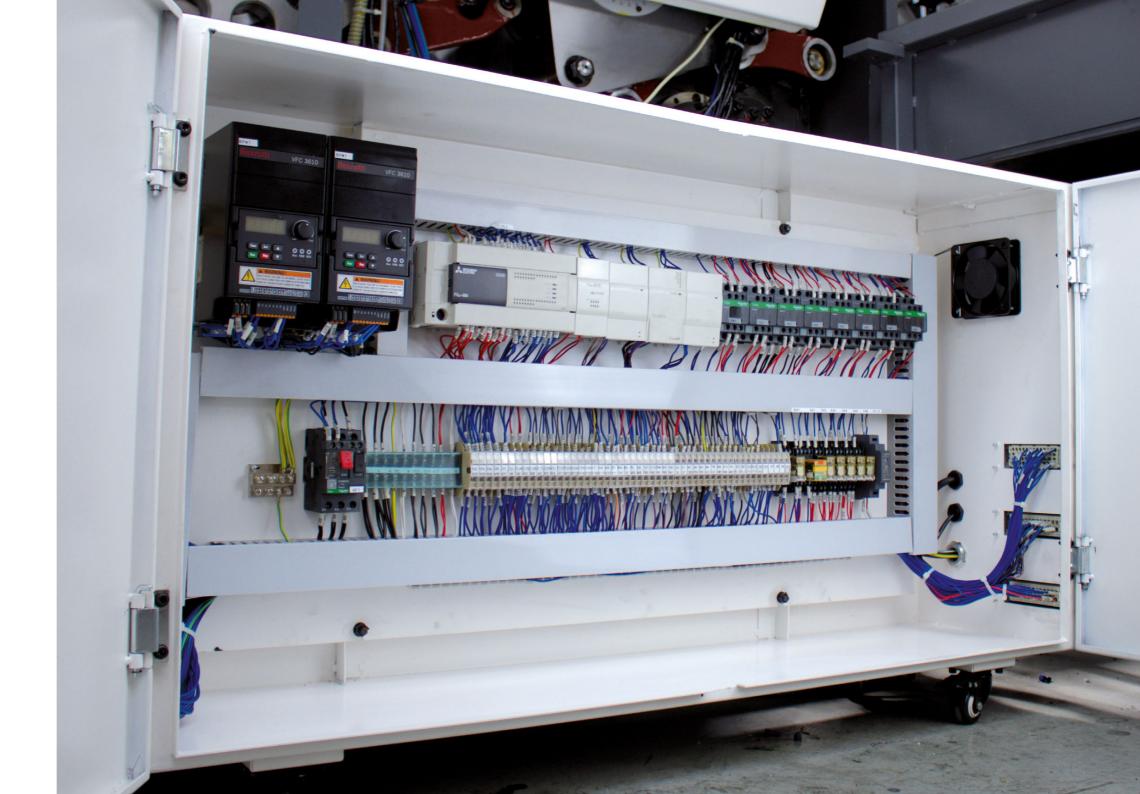
BASIC IDEA

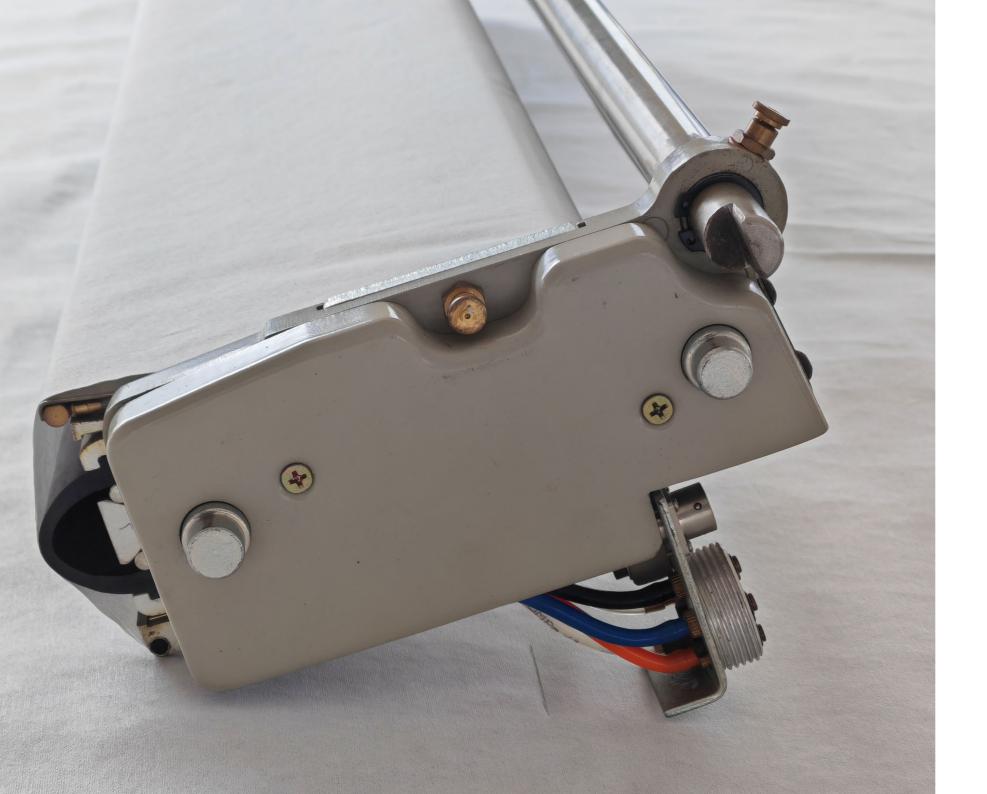
Our philosophy is grounded on the belief that the best solution is often the simplest one. In line with this guiding principle, we have developed a machine that uncompromisingly adheres to this. It is easy to operate, reliable, and provides all the necessary functions for daily use, without distracting with unnecessary extras. Through modern electrical solutions such as decentralized servo drives with integrated position detection, we can take shortcuts where previously a large detour was necessary."

TECHNICAL DATA	
Max. Sheet Size	1,200×1,040 mm
Min. Sheet Size	720×550 mm
Max. Printing Size	1,200×1,000 mm
Sheet Thickness	0.38 mm
Blanket Size	1,310×1,200×1.95 mm
Plate Size	1,095×1,220×0.3 mm
Max. Speed	7,000 s/h
Printing Edge	4.5 mm
Gripper margin	3.0 - 3.2 mm
Main Motor Power: (4-/5-/6-Color Machine)	45 / 55 / 75 KW
Total Power: (4-/5-/6-Color Machine)	93 / 106 / 128 KW
Feeder with Single Drive:	yes

KEEP IT SIMPLE

The machine control and electronics have been reduced to the simplest possible level. A fully interchangeable control cabinet is located on the side of the machine for each printing unit. Troubleshooting and repair instructions can easily be carried out remotely. No secrets, no complicated hidden features, nearly open source.





KEEP IT CLEAN

Equipped with a modern washing system, you can keep the printing process at the highest quality in the most reliable way. Simple removal of the washing device ensures quick changes of cleaning cloths. The cloth washing device is included in the standard equipment. The impression cylinder washing system can be configured as an optional extra.



UV IN METAL DECORATING

It is important to maximise the production possibilities that new automation provides. IST UV solutions are designed with optimum reliability as a priority and this is achieved by incorporating outstanding heat management capability along with simple operation allied to quality design and manufacture which has become the hallmark of IST products.



UV UNITS

IST UV systems are individually designed for each application so that each customer's unique requirements can be taken care of from the beginning. Each IST system is fully tested in our workshop prior to dispatch and customers are welcome to view this part of the production process.

All components of the UV unit are easily accessible so cleaning and changing of lamps and reflectors can be carried out with the minimum of downtime by line operatives.



SET-STACK UNITS

Single lamp housings with quick release couplings ensure individual control, easy handling and production flexibility plus retro-fittable upgrade possibilities up to 5 lamps.

The plates are conveyed through the system via an adjustable vacuum conveyor belt. The speed of the conveyor belts can be varied to match the speed of the press, enabling high productivity and flexibility.

YOUR BENEFITS WITH UV CURING SYSTEMS FROM IST METZ

- Interdeck UV curing
- Set stack with vacuum conveyor
- Undercure drying units
- installations in drying towers
- high output despite large distance
- flexible reflector system
- all lamp doping are possible
- in-house production of all components

- Remote possible
- flexible reflector system URS and URS-A inlay
- FLC (Fast Lamp Change)
- The ELC range of electronic power supply units have been developed specifically to operate UV lamps
- IPS real-time detection
- reduce service life
- energy saving

THE LEADING EXPERT FOR UV, LED UV, W/IR AND EXCIMER



UV SYSTEMS

IN-HOUSE UV LAMP MANUFACTURING

"The reliability of a UV unit depends considerably on the quality of the installed UV lamps." Developed for diverse applications with adapted emission spectra, the UV lamps are manufactured for the industrial application of UV units for the efficient curing of UV inks, varnishes and adhesives on substrates including wood, paper, plastic, metal and glass.

Available with all dopings, lengths of 100 to 2300 mm and outputs of 40 W/cm to 300 W/cm depending upon length.



FLC

FAST LAMP CHANGE

The cordless FLC® UV lamp system enables lamps to be changed quickly and easily. It is possible to remove the UV lamp from the lamp unit with just one hand movement and a lamp replacement just takes a few seconds, thus saving users several hours of machine availability per year.



ELC

ELECTRONIC POWER SUPPLY UNITS

Linked to the printing speed, the ELC® controller can continuously adjust the lamp output between around 30 and 100%. In standby mode, the power is automatically reduced to a minimum.



LED UV SYSTEMS

FOR A WHOLE HOST OF APPLICATION AREAS

This technology is used to cure inks, coatings, silicones and adhesives with UV light, offering significant potential for the metal industry.

In addition to conventional UV systems, IST METZ product range also includes a selection of LED UV curing systems for a variety of different requirements. What makes IST METZ stand out is the delivery and integration of complete systems that are ready for operation.



URS AND URS-A

COLD MIRROR REFLECTOR TECHNOLOGY

IST Metz has developed a selection of reflector patterns to meet the needs of various processes and customer needs: standard and URS®-A reflectors.

The standard reflector is for excellent reflective properties in the short-wave UVC range. The URS®-A reflector promises high reflectance over the entire UV spectrum.







LithoFlash Inline® Inline Measurement System for CMYK and Potcolor.

LithoFlash® Inline is a crucial tool for quality assurance in the pressroom. Equipped with all necessary features for measuring and controlling spot colors and special inks, LithoFlash® Inline provides immediate visual assessment of quality through displayed measured values. Depending on the configuration, control recommendations can be directly transmitted to the printing press. Standardization or in-house standards present no challenges due to the available target value functions for density or dot gain. Quality protocols with customizable contents assist in documenting print quality throughout the production process, facilitating improved communication with clients.

LithoScan Professional®: Spectral + Density 2D online External Measurement System for Lab and Density Values

Litho Scan Professional: Spectral 2D Online Measurement System for Lab and Density Values

This spectral 2D inline measurement system for lab and density values boasts high accuracy, optimal correction values, and user-friendly operation as its key features. The latest generation of the system comes with a high-speed measurement head for rapid lab scanning and new long-lasting LED illumination with M1 option as standard.

Advantages

- Contactless measurement on control strips or images
- Various strategies for optimal color and density control
- Standardization according to PSO or in-house standards
- Customizable quality protocols
- · Reduction in quality costs
- Low service or maintenance costs







Karlsteiner Druckmaschinen GmbH & Co. KG | Frankenstr. 25 | D-63791 Karlstein am Main Phone: +49 (0) 6188 / 99 29 30 | Email: info@karlsteiner-druckmaschinen.de

KARLSTEINER-DRUCKMASCHINEN.DE