

ROXCEL®
Printtec

large format printing press

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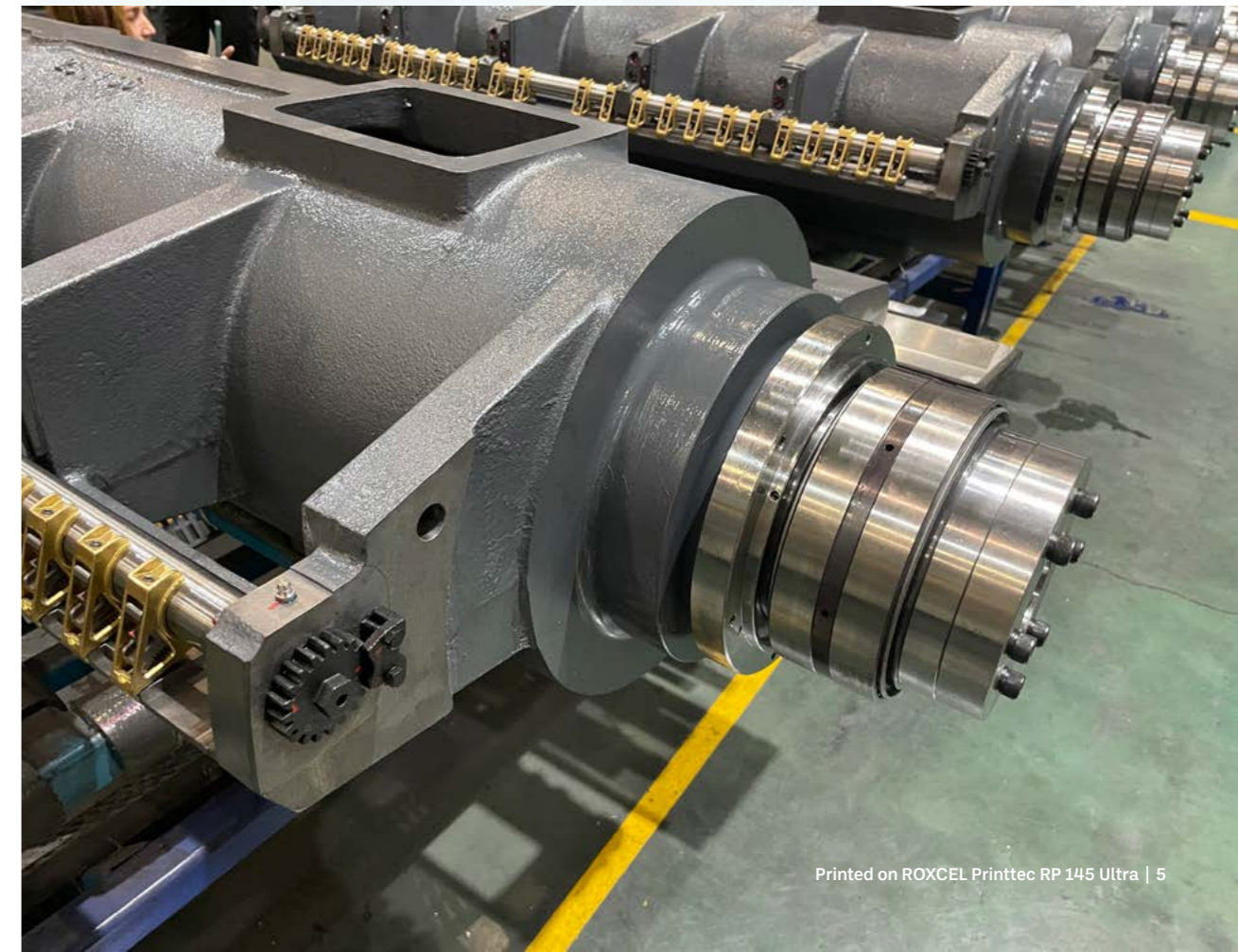
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Preface

Welcome to the Printtec product catalog – your source for innovative packaging printing solutions of the highest quality! As a globally operating company, we take pride in not only offering top-notch machines but also providing comprehensive services that go beyond mere sales.

At Printtec, everything revolves around the needs of our customers. Our global network enables us to meet your requirements worldwide. We understand that the success of your business depends on efficient and reliable packaging solutions. Therefore, we go beyond the traditional sales process to ensure that you receive not only the best machines but also comprehensive support throughout the entire lifecycle of your investment.

From meticulous project planning to precise installation and regular servicing – customer satisfaction is paramount at Printtec. Our dedicated team of professionals works hand in hand with you to develop tailor-made solutions perfectly aligned with your individual requirements.



Half-shell grippers are always in contact with the shaft. The printing results are inevitably stable and the gripper can be changed using a screw. The 35 mm shaft was chosen to be very stable and demonstrates the basic idea. Robust design!

History of development of ROXCEL Printtec presses

- 1947 Establishment of the former firm
- 1968 Development and production of printing presses in quarto format
- 1992 Development and production of Folio printing presses
- 1993 Development and production of high speed folio printing presses
- 2003 Development and production of Ginathrone® 1142 large format single color sheet-fed offset printing press
- 2005 Development and production of Ginathrone® 2142 large format double color sheet-fed offset printing press
- 2006 Start upholding the banner of Building the Leading Brand for National Large Format Printing Presses Development and production of Ginathrone® 4142 large format 4 color sheet-fed offset printing press, and Mathrone® 2103 large folio double color sheet-fed offset printing press
- 2007 Development and production of Ginathrone® 2162 super large format double color sheet-fed offset printing press, and Ginathrone® 5142D large format 5 color sheet-fed offset printing press, and Mathrone® 4103 large folio 4 color sheet-fed offset printing press
- 2008 Development and production of Mathrone® 1180 super large folio 4-color,5-color sheet-fed offset printing press
- 2009 Development and production of Mathrone® 6118 super large folio 6-color sheet-fed offset printing press
- 2010 Development and production of Ginathrone® 4142G large format 4 color sheet-fed offset printing press
- 2011 Development and production of Ginathrone® 1300 series 4-color, 5-color sheet-fed offset printing press
- 2012 Development and production of Ginathrone® K series large format multi-color sheet-fed offset printing press and Sginathrone® multicolor offset printing press
- 2013 Development and production of Ginathrone® and Mathrone® multicolor offset printing press+coating unit, for example,5128+coating large format 5-color sheet-fed offset printing press+
- 2014 Introduction of production concept from German printing industry , SOS, Sorgfalt, Ordnung, Sauberkeit. Development of 145 commercial modal printing press.
- 2016 RP145 Large format multi-color offset printing press developed by Sino-German cooperation comes out.



Manufacturing

Main products of the company

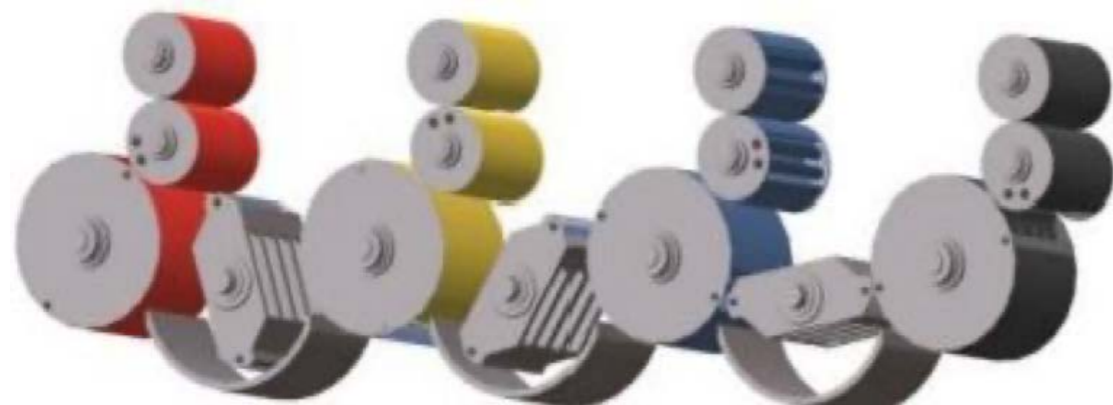
130 145 165 High end Business Series

Large format, high efficiency,exquisite printing

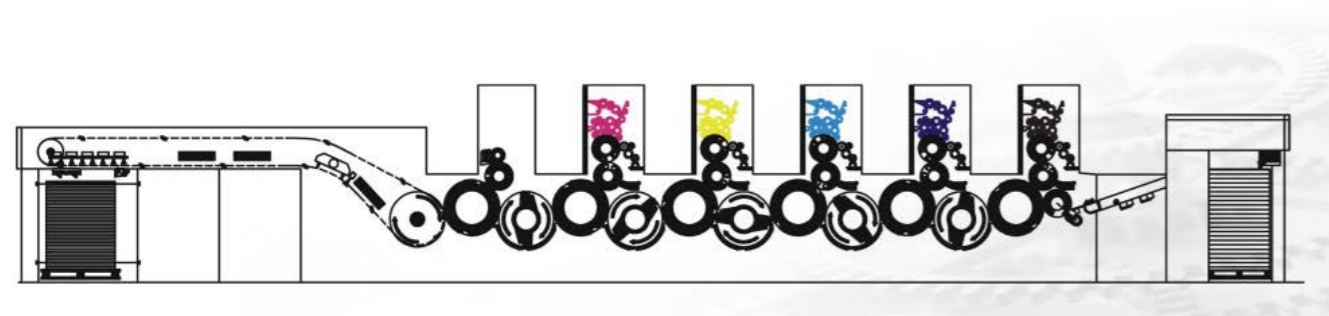
- Pressure preset
- Paper preset
- Semi-automatic plate mounting
- Automatic blanket washing device
- Automatic impresling washing device
- Packaging raised 650 mm
- Nonstop manual
- Trash Varnish Group with Chamberblade and Auilox
- TRESU
- UV Systems (LED UV / Traditional UV) made by IST Metz
- Lithec Scanner made in Germany
- Litho Flash inline made in Germany
- Doyle Suction Infeed



Technical Structure Description



- Double-size impression cylinders and transfer system, optimized seven o'clock arrangement
- Strengthened frame and shaft end structure, with a more stable structure
- The double-size cylinders with high-precision, without clearance special rolling bearings to ensure printing pressure



- Our company's patented strengthened transferter cast iron cylinder avoids smearing
- The impression cylinders are made of wear-resistant alloy cast iron and Triplex chromed on the surface (Option Ultra)
- High frequency hardened gears of cylinders, cam surfaces, inking fountain rollers, etc., durable and durable



Picture without Guards

According to the optimization design of fluid mechanics, large size ink rollers and dampening rollers are used to rearrange the ink flow route, which can quickly adjust the ink amount and dampening volume, and the ink dosage is fast, sufficient, and evenly distributed, greatly reducing paper waste.

Ultra-TEC CONSOLE

- graphic display panel
- flat storage drawer underneath the sheet inspection desk

OPERATING AND CONTROL

The following control console menus and programs can be selected by the printer:

- menu “job”
- menu “Ultra-Color”
- menu “register”
- menu “printing unit configuration”
- menu “sheet guiding configuration”
- menu “auxiliaries’ configuration”
- press program “job change”
- press program “ production run”
- press program “washing”
- press program “sheet travel”
- press program “press run”

The inking unit data are transferred to the control console via cip3/USB stick (or in case of special equipment online). The setting of the ink profile is made in the Hi-COLOR-menu via the Hi-COLOR-keyboard which is equipped with light LED-lines for each ink zone. The register adjustment can be done at the monitor by pictorial representation of a register mark.

Operating status of the press as well as possible malfunctions during the functional course appear in plain language on the screen as well as in a plain language display at the delivery and infeed operating panel.



TOUCH PANEL

- Adjustment of electronic control data through touch screen operation , quick and flexible , greatly saving time
- The large monitor shows the working status intuitively and clearly with memory of job storage and ink color information,
- The pre-ink metering-function can be added with CTP-interface to improve work efficiency

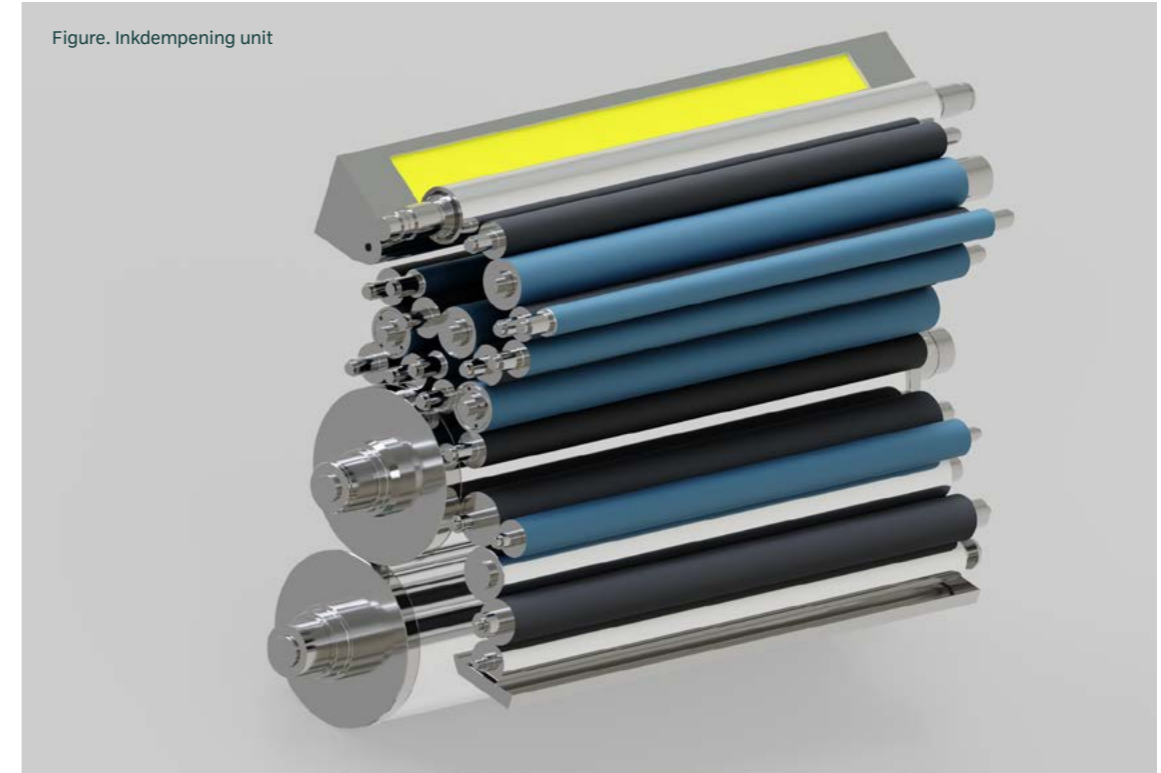


Figure. Ink dampening unit

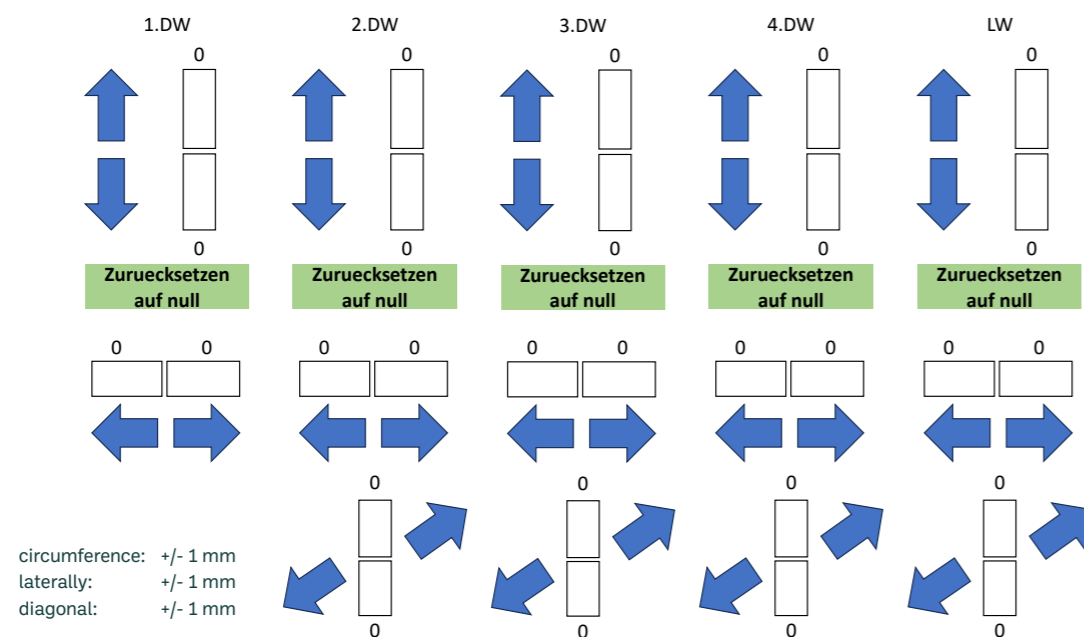


Figure. Remote Register Control



Figure. Ink dusts with Foil

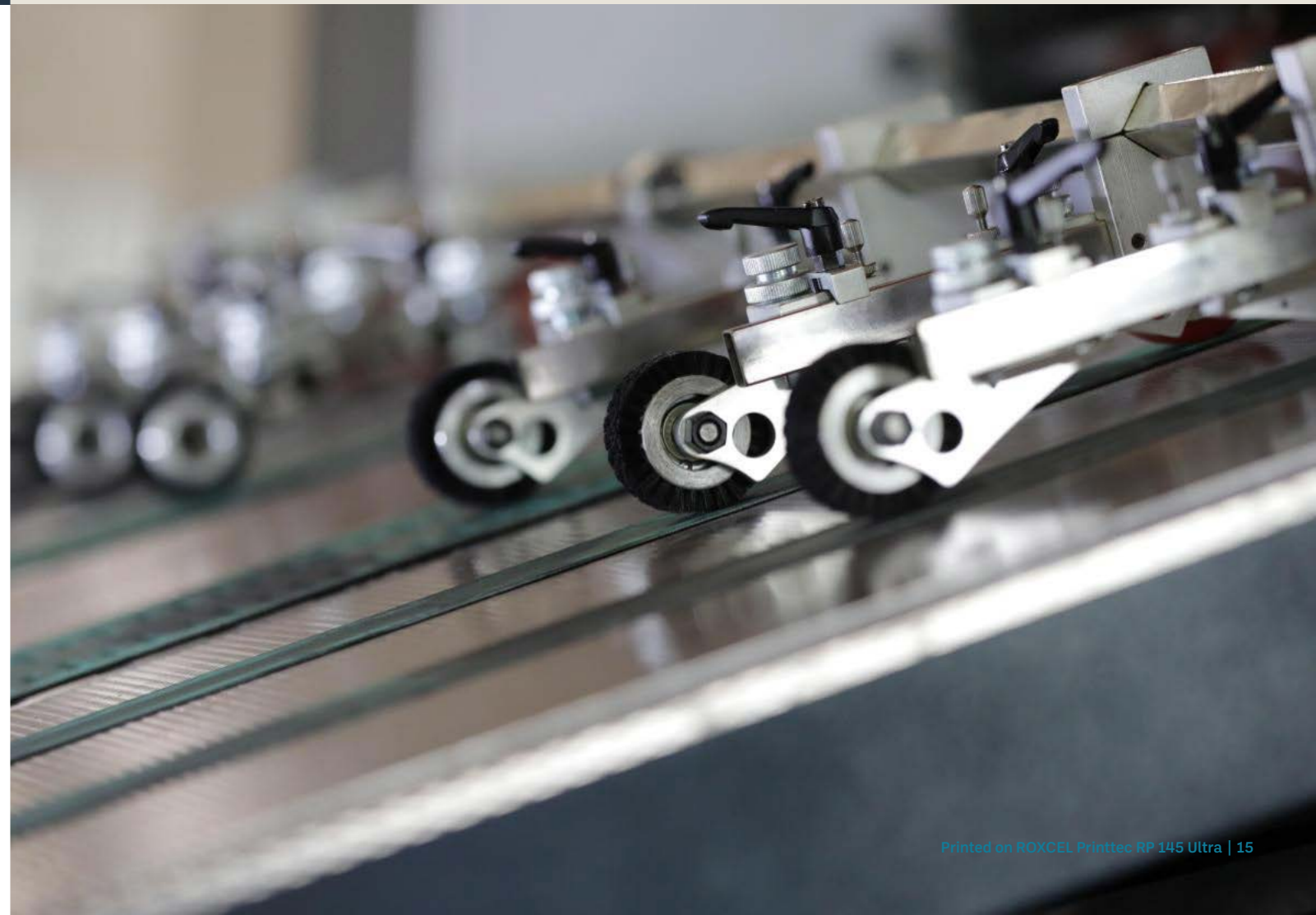


INFEEED SYSTEM

- Optimized high-speed infeed system with front lays.
- German original optical control element for crooked sheet, too late arrived sheet. Ultrasonic Double-sheet detector directly in front of the infeed.
- Automatic adjustment of sheet size (Pre-set function) through pneumatic side guides to improve efficiency.

SHEET FEEDER

- High speed sheet feeder with variable speed feeding, and the speed of sheet reaching at the front lays can be adjusted
- Suction feed table and sheet hold-down rollers used in parallel, making the sheet run extremely smooth
- Equipped with size setting function, the sheet size can be automatically adjusted to improve efficiency by job-change.



- Control of plate clamping bars via imported pneumatic components, semi-automatic plate change, stable and fast
- Remote adjustment of lateral, circumferential and diagonal register at the control panel.



- With Setting function of printing pressure, the sheet thickness can be adjusted quickly.
- Equipped with automatic washing system for ink rollers and blanket / impression
- Automatic lubrication
- Alcohol dampening cooling system with automatic temperature control , automatic alcohol ratio, and water return under negative pressure





Picture without footstep

MORE PRECISE THAN A SWISS WATCH



Very precise – exact gear transmission to ensure high-quality printing products

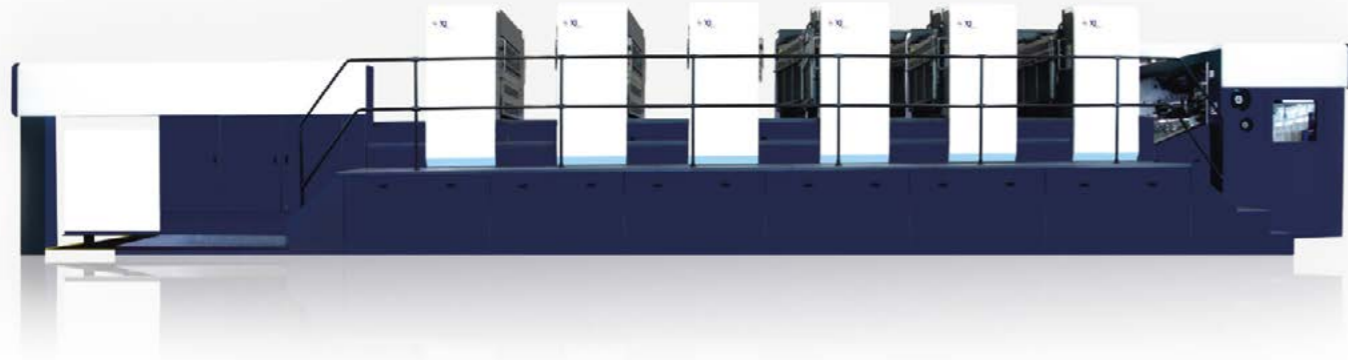
DELIVERY

- Optimized and closed guide rails to ensure smooth operation of the delivery gripper carriage with low noise
- The combination of suction air of suction rollers and ventilators ensure the stable falling of the sheets by high-speed
- Gripper opening with motorized adjustment. The suction roller will be directly driven by variable frequency motor
- Delivery has the size-setting function and the sheet size can be adjusted automatically
- Pile Height 1500 mm optional 2170 mm
- Main Cancel with 60 inch wallscreen



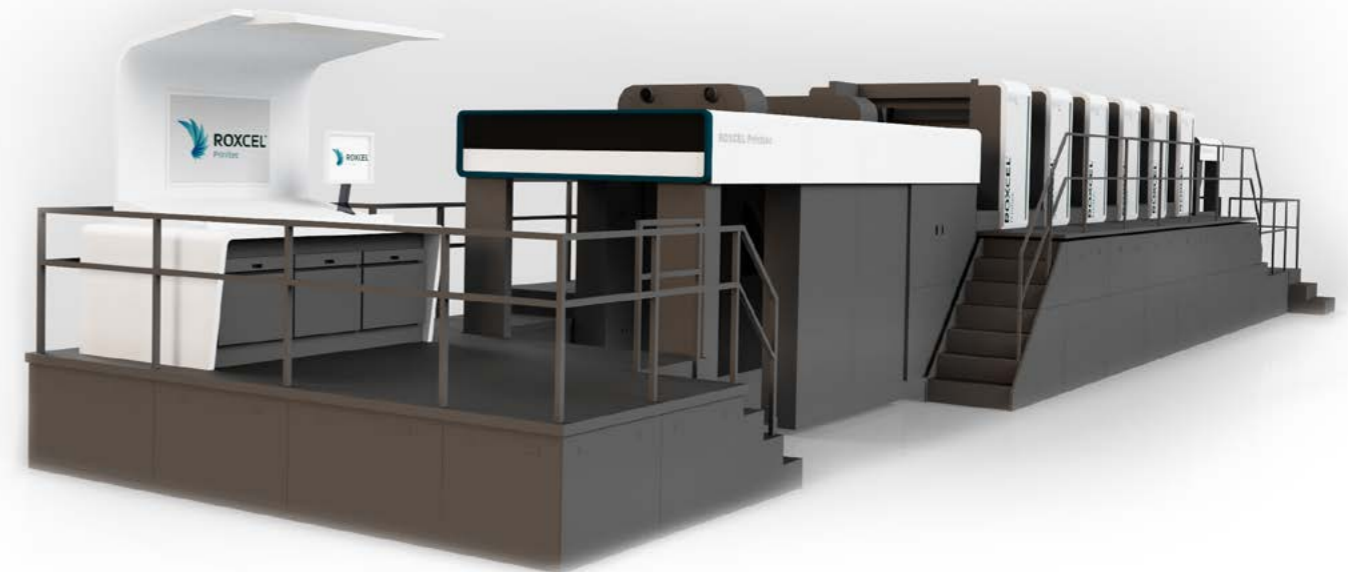
Made in Germany. High-precision special bearings for printing machines for smooth and reliable running.

The best printing machine fulfills your wishes!



- Offset printing, coating and drying complement each other, meeting the requirements for surface inline processing
- The combination of chamber blade system and screen roller can achieve uniform vanishing, whether it is mat or glossy, full surface or partial, ensuring exquisite coating effect
- Drying system in the extended delivery with IR and hot air to effectively improve drying efficiency
- The drying system can be pulled out or pushed in from the operating side without manual wiring or connecting pipes
- No tools to complete the exchange of lamp tubes
- The drying device can be installed at the end of the machine or between printing units
- Optional LED UV or traditional UV System available

- All machines can be equipped with Anilox coating unit
- System Tresu with Chamber Blade and Anilox Roller
- With coating unit it can realize unit printing, inline dispersion- or UV coating (full or partial), reverse varnishing, metallic ink and pearl printing as well as the completion pf many post-processes in one. Meet the requirement of Packaging at various levels, greatly enhance the competitiveness of printing and packaging enterprises
- Drying Systems made by IST-Metz Germany



STANDARD EQUIPMENT

ROXCEL-Printtec Large-Size

	RP130	RP145	RP162	RP165
Max. Sheet Size	1300×1040 mm	1450×1040 mm	1620×1040 mm	1650×1210 mm
Min. Sheet Size	720×550 mm	720×550 mm	920×550 mm	920×600 mm
Max. Printing Size	1300×1010 mm	1420×1010mm	1620×1010 mm	1620×1200 mm
Sheet Thickness	0.1-0.8 mm	0.1-0.8 mm	0.1-0.8 mm	0.1-0.6 mm
Blanket Size	1310×1200×1.95 mm	1430×1200×1.95 mm	1630×1200×1.95 mm	1370×1630×1.95 mm
Plate Size	1310×1107×0.3 mm	1430×1107×0.3 mm	1630×1107×0.3 mm	1316×1630×0.3 mm
Max. Speed	12000 s/h	12000 s/h	10000 s/h	10000 s/h
Paper Pile Height	1500 mm / 2170 mm	1500 mm / 2170 mm	1500 mm / 2170 mm	1700 mm
Main Motor Power (four/five/six color)	45 / 55 / 75 KW	45 / 55 / 75 KW	55 / 55 / 75 KW	75 KW
Total Power	93 / 106 / 128 KW	93 / 106 / 128 KW	103 / 106 / 128 KW	126 KW
Total Weight (four/five/six color)	70803 / 83503 / 98003 KG	72003 / 85003 / 98503 KG	74003 / 88003 / 102003 KG	109000 KG
Overall Dimension LWH. (four/five/six color)	12840/14400/ 16200×4650×2840 mm	12840/14400/ 16200×4770×2840 mm	12840/14590/ 18300×4970×2840 mm	17320×4970×3330 mm



DRIVE

- continuously adjustable AC main drive
- electrical braking with Braking resistor
- digital drive
- motor current display possible

SHEET FEEDER

remote-controllable high-performance stream feeder

- feeder head for exact sheet transport with 4 separating and 6 forwarding suckers
- suction feed table for paper and board made from stainless steel structural sheet metal; sucker air adjustable; table lifting supported by means of gas spring
- pile front edge sensor with feeder head height adjustment, switchable to pile rear edge sensor
- touch-free pile centering device (balancing out +/- 25mm)
- central size setting for feeder, infeed, suction feed table and delivery at the Ultra-Tec-console
- motorized feeder head height adjustment (automatic feeder head height adjustment in case of pile front edge sensing)
- cut sheet correction during press run (remote controlled via infeed operating panel)
- sheet slow-down with speed control for optimization of the sheet arrival at the head stops (can be switched on/off at the infeed operating panel)
- lateral blowers at pile front edge
- universal suckers (also for light-weight paper) from 80g to 500g
- pile height above floor 1500 mm (Note: 2170mm in Case of raised Machines)
- lowering frame for pile supporting plate
- light barrier as foot protection
- foreign particles excluder (magnetic and switching)
- continuous pile lift with automatic lift adjustment (paper/cardboard)

INFEED

Swing arm gripper system operating under the sheet:

- pneumatic side guides (operating side and drive side)
- ultrasonic double-sheet detector directly in front of the infeed
- optical side guide control
- optical control at the front lays
- optical control of sheet arrival
- electropneumatic overshoot protection

PRINTING UNIT

- seven o'clock arrangement of the cylinders which ensures that the maximum sheet format is fully printed before transfer.
- double-size impression cylinders and transfer systems
- blanket and plate cylinders with bearers
- plate cylinders for RP-plate size
- surface treatment for all cylinders (plate and blanket cylinders are stainless steel -covered; impression cylinder Triplex chromium-plated)
- automatic washing system for blanket cyl. and plate cylinder and Rollers (program selection at the Ultra-Tec-console)
- transfer systems with gripper bar-universal distance (adjustment not necessary)
- half shells gripper with coated Tips and coated pads in the impression cylinder/
- gripper with one screw individually exchangeable
- cam-controlled gripper closure of the impression cylinders and transfer systems
- remote adjustment of pressure blanket cylinder / impression cylinder (at the Ultra-Tec-console)
- sheet guiding underneath the transfer systems by means of air blast / sucker air boxes and comb-shaped sucker before transfer to the next impression cylinder (air controllable at Ultra-Tec-console)
- air blast ("smoothing blowing") for paper before the printing zone above impression cylinders (air setting at the Ultra Tec-console)
- semi-automatic plate change
- plate clamping bar register pin, compatible to GRAPHO-METRONIC and BACHER
- split rear plate clamping bars, consisting of 3 parts
- plate cylinder with 0.7 mm packing
- blanket cylinder with 3.25 mm packing
- pre-railed blankets
- remote adjustment of lateral (+/- 1mm), circumferential (+/- 1mm) and diagonal [Cocking](+/- 0.13 mm) register at the Ultra Tec-console
- pneumatically opening plate cylinder guard



INKING UNIT

- ink metering via Ultra-Color ink fountain
- rider roller on the 4th application roller
- intermediate roller between the 2nd and 3rd application rollers
- oscillation timing ("360° -adjustment") continuously remote-controllable at the Ultra Tec-console
- ink feed timing for minimum metering (adjustable at the Ultra Tec-console in steps 100 %, 50 %, 25 %)
- automatic roller washing system (program selection at the Ultra Tec-console)
- manual hickey picker system in front of the dampening unit
- ink distribution device manually adjustable at the printing unit (0 ... 35 mm)
- ink duct roller speed compensation dependent on press speed (automatic, function can be set at the Ultra-Tec-console)
- oscillating cylinders Rilsan-covered
- touch-free metering levers in the ink fountain, carbide tipped, free from wear
- ink duct roller free from wear
- roller covering BOETTCHER, SAUER or WESTLAND

DAMPENING UNIT

- alcohol dampening unit
- application roller 22° Shore, pan roller 22° Shore, transfer roller chromium-plated
- automatic separation of pan roller, transfer and damping form rollers for separation of the dampening unit (stand-by position)
- speed adjustment at Ultra-Tec-console or at the printing unit
- dampening duct roller speed compensation dependent on press speed (automatic, function can be set at Ultra-Tec-console)
- automatic "pre-dampening" program (after press standstill and turned-off dampening rollers)
- "pre-dampening with operating speed" (manually at the printing unit before print start)
- "over-dampening" (manually at the delivery)
- damping solution circulation and cooling unit Basic-Liner with alcohol metering BC713 (operation at the appliance)
- level sensor above the damping solution pan
- damping solution pan can be removed without any tools



DELIVERY

- high-pile delivery with operating panel for various press functions
- exact sheet guiding thanks to large radius of curvature and air cushions
- sheet decurler
- fan frame above sheet pile
- blow-bar frame above the pile
- vacuum slow-down speed adjustable with suction rings made from steel
- remote size setting delivery (together with feeder and infeed)
- capacitive pile height sensor
- adjustable side joggers
- jogging front pile stops
- phase regulation of the side joggers
- pile height above floor 1500 mm (Note: 2170mm on elevated Machines)
- powder sprayer High Performance
- gripper opening compensated dependent on press speed (compensation adjustable)
- automatic lubrication of chains and chain rails
- control key button and display at the delivery for all important functions (production start / end, overdamping, impression ON/OFF, sheet counter, tachometer, pile movement, air control)

PRESS, AIR SUPPLY, GALLERY

- blowers and compressors for feeder, delivery, sheet guiding (installed in Special cabinet with Noise cancellation - drive side)
- compressor incl. cold air dryer for setting pneumatics
- gallery with operating platform in front of the delivery, installation of Ultra-Tec- console opposite of the delivery and pile exit towards the drive side
- oil pans

SAFETY EQUIPMENT

- The safety equipment of the press complies with the currently applicable European safety standards.

MISCELLANEOUS

- starter kit with consumables, set of lubricants for the first year of production (without machine oil)
- 1 set of tools and setting gauges
- 1 proof sheet
- 1 set of blankets (mounted on cylinder)
- 1 set of self-adhesive foils (mounted on cylinder)
Please Note: all of our Consumables have been tested on the RP Ultra Machines.
- voltage 380 ... 420 V / frequency 50 Hz

COATING TOWER (System Tresu Danmark)

- chamber blade metering system at the Delivery
- varnish supply and cleaning system for water-based varnish
- 1 anilox roller
- anilox roller exchange fixture
- Manuel Champignons Rails
- remote adjustment of lateral, diagonal and circumferential register

CONTENT OF THE MENUS AND PRESS PROGRAMS FOR PRESS CONTROL

- The menu "job" for retrieval, description and filing of a job (job no., title, comment, customer, text information, deadlines, ...)
- The menu "Ultra-Color" for setting the ink and dampening solution metering parameters (single, groupwise and overall adjustment of the ink zones, ink zone ON/OFF, ink feed timing for minimum metering, ink feed roller blocking, speeds of ink and dampening duct rollers, copying, changing, mirroring and shifting of the ink profile, 360°-adjustment of the lateral distribution)
- The menu "register" for setting the register of the printing plates during make-ready (lateral, circumferential and diagonal register)
- The menu "printing unit configuration" to determine which systems and functional groups of each printing unit are to be activated for the printing process (printing with ink and dampening unit, waterless offset, damping only, varnishing, operating modes for varnishing, ..)

- The menu “sheet guiding configuration” for setting of all parameters considerably influencing the sheet transport through the press (sheet size, head stop height, printing pressure, guiding device).
- The menu “auxiliaries’ configuration” for setting of their operating parameters, provided these devices are existing and suitable for control console (individual parameter setting of washing systems, dryers, powder sprayer, damping solution conditioning system, ...)
- The press program “job change”: all settings prepared for a new job are transferred from the background-memory to the press (format, ink profile, setting of the configuration parameters for printing units, sheet guiding and auxiliaries);
- The press program “production run”: all switching and monitoring functions necessary for the production run are carried out exactly in the technologically correct order. This is based on the configurations for printing units, sheet travel and auxiliaries preset in the control console menus (see above)
- The press program “washing” comprises automatic washing of plate, blanket Cyl. and/or rollers in one or several printing units; based on the presettings and washing programs selected in special menus
- The press program “sheet travel” for the setting of all automatic sheet travel functions and their parameter settings without connection of inking/dampening/varnishing unit
- The press program “press run” without substrate, ink and damping solution for checking all automatic press run functions after commissioning, service and maintenance works.

Large format printing machine optional configuration

- Raised up 650mm for 2150mm Pile
- LED UV Drying System made in Germany IST-Metz
- Impression Washdevice
- Inline Messurement from Lithec made in Germany
- 2D Scanner for density from Lithec, made in Germany



Higher, faster, further?

That wasn't our goal! From the beginning, we faced the current market situation and listened to our customers.

In a world where complexity is often mistaken for quality, we're setting a new standard with a device that focuses on the essentials.

We believe that the most effective solution is not necessarily the most complex one. Our machine is proof of this belief — it is efficient, reliable, easy to use and offers the necessary features for daily use without distracting with unnecessary extras. If you carry this philosophy to its conclusion, our machine cannot include encrypted computers and electronic components that are inaccessible. Likewise, for the common practice of pushing for the purchase of new modules through product announcements.



With our service, you can count on us!

Our factory technicians are available worldwide. Alongside our partner R&W Printing Machinery Service, we offer comprehensive service programs and boast extremely quick response times. For your printing system, we provide you with peace of mind from day one.

- **Ultra** Pit Stop, a tailored service program for your new printing system
- **Ultra** Quality Test, an annual print test with SID analysis
- **Ultra** Glasses, instant assistance via smart glasses
- **Ultra** Training, comprehensive training for your printing personnel by our instructors

Our **Ultra** Glasses align with our philosophy!

We aim to keep your printing system as profitable as possible, hence, alongside a range of spare parts, every RP machine comes with **Ultra** Glasses included. With these smart glasses, we can address minor issues from Germany immediately and determine the need for replacement parts even in the case of major damages. This not only saves valuable time but also expensive service interventions.

Only the finest ingredients for your RP offset printing machine. – THE ROYALS –



Offset printing must be seen as a process, and therefore, selected products are necessary to ensure stable production. We have taken the time to test, adapt, and extensively determine the best matches for our Crown series on our printing materials. For our users, it's a guarantee of uninterrupted production:

Blanket

- Crown-Dot Series
- Crown-Solid Series

Varnish Plates

- Crown-Varnish Series

Process-free Plates 0.3 mm

Crown Ink Series

- Crown Gold – Food packaging Series
- Crown Silver – Pantone Series
- Crown Bronze – 4C Color Series





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.

The product range comprises UV lamps with lengths of 100 to 2300 mm and with outputs of 40 W/cm to 300 W/cm depending upon length. For full flexibility we offer you standard lamp without doping, Gallium-indium-doped lamp, Iron-doped lamp and Lead-doped lamp.



W/IR DRYING SYSTEMS

WARM AIR AND INFRARED RADIATION

A combination of radiation in the infrared area and warm air aims to bring energy into the wet water film that needs to be cured. The energy input causes the acceleration of the evaporation process, while a defined air circulation and extraction provide for the secure removal of the released water.

Depending on the machine speed, the solvent content and the film thickness, a particular drying line and hence amount of energy is needed. The required energy can be pulled from different combinations of IR radiators, carbon radiators and warm air.



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 printing and coating industry. Since the turn of the millennium, UV curing has not only been performed using arc lamps – LED modules have also been deployed for this purpose. IST METZ provides a range of LED UV curing systems for a variety of different requirements.

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



BENEFITS OF IST METZ

YOU'RE IN THE BEST HANDS

Our UV, LED and IR systems are highly productive – to keep it that way in the long term, we provide a variety of services to help to maintain your productivity. A professional installation and regular inspections and servicing guarantee consistent high production quality.

Your benefits:

- More than 45 years of expertise
- A state-of-the-art research laboratory for internal test series and customers and partners for individual trials.
- Worldwide service
- Customised systems for your application

Litho Scan Professional Spectral 2D Inline Measurement System for Labs.

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 pose no challenge 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, enhancing communication with clients.



Litho Scan Professional: Spectral 2D Inline 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



Print Village

CONTACT PERSON

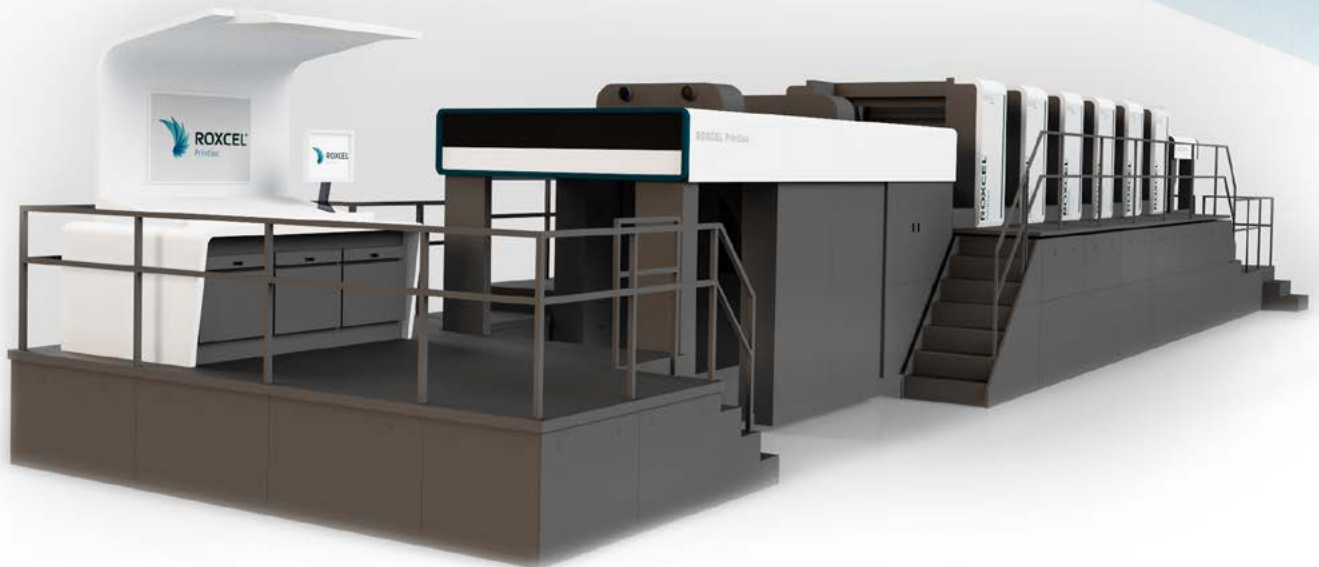
Tina Kunze – Managing Director
Frankenstraße 25
63791 Karlstein
Germany



Scan the QR Code and get to google maps directly.

WELCOME TO YOUR PRIVATE PRINT DEMONSTRATION





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