

# ROLAND 700 *EVOLUTION*

ULTIMA®: The ultimate printing machine



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sheetfed



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# ROLAND 700 *EVOLUTION*

**DOUBLE COATING / ULTIMA®**

AUDIENCE: Packaging printers / Commercial printers / General managers / Heads of production

Discover the world of inline enhancements with OnePass® technology from Manroland Sheetfed.

Stimulate your senses. Wake your emotions. Seeing, smelling and touching are qualities that make printed goods unique, attractive and more valuable. The OnePass® technology in the ROLAND 700 *EVOLUTION* provides you with these new possibilities.

Cost pressures and ever shorter delivery times require production steps to be reduced and enhancements to be implemented in one single pass. With OnePass® technology in the ROLAND 700 *EVOLUTION*, you can increase productivity through enhanced in-line production.

With the Ultima® concept Manroland Sheetfed offers tailor-made solutions for a wide array of applications. Ultima® stands for customising.

Whether it is coating before printing or a downstream printing unit after coating – anything that varies from the standard printing and varnishing process finds application-specific solutions with the ROLAND 700 *EVOLUTION* Ultima®.



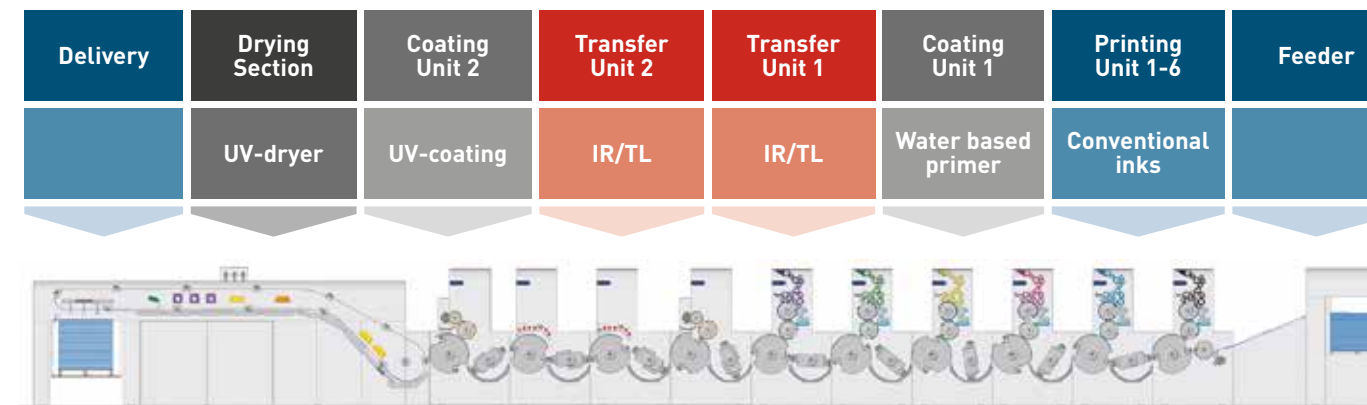
# APPLICATIONS

The following four applications show examples of how OnePass® technology achieves the highest performance and the shortest throughput times.



## APPLICATION 1 Printing – Coating with double coating module

The classic application achieves the highest gloss levels using conventional inks:



## OTHER APPLICATIONS\*

- Gold-Coating
- Soft-Touch-Coating
- Relief-Coating
- Scent-Coating
- Iridin-Coating
- Inline-Impress
- TWIN-Effect
- Blister-Coating

\*These applications may require special engraving of the anilox rollers.



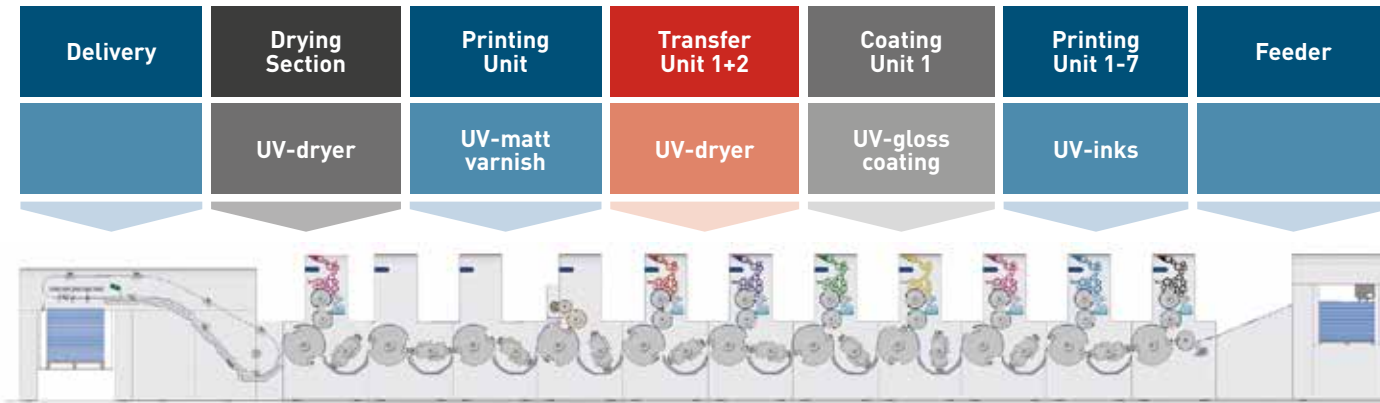
## APPLICATION 2

### Printing – Coating – Printing

This application uses another printing unit after the coating module.  
In this configuration matt varnish is applied with an offset printing plate.

#### ADVANTAGES

- Finer structures
- Better register
- Optimal matt-gloss effects



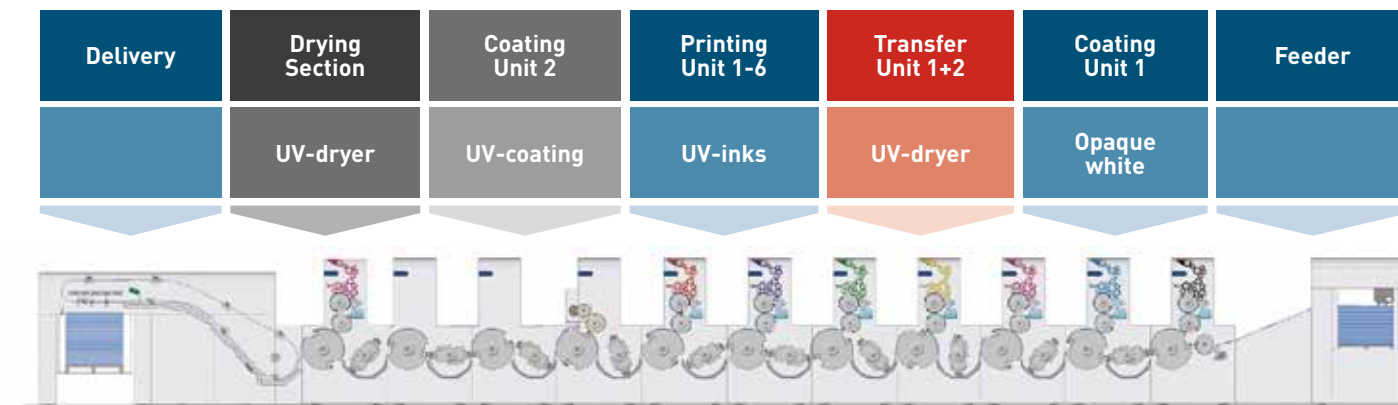
## APPLICATION 3

### Coating – Printing – Coating

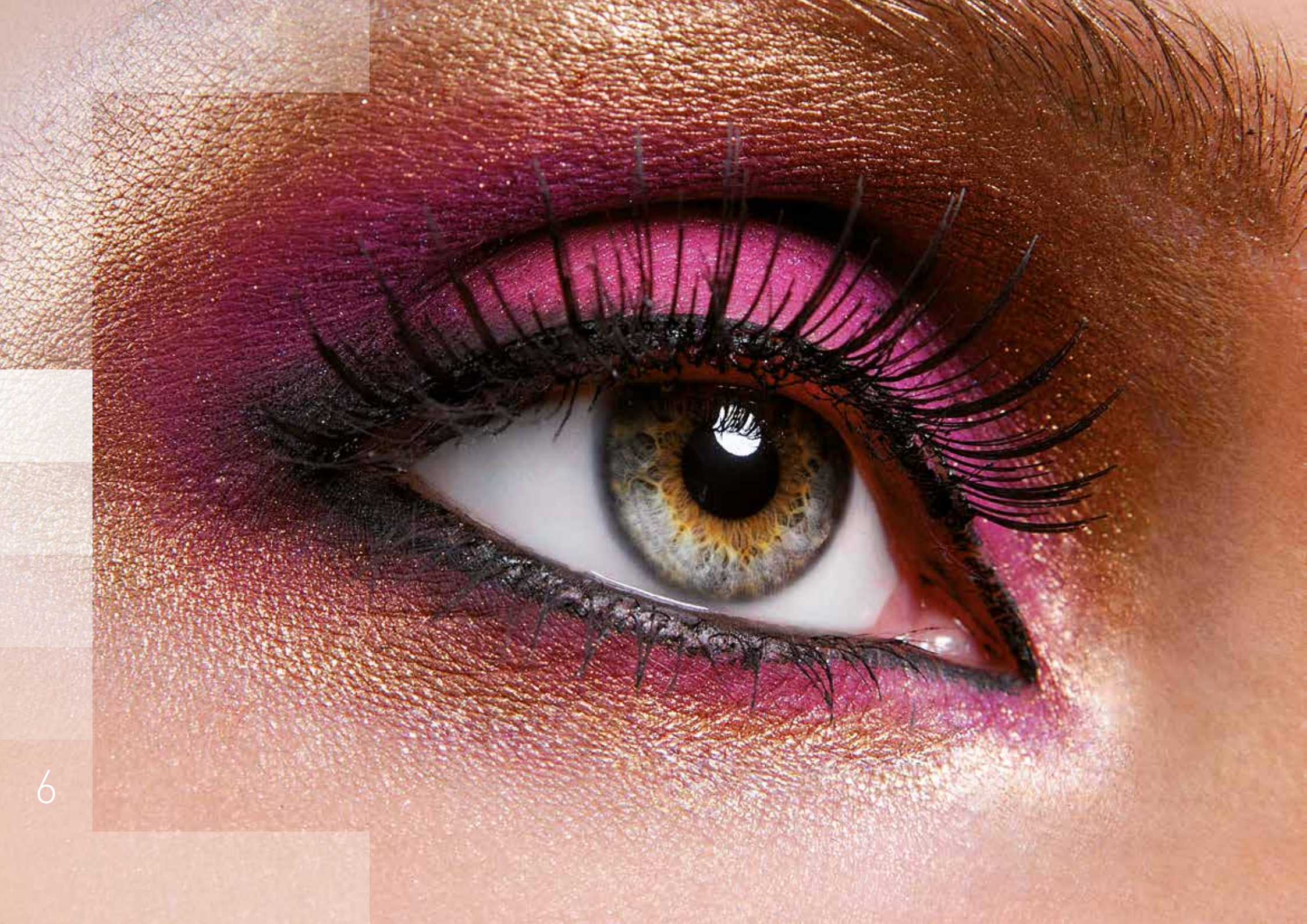
Here, by using a coating plate, opaque white can be partially applied to different substrates. (i.e. Polyethylene laminated substrate or transparent foil).

#### ADVANTAGES

- Gives solid surface for good white coverage
- OnePass® technology allows inline printing on top of opaque white



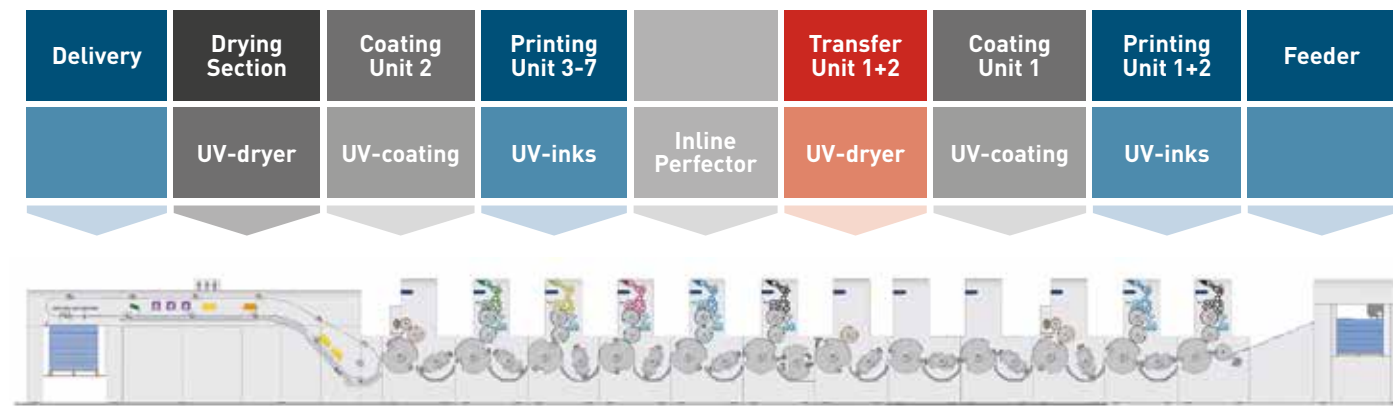




## APPLICATION 4

### Printing – Coating – Perfecting – Printing – Coating

With this configuration the inner face of a folding box can be printed with text information or messaging on the reverse face by using an inline perfector.



In straight mode this configuration can apply opaque white or primer with the coating module before perfecting.

## DRYING SYSTEMS

The ROLAND 700 *EVOLUTION* Ultima® offers maximum flexibility due to its universal configuration possibilities. Water based coating, UV-coating, special lacquers or even opaque white can be applied.

Manroland Sheetfed offers comprehensive SelectDryer configurations that can be flexibly adjusted to every printing requirement and application:

- Length and position of drying sections
- Position and power of infrared lamps
- Temperature management of hot air dryers
- Exchangeable UV cassettes (also between printing units, transferter and extension in the delivery)
- Pure UV-drying systems (for heat sensitive materials)
- UV-white cure dryer for opaque whites
- LED-UV
- Combination of conventional UV and LED-UV
- Cold air showers in the printing units or in the delivery (for heat sensitive materials)





Manroland Sheetfed offers tailor-made solutions for makeready time reduction, increased output performance and waste reduction specifically to meet the requirements of packaging printers:

#### Washing

- Ink fountain: covered with a special hardened, ink repellent, polymer layer (QuickChange Surface)
- Blankets: faster washing cycles due to higher washing speeds
- Rollers: dedicated pipe system for special washing solvents (4th piping system)
- Simultaneous washing of rollers, blankets and impression-cylinders with DirectDrive

## PRODUCTIVITY

In reality, job structure frequently determines which automation features are desirable and which are not. It's not always necessary to invest in make ready time automation when run lengths are long. However, for short runs a high nominal press speed and the related investment costs needed can negatively impact on cost per copy of the finished job.

#### Changing systems for printing plates

- Automatic Plate Loading (APL)
- Simultaneous Plate Loading (SPL)
- DirectDrive

#### Changing systems for coating plates

- 3-minute changeover time from a coating plate to a coating-blanket with QuickChange Clamp
- Coating-plate-PPL: Coating forme cylinder with semi-automatic clamps
- Direct-Access for machines equipped with DirectDrive:
  - Simultaneous plate changing in the printing and coating units
  - Simultaneous plate changing in the printing units and packing sheets (sheets below the coating plate / coating blanket) of the coating module

#### Change of the coating

- QuickChange Coating plus "H": pre-heated washing and rinsing water

#### Faster to the OK-sheet (faster in register, faster in colour)

- QuickChange Color printnetwork®: inkslide presetting system
- ColorPilot and Inline ColorPilot with DynamicColor Control
- Inline Register with Bobst registermarks

#### Solutions to increase running speed

- Machine speed 18,200 sheets/h instead of 16,000 sheets/h
- AUPASYS material handling systems
- Non-stop equipment at feeder and delivery (Rollomat)

#### Solutions for reducing waste

- TripleFlow inking unit: optimised start/stop sequences, better ink to water balance
- Inline ColorPilot with polarisation filters to avoid false measurements on wet inks/coatings
- InlineInspector 2.0 can help to identify faults on plates/jobs as early as possible in the run - saving on waste sheets







## 360° PERFORMANCE

The scope of delivery for the ROLAND 700 *EVOLUTION* automatically includes the ProServ 360° Performance package. This ensures achieving the promised performance levels and helps manage operating costs.

The 24-month ProServ 360° Performance package contains:

- ProServ maintenance contract with extended services for the first 2 years
- Annual machine inspection
- Annual machine maintenance
- Technical Support Center (TSC) 24/7 Service
- 5x Remote Check-ups
- Spare parts and services
- 4x productivity analysis topAnalysis
- End of warranty visit
- 1x Question & How To Continue visit

These services offer permanent productivity monitoring of the machine. All services are performed by certified Manroland Sheetfed service partners.

## CONCLUSION

Evolving toward perfection! The ROLAND 700 *EVOLUTION* has many innovations that set new standards in printing press construction.

These features include:

- User-friendly operation via the PressPilot machine control-console.
- Modern operating philosophy for efficient and safe working with the graphical user interface NavigationPilot®
- Newly designed feeder and AirGlide-delivery for higher performance
- Improved drive technology for higher performance, especially with long Ultima® configurations
- 'State-of-the-Art' inking and dampening units ensure the highest print quality
- Further improved coating module
- Cold foil application with Inline Foiler
- JDF and JMF workflow with IntegrationPilot 2.0

The groundbreaking ROLAND 700 *EVOLUTION* is designed to handle both current and future challenges.

To learn more about the ROLAND 700 *EVOLUTION*, please contact your local Manroland Sheetfed representative or email: [info@manrolandsheetfed.com](mailto:info@manrolandsheetfed.com)

## GLOSSARY

**DynamicColor Control:** New improved control algorithm in ColorPilot and Inline Colorpilot. The set points (target values) are reached after less control steps (saving on time and waste).

**Inline-Impress:** A relief is 'embossed' into the UV varnish by means of flexo plates

**QuickChange Color printnetwork®:** In a central database, all ink-slide characteristics and ink characteristics are stored and continuously optimised automatically in order to ensure ink slide presetting in perfection.

**Soft-Touch-Coating:** Soft-touch coating is used for a special feel.

Depending on the type of coating, it can feel velvety, rubbery or even soft. In partial printing, the matt effect of soft-touch coatings can really come into their own.

**TWIN-Effect:** Two-step in-line coating process leading to special matt-gloss effects.

An oil-based varnish (partially applied in the last printing unit via an offset printing plate) interacts with a UV coating (applied in the varnish module via a blanket or a coating plate).

**White Cure UV-Drying module:** Specially doped UV-dryer, the emission spectrum of which is adapted to the characteristics of UV opaque white.



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