



Genetic  
Innovation in  
Converting

## UTECO Program

Flexographic  
Printing



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and Laminating



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## The right move to guaranteed profits

The DIAMOND HP represents Uteco's excellence in flexographic printing. Short runs increased quality, and reduced waste and set-up times remain priorities in today's flexible packaging market.

The DIAMOND HP is the ideal answer for top converters who require increased flexibility and consolidation of equipment to streamline operations.

The DIAMOND HP reaches a maximum printing speed of **600 m/min.**



HP 808 / 812 / 815 / 108 / 112		
Print Width	mm	1000÷1800
Min. Print Repeat	mm	350÷440
Max. Print Repeat	mm	1600
Mechanical Speed	m/min	600

- High productivity
- Drastically reduced job changeover times
- Consistent return of investment
- **Direct Drive Evo**<sup>®</sup>: advanced Uteco's ES technology to grant unique performances
- **P2P**<sup>®</sup>: dynamic adjustment of printing pressures
- **Kiss&Go**<sup>®</sup>: fully automatic impression setting at the start-up
- **PTC**<sup>®</sup>: Predictable Torque Control
- **SprintWash**<sup>®</sup>: new automatic washing system
- **SmartMatch**<sup>®</sup>: reliable and quick color matching
- **FlexoSmartPackHP**<sup>®</sup>: Uteco engineering platform for improved performance and profitability in high speed flexographic printing
- **ShopWareHP**<sup>®</sup>: Production Management, Control & Monitoring: easy machine-operator interface to manage high-productivity
- **Logipack**<sup>®</sup>: automatic handling system of reels and shafts+cores







## Excellent quality and low waste flexo printing

The Crystal has been especially designed for food packaging applications giving great care to the automatism able to reduce the changeover times, the material waste and the energy consumption. With its new design the Crystal is also suitable for various applications in the flexible packaging field, when a high level of automation is required. New ergonomic solutions have also been applied to facilitate the operator's work. The Crystal is designed to reach a printing speed of **500 m/min.**



CRYSTAL 808 / 108		
Print Width	mm	800÷1600
Min. Print Repeat	mm	290
Max. Print Repeat	mm	850
Mechanical Speed	m/min	500

The basic Crystal configuration features:

- **Direct Drive Evo®**: advanced Uteco's ES technology to grant unique performances
- **Sleeve ejection** system
- **Carbon fiber** sleeve mandrels
- **Touch&Go®**: automatic setting-up of the contact point at the start-up
- **Kiss&Go®**: fully automatic impression setting at the start-up
- **P2P®**: dynamic adjustment of printing pressures
- **PTC®**: Predictable Torque Control
- **RDMR**: Random Deck Make Ready system
- **Integrated digital** videocamera system
- **SprintWash®**: automatic washing system
- **Viscosity Controls**: integrated in the machine HMI
- **CrystalShopWare®**: Production, Management, Control & Monitoring Supervisor
- **FlexoSmartPackQC®**: Uteco engineering platform for improved performance and profitability in quick change flexographic printing

On request it can be equipped with:

- **Logipack®**: automatic handling system of reels and shafts+cores
- **SmartMatch®**: reliable and quick color matching
- Corona Treatment
- 100% inspection systems for defect detection
- In-line flexo or gravure units
- UVi or EB curing systems





## The packaging solution with the minimum cost of investment

ONYX is a gearless flexographic printing press (6-8-10 colour central impression), which is: **Simple**, due to its easy sleeve change system which requires minimal operator skill. **User-friendly**: both the anilox and plate sleeve can be changed, even when the print deck is in print-off position. **Modern**: the compact accessible design for quick job change using “proven” Uteco synchro deck gearless drive technology. ONYX can be supplied with in-line lamination, down-stream printing and/or coating units.



ONYX 612 / 808 / 810 / 812 / 108 / 110		
Print Width	mm	1000÷1600
Min. Print Repeat	mm	320÷450
Max. Print Repeat	mm	1250
Mechanical Speed	m/min	400



- Fully equipped state of the art machine
- Reduced make ready and maintenance times
- Quick and simple sleeve changeover
- **Direct Drive Evo**<sup>®</sup>: advanced Uteco's ES technology to grant unique performances
- **P2P**<sup>®</sup>: dynamic adjustment of printing pressures
- **Kiss&Go**<sup>®</sup>: fully automatic impression setting at the start-up
- **PTC**<sup>®</sup>: Predictable Torque Control
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- **SmartMatch**<sup>®</sup>: reliable and quick color matching
- **FlexoSmartPackQC**<sup>®</sup>: Uteco engineering platform for improved performance and profitability in quick change flexographic printing
- **ShopWare**<sup>®</sup>: Production Management, Control & Monitoring: easy machine-operator interface to manage high-productivity
- **Logipack**<sup>®</sup>: automatic handling system of reels and shafts+cores





## Flexo printing press at unrivalled price

This press features a modular concept design and it can be supplied in a “tailor made” configuration, but maintaining the characteristics of a standard machine.

TOPAZ GL is a gearless flexographic printing press featuring on-press sleeve change for both the anilox as well as the plate cylinders. The sleeve change is easy and very quick and the automatic positioning of the printing units is granted by the latest generation of CNC controlled stepping motors.

The ventilation on the upper bridge is very silent thanks to a sound-proof cabin, which contains the supply and exhaust fans.



TOPAZ 608 / 808 / 613 GL		
Print Width	mm	800÷1400
Min. Print Repeat	mm	300
Max. Print Repeat	mm	850÷1300
Mechanical Speed	m/min	300



## Precision, flexibility and reliability: the strong points of Uteco Stack Type presses

The new generation of Stack Type from Uteco features:

- Sleeve change for both the anilox as well as the plate roller
- Servomotors to drive the inking rollers (optional item)

Using the same printing unit utilized for the TOPAZ 6C-CI/GL, QUARZ is the new series of 2/4/6 and 8 color stack type introduced by Uteco in the market for **in-line** (to film extrusion lines or to bag making machines) or for **reel to reel applications**.

In the **gearless solution** all counter-impession cylinders are driven by their servo-motors and all servos are linked together by the well tested and reliable Uteco electric shaft.

With its sturdy construction it can be applied also for wide webs and important print repeats.

The main applications are for printing on paper, board, plastic tubes and plastic films.

QUARZ 608 / 613 / 808		
Print Width	mm	600÷1600
Min. Print Repeat	mm	300
Max. Print Repeat	mm	800÷1200
Mechanical Speed	m/min	300



# Flexo with EB2

ENVIRONMENTAL FRIENDLY FLEXO WITH EB2



## Ergonomics

- The **Diamond HP** and the **Onyx** equipped with the **EB2** New Generation Technology are simple and user-friendly presses
- The new patented **Thermilox**<sup>®</sup> inking and thermoregulating solution and the new **Thermowash**<sup>®</sup> automatic washing system make life easy for the operators

## Efficiency

- The **Diamond HP** and the **Onyx** equipped with the **EB2** New Generation Technology are capable of steady production at 400 m/min without the typical complications of “drying” traditional inks
- Minimum set up time, minimum waste of materials and minimum downtime
- Rotogravure and roto-offset print quality, yet maintaining a clear advantage in costs for medium and short runs and capability to print flexible films, with stability and consistency for the full print run

## Ecocompatibility

- Reduced carbon footprint, reduced energy requirements, reduced risk of hazard for personnel thanks to the reduced impact on the environment, use of recyclable materials
- **The EB curable inks** are ideal for food packaging to achieve a totally food-safe and certified printed product



The patented Thermilox<sup>®</sup> system is applicable to EB and UV flexo presses in order to guarantee the accurate and continuous control of ink temperature during the print run.





## On press quick change of engraved sleeves

Nowadays, in the rotogravure printing for flexible packaging, the quick change of jobs is of great interest and allows the increase of machine production and the reduction of unproductive times needed for the preparation of the machine for a new job.

Q-PRESS represents the exclusive approach made by Uteco in the rotogravure printing field, for short runs and quick change.

- **RotoSmartPackQC®**: Uteco engineered platform for improved performance and profitability in “On-Demand” gravure printing
- **SynchroWeb®**: register error auto correcting system during speed ramps (acceleration/deceleration).

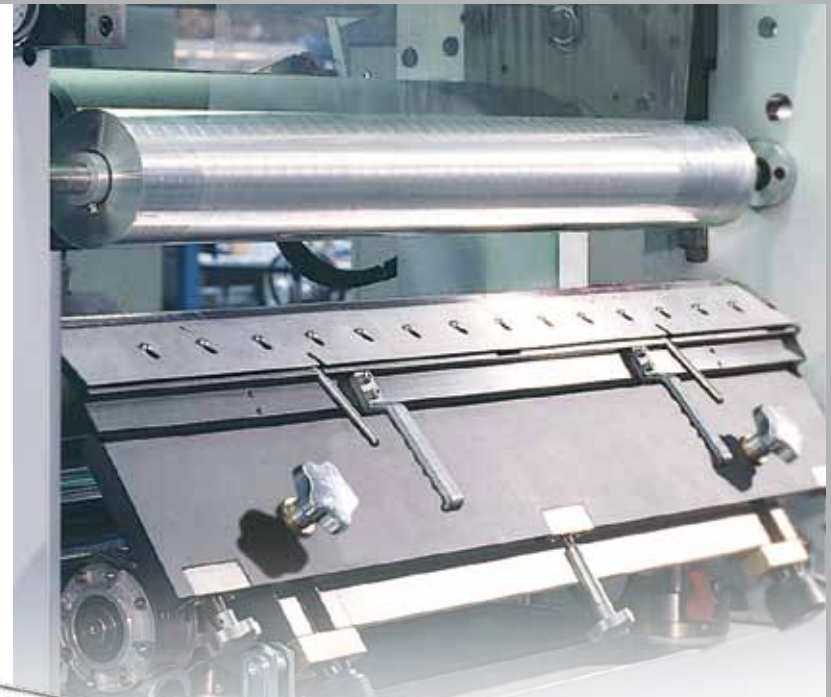


Q-PRESS		
Print Width	mm	800+ 1200
Min. Print Repeat	mm	450
Max Print Repeat	mm	920
Machine Speed	m/min	350

## Tailor-made technology with the maximum flexibility in machine configuration

- Exclusive machine specifications "On Demand"
- Direct drive of the engraved cylinder (electric shaft)
- Job change by means of interchangeable trolleys
- Automatic change of the gravure trolleys (optional item)
- **RotoSmartPackOD®**: Uteco engineering platform for improved performance and profitability in "On-Demand" gravure printing

M/H-PRESS		
Print Width	mm	800÷1600
Min. Print Repeat	mm	450
Max Print Repeat	mm	920
Machine Speed	m/min	fino a 500





## State of the art gravure printing with advanced ELS technology

The E-PRESS has been designed to print on films, laminates and light paper for the flexible packaging. This press features very precise register accuracy between the units and it has been studied to print also on LDPE film. The total absence of compensators, which shortens the distance between the print units and the new pre-registration system, minimizes the material waste during job start up. E-PRESS is equipped with **Synchro Web®**, **RotoSmartPackEL®** and with **ShopWareEL®** the advanced intelligent HMI, which performs the management, the supervision, the controls, the diagnostic and the trends of the entire production cycle. The drying hoods are ranging from 1.5 m single up to 9 m double for special coating applications.

E-PRESS		
Print Width	mm	800÷1500
Min. Print Repeat	mm	450
Max Print Repeat	mm	920
Machine Speed	m/min	350



## Short-medium runs with the minimum cost of investment

The modular and essential design solutions studied for the V-PRESS 300 and its manufacturing based in India guarantee competitive prices with optimum results in performance. This ELS rotogravure press can be considered an “Entry-Level” for those converters who are willing to enter the gravure printing market in an extremely competitive way with a limited investment in capital equipment. The V-PRESS 300 can be supplied also in the “**shaftless**” version where the engraved cylinder is a “hollow” type one.

Main features:

- **Easy** to use
- **ELS shaft with GL Uteco Technology**
- Job changes by means of **interchangeable trolleys**
- Easy machine color touch screen **supervisor**

V-PRESS 300		
Print Width	mm	600÷1300
Min. Print Repeat	mm	400
Max Print Repeat	mm	900
Machine Speed	m/min	300





## Compact Solvent-less technology

The modern solvent-less technology is made very compact in MIRA laminator. The adhesive mixer is on-board of the machine to reduce the room needed for its installation.

All main materials utilized for food packaging application can be run in this laminator, which features:

- Quick change of transfer roller
- Efficient exhaust of the residual coating fumes
- Energy savings
- Environmental friendly operation
- Ergonomic solutions for the operator
- Simple and easy screen control panel



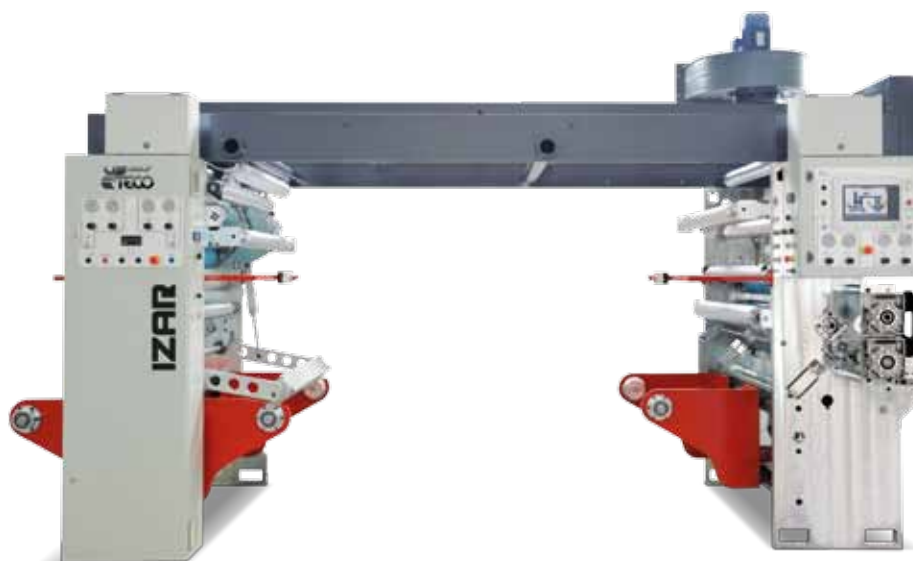
MIRA		
Web Width	mm	850÷1350
Coating Width	mm	800÷1300
Laminating Speed	m/min	300

## Compact Solvent-less technology

The state of the art of solvent-less technology is inborn in this laminator, which is suitable to produce laminated films for the whole flexible packaging and specially for food applications.

The IZAR solvent-less laminator is featuring:

- Quick change of transfer roller
- Efficient exhaust of the residual coating fumes
- On-board cleaning system
- Energy savings
- Environmental friendly operation
- Ergonomic solutions for the operator
- Operator touch screen control panel



IZAR		
Web Width	mm	1050÷1450
Coating Width	mm	1000÷1400
Laminating Speed	m/min	400





## Roto Off-Set

The roto/off-set printing press **Silver SIL** stands out for the high printing quality, reduced costs of printing, waste reduction, accurate color reproducibility, wide application range, easy use.

**Versatile Printing:** the **Silver SIL** processes the most different printing materials such as paper, paper board, flexible films and alluminium and features Direct Drive on all printing units, quick job, change through interchangeables blocks with automatic positioning system.

SILVER SIL		
Web Width	mm	520
Print Width	mm	500
Range Repeat Lengths	mm	407÷720
Mechanical Speed	m/min	300 (opt. 400)
Material Range <sup>(*)</sup>	µm	14 up to 300

<sup>(\*)</sup> depending on substrate



## Sleeve Web Off-Set

A variable sleeve roto/off-set press **Gold SIL** is ideal for printing flexible packaging, BOPP, shrink sleeves, PET, folding carton and labels.

Complete integration with flexo and gravure units.

Features:

- Variable repeat length
- Easy change of the sleeves
- Printing quality at all speed ramps
- Short make-ready and change over times
- Absolute accuracy of register print
- Printing on flexible film
- Low printing plate costs
- User friendly and ergonomic for the operator

GOLD SIL		
Web Width	mm	850
Print Width	mm	840
Range Repeat Lengths	mm	400÷900
Mechanical Speed	m/min	400
Repeat Steps		infinitely variable
Material Range <sup>(*)</sup>	µm	14 up to 300

<sup>(\*)</sup> depending on the substrates





## Flexographic Printing Press Stack-in-Line

An important development in Uteco flexo printing solutions is the modular type in-line press. This type of design has been supplied even up to 24 colours (for lottery application) and is featuring:

- Servomotors on each printing or coating unit
- Sleeve for both the anilox as well as the plate rollers
- ELS: the well tested and reliable Uteco Electric Shaft
- Hot air drying hoods, UV curing lamps or EB unit for wetflexo, according to the applications
- Combination of flexo and gravure units
- Hot melt, silicone and different type of varnish application

The main sector for this type of lines is for folding carton, pre-print liner, unsupported aluminium foil (yogurt lids), laminated substrates (soup puoches) and the security market.





- E-Shaft gravure printing for short and medium runs
- H-PRESS for high speed production
- Special and customized presses

All the gravure units transmission is made by means of electrical shaft and gives the following benefits:

- PRS®: Automatic Preregister System
- SynchroWeb®: Register Error Autocorrecting System, automatic compensation of register error between the colour station during acceleration and deceleration.

These gravure presses are not meant to print only for flexible packaging applications but also in other markets and are special customized machines, such as:

- Print on soft aluminium foil
- Wooden grain applications
- Banknotes
- Security applications in general with different in-line technologies: coating for holograms, high efficiency drying for temperature up to 180 °C, fine register accuracy on reprint of material, embossed metallization in register with printing
- Tobacco wrapping boxes.





The experience of Uteco engineers in design and special application technologies is applied in these kind of lines where a blend of engineering expertise and technological proven systems are merged together:

Beyond the different types of coaters and laminators it is worth to mention:

- Coater/laminators with reverse roll trolley for acrylic glue coating for production of adhesive tape and label tapes.

The typical materials are PAPER - PET- BOPP and PVC and the laminated materials are BOPP and LDPE.

- Thermal silicone coating unit with 5-rollers trolley, acrylic glue coating with kiss trolley and Meyer bar, laminating with secondary material. Typical application for labels.
- Special triplex coater laminator with a "sandwich" plastic net positioned between the alu foil and the film.  
The final production is the substrate to cover the roof.
- Coater laminator for alu foil/paper for the internal side of the cigarette packages.

These lines features multiprocess coating/ laminating (solvent & solvent less, water base) - lacquering-coating-UV-demetalization.

They can work on different substrates, such as film-paper-foil-board-PVC (up to 800 microns) and are equipped with:

- automatic trolley change
- turning bar
- UV inks
- extended dryers, floating tunnel
- humidifier for paper and infrared humidifier controls
- multilayer measurement & control system
- electrical shaft

These machines are designed for the supply of turn-key lines featuring different coating and lamination technologies with the addition of gravure units. They are composed by:

- multilayer flat die extrusion units
- carriages for the chilling cylinders
- gravure units
- unwinders and rewinders

The market applications are:

• **flexible packaging**

(film + alu foil):

- stand up pouches
- high barrier laminates for fresh foods

• **liquid packaging**

(film + board + alu foil):

- basic (board and film)
- aseptic (board, film and alu foil)
- milk and juice bricks

• **commercial and industrial**

(film + paper/board + alu foil):

- release liners
- envelopes
- medical/hygiene
- building and insulation
- sacks

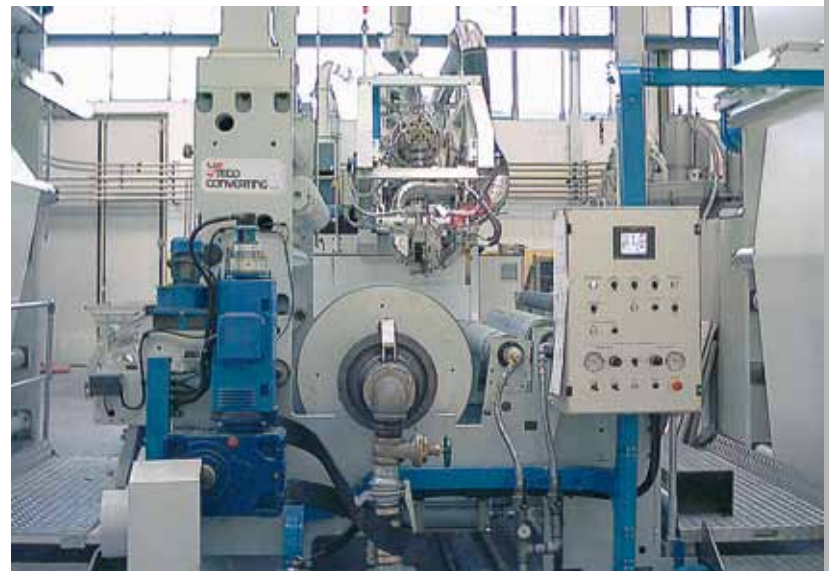
• **photographic**

(paper + film):

- photographic prints

Other special machine manufactured by Uteco are:

- punching unit to be put in line to printing or laminating machines
- embossers for paper and foil and for hologram transfer





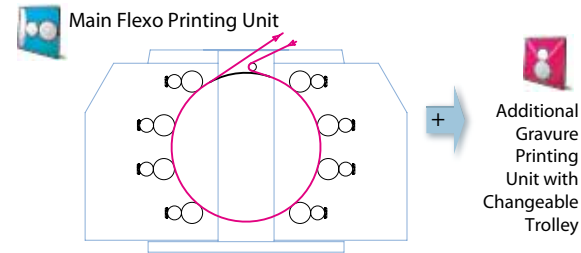
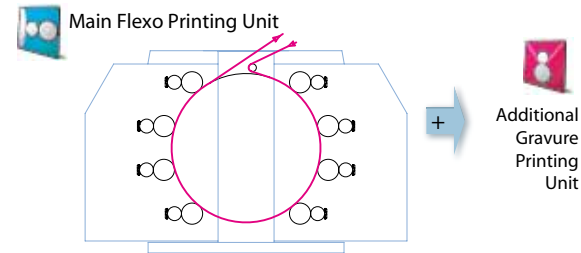
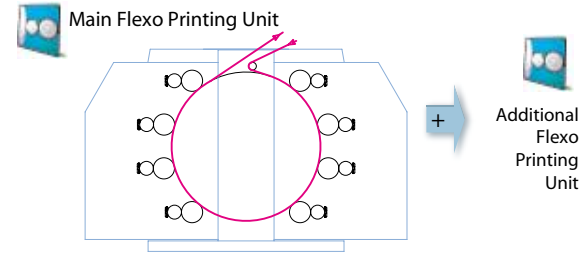
# Fully integrated In-Line Converting options

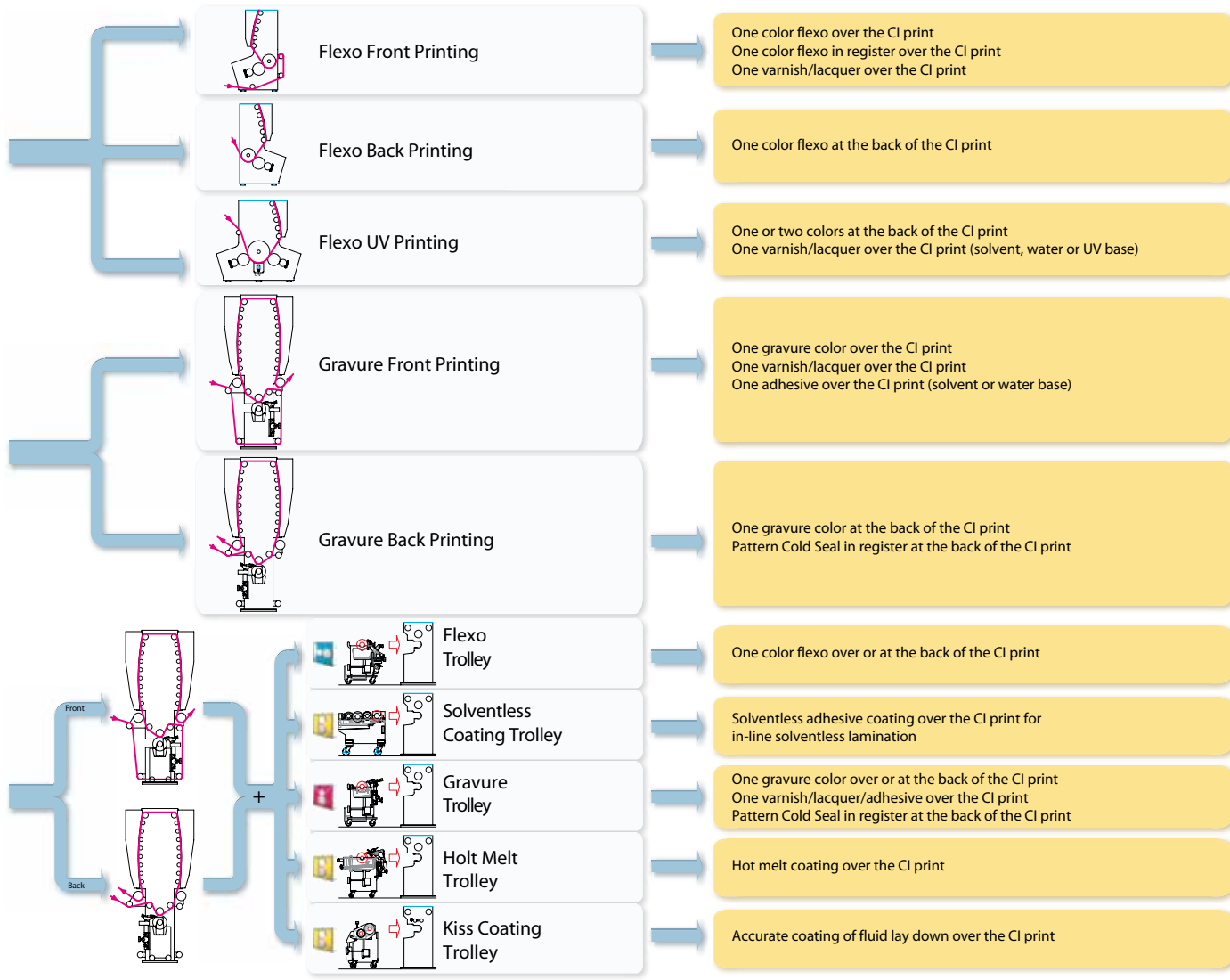
## Application of Converting processes In-Line with printing:

- Expert analysis to achieve the best solution
- Optimum machine configuration
- Enhanced machine performance
- Improvement in productivity of the whole line

**ILTSmartPack®:** Uteco engineering platform for improved performance and profitability of the various Converting technologies In-Line with printing

- **central impression flexographic** printing group
- **flexographic** unit for **printing** and/or **lacquering**
- in-line unit **equipped with trolley:**
  - **gravure** system
  - **flexo** system
  - **kiss-coating** system
  - **hot-melt** system
  - **cold-seal** system
  - **solvent-less** system







## UTECO Global Service on Product

### Increased Value in Life-Cycle Investment

#### 3S CONVERTING

3S Converting is Uteco Group Business Unit specialized in the supply of complete services to support the flexographic, rotogravure and converting products and process, by the study and design of new applications for already installed machines, or their modification; by the integration of retrofits and auxiliary equipments, as well as with the sales of used machines which becomes a real individual application consulting with the aim of finding out the proper solution for each customer's need.

#### USED MACHINES

- Optimum long-lasting performances at a low cost
- Technological improvement coming from the newest machines
- Modifications, personalization or integration with other machines
- Technical assistance and operators' training by skilled staff

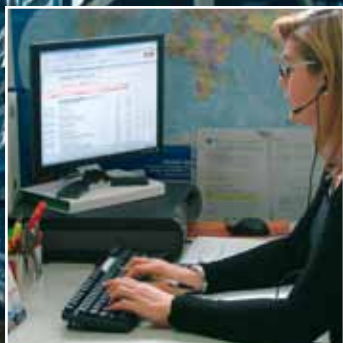
#### VARIOUS EQUIPMENTS

- Supply of auxiliary equipments tested by Uteco
- Supply of commercial accessories
- Retrofit integrations to gain maximum efficiency

#### MACHINES UPGRADES

- Updating of process and performance to meet new market demands
- Application of the most recent Uteco's technological innovations
- Integration of more converting technologies in one machine





### SPARE PARTS

- High availability of spare parts worldwide
- Fast reply and just in time delivery
- Original spare parts controlled by Uteco

### RETROFITS

- Optimization of machine configuration
- Machine up-grade
- Specialized solutions





## UTECO Global Service on Technology

### Increased Value in Life-Cycle Investment

The type and quantity of services Uteco can grant both on the technology as well as on the product increase the productivity and the value of the investment for the entire machine life.

The growing competence and the increase potential of Uteco customers are always an evidence of the success which is constantly granted by Uteco.

The modern Converting Culture "by Uteco" is the guarantee of the best return of investment to the end user.

#### **CONVERTING APPLICATION CONSULTATION AND SOLUTIONS**

- Technical expertise on the various converting technologies
- Industrial consulting for the Converting process optimisation
- Management and financial consulting

#### **TRAINING**

- Personalized theoretical and practical trainings
- "Lean Training" for skill refinement

#### **ASSEMBLING AND START-UP**

- Installation, commissioning and acceptance test
- Training at machine start-up



## UTECO Global Service on Machines and Process

### Uteco Service Division

- **H24 hot-line call service**
- **Local technical service**
- **TelePack®**
- **Planning for preventive maintenance**
- **Machine moving**
- **Customized service contracts**

- Immediate and very effective interventions are possible thanks to the Uteco hot-line call service: fast answers on the correct maintenance, repair and restore of machines functioning are the valid support provided by skilled personnel.

- Appropriate and capillary after sales services increase machines profitability.

- The immediate analysis of the damages and the intervention are provided on-line thanks to the data transfer in the utmost safe and protected way.

- The preventive planned maintenance means maximum reliability and profitability of the production process. Personalized tailor-made customer care and maintenance contribute also to higher safety in the working site.

- Moving of machines from plant to plant allow reduction of customer's unproductive times and to focus only on their production processes.





CONVERDROME™ is part of the Uteco Group structure, and it consists of high qualified experts who operates in R&D, “Just in Time” demos and tweak of the different technologies.

This structure organizes:

- “Just in Time” demonstrations
- Optimization of turn-key solutions
- Uteco Academy (training, seminars, conventions)



The main target at CONVERDROME™ is:

- to satisfy and surpass the needs of the customers, which require new production systems in order to compete on the global markets successfully
- to organize test-runs of the printing presses
- to test and examine new solutions with the purpose of improving the product and its operability
- to complete the start-up at the customer's plant and carry out the operator training, printing training, etc.
- to co-operate with the Uteco R&D Department to develop new machine functions, new technologies and applications





# ECOSmartPack®

The **ECO-Environmental** technologies of Uteco Group for **Converting**



Eco  
Innovation in  
Converting

## WATER BASED INKS

- Superior printing quality without compromising the running speed
- Suitable for all kinds of plastic substrates
- Zero costs in VOCs abatement equipment

## UVi INKS

- Flexo printing quality equal to rotogravure
- 100% of ink utilisation, no need of washing at the end of shift
- Conformity to legislation for food packaging

## WET FLEX EB INKS

- Reduced costs of production (Energy Saving)
- Conformity to legislation for food packaging

## WATER BASED & SOLVENT-LESS ADHESIVES

- Minimum costs of investment & cost of production (solvent-less)
- Zero costs in VOCs abatement equipment
- Conformity to legislation for food packaging

## WASTE REDUCTION

- Direct Drive Evo® Uteco Gearless Technology
- Quick change between jobs (sleeves, SprintWash®, RDMR, PCT®, Kiss&Go®)
- Continuous control & monitoring of job parameters during running

## ENERGY SAVING

- UTECO EXCELLENCE (know-how, patents, R&D, innovations)
- ECOSmartPack®: Uteco engineering platform for improved performance and profitability
- New generation of motors & drives

