

**HIGH SPEED FLEXO PRINTING WITH DIRECT DRIVE EVO®**



# DIAMOND HP



**GENETIC INNOVATION**

## DIAMOND HP

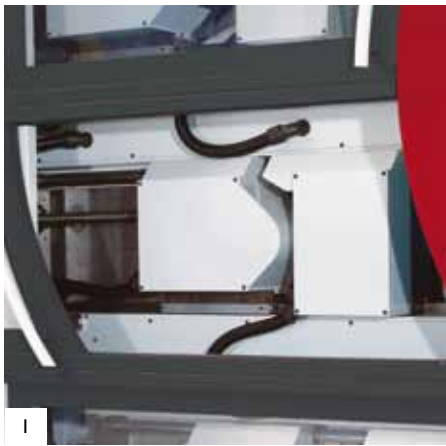


The DIAMOND HP represents Uteco's excellence in flexographic printing. Short runs, increased quality and reduced waste and set-up times remain priorities in today's flexible packaging market. The DIAMOND HP is the ideal answer for top converters who require increased flexibility and consolidation of equipment to streamline operations.

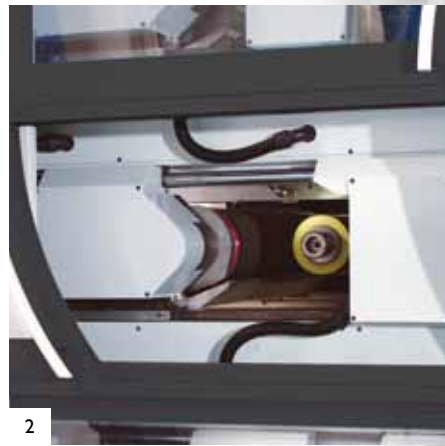
The DIAMOND HP reaches a maximum printing speed of 600 m/min. Thermoregulation by air of the CI group frame, carbon fibre sleeve mandrels, sleeve ejection system, new and efficient drying system, improved high-performance winders, dynamic adjustment of printing pressures (**P2P**®), new automatic washing system (**SprintWash**®), and an upgraded press supervisor (**ShopWareHP**®), give the DIAMOND HP a significant competitive advantage in the production of both large and small orders.

The DIAMOND HP print deck represents an evolution of the well tested, dual-guided and patented print unit of the Uteco Emerald flexographic press.

The sleeve change is completely automatic and can be managed by the press operator from both the press supervisor as well as the CI printing group.



1



2



3



4

1 - Deck in normal operation  
2 - Deck open for plate sleeve change

3 - Plate sleeve ejection  
4 - Anilox sleeve ejection



# GUARANTEED PROFITS



## P2P®

### Press To Print

Automatic and dynamic correction of printing pressures during press speed variations. These settings can be individualized per print job and stored in the job recipe of the press supervisor by the operator.

## PCT®

### Press Control During Transition

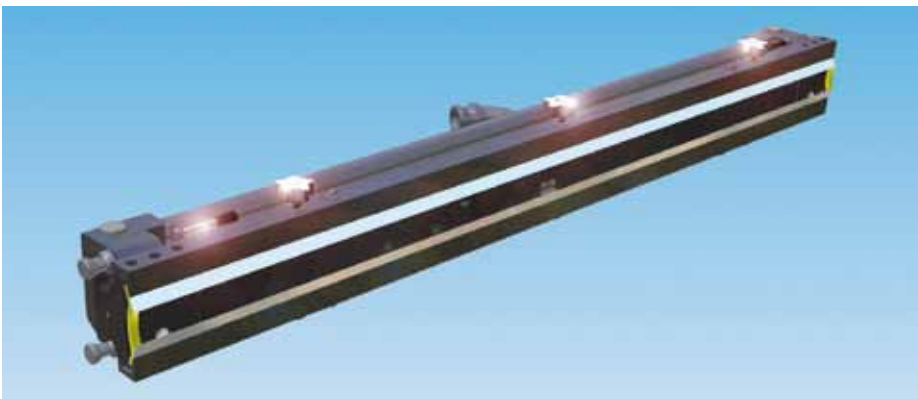
New Uteco platform for low waste and fast setting of:

- printing pressures (Touch & Go® + Kiss & Go®)
- registers (Click & Drag®) in partnership with Grafikontrol.

## PTC®

### Predictable Torque Control

This software system allows predictive control of plate mandrel servomotor's torque in varying print conditions to ensure best available print register accuracy.



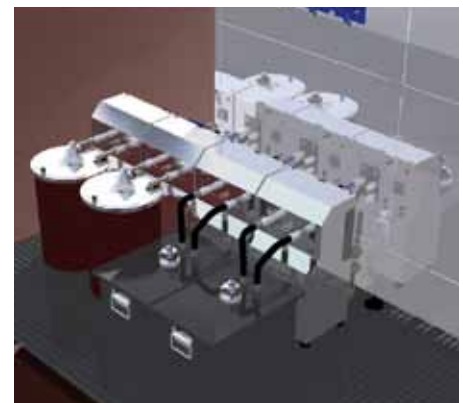
The new pneumatically loaded chamber doctor blade permits toolless end seals and doctor blades replacement.

## Direct Drive Evo®

The Direct Drive Evo® technology by Uteco grants unique performances which give converters important benefits.



The DIAMOND HP can be equipped with **SprintWash®**, Uteco's automatic and modular washing system. Three different washing cycles (light, medium and heavy) can be selected per deck based on need by the operator on the machine supervisor.



## DIAMOND HP 808

The 808 model, the most compact machine in DIAMOND HP range, is ideal for printing on film for flexible packaging.

Featured by plate and anilox sleeve quick change the machine is expression of great productivity, with its printing speed of 600 m/min both with solvent based and water based inks.

Thanks to the reliability of the printing group frame and the new drying system, as well as the high stability of the color unit, that characterizes the machine, it can be defined the queen of the 8 colors flexo printing presses.

The DIAMOND HP 808 is the highest expression of Uteco's Direct Drive Evo® potentialities, marking the whole DIAMOND HP range of presses.



TECHNICAL CHARACTERISTICS		DIAMOND HP 808				
MODELS		100	120	130	140	160
Number of colors		8	8	8	8	8
Web Width	mm	1050	1250	1350	1450	1650
Print Width	mm	1000	1200	1300	1400	1600
Min. Print Repeat	mm	310	350	380	400	440
Max. Print Repeat	mm	850	850	850	850	850
Mechanical Speed	m/min	600	600	600	600	600
CI Drum Diameter	mm	1950	1950	1950	1950	1950
Reel Diameter	mm	800 - 1000 - 1300				
Approx. Length	mm	17000	17000	17000	17000	17000
Approx. Width	mm	5900	6100	6200	6300	6500
Approx. Height	mm	5300	5300	5300	5300	5300

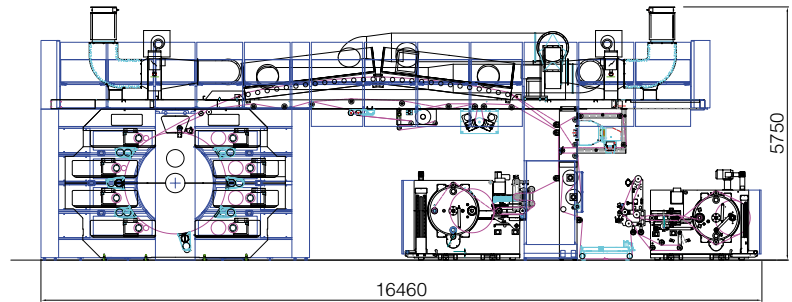
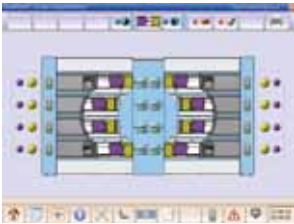


# IN FLEXOGRAPHIC PRINTING

## DIAMOND HP 809

The DIAMOND HP 809 model has been studied especially for printing on shrink film, on paper and for all that applications where a printing repeat bigger than 1000 mm is required.

This model is often equipped with the Flying Deck Make Ready system, which enables the preparation of the unused printing units while the machine prints a job. According to the substrates used, automatic winders shafted and shaft-less and for reels with diameter up to 1800 mm, typical for applications on paper and cardboard, are supplied.



TECHNICAL CHARACTERISTICS		DIAMOND HP 809				
MODELS		100	120	130	140	160
Number of colors		8	8	8	8	8
Web Width	mm	1050	1250	1350	1450	1650
Print Width	mm	1000	1200	1300	1400	1600
Min. Print Repeat	mm	350	380	380	400	440
Max. Print Repeat	mm	1070	1070	1070	1070	1070
Mechanical Speed	m/min	600	600	600	600	600
CI Drum Diameter	mm	2300	2300	2300	2300	2300
Reel Diameter	mm	800 - 1000 - 1300				
Approx. Length	mm	18000	18000	18000	18000	18000
Approx. Width	mm	5900	6100	6200	6300	6500
Approx. Height	mm	5800	5800	5800	5800	5800



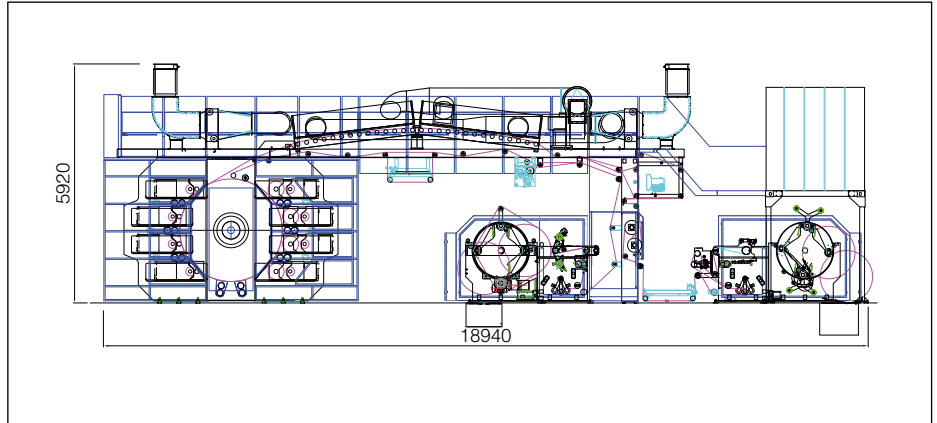
The operator control panel can be enclosed in the press rear frame structure or on a separate console.



# IMPROVED PERFORMANCE IN HIGH

## DIAMOND HP 812

The DIAMOND HP 812 is a highly productive press certainly suitable for the production of paper and polyethylene industrial bags and for the print of shrink film for packaging of big beverage bottles. For the models with more than 1400 mm width, the machine is equipped with elevating platforms and sleeve carrying trolleys, which are clamped directly to the platforms, in order to help the operator with the sleeves change. For printing applications on paper/cardboard this model is often completed with in line units for varnish coating and for lacquering in register with printing. These flexo or gravure units, that are in line with the central drum printing group, are supplied both with empowered air drying system and with UV lamps or EB groups depending on the applications.



Easy change of the sleeve



# SPEED FLEXOGRAPHIC PRINTING



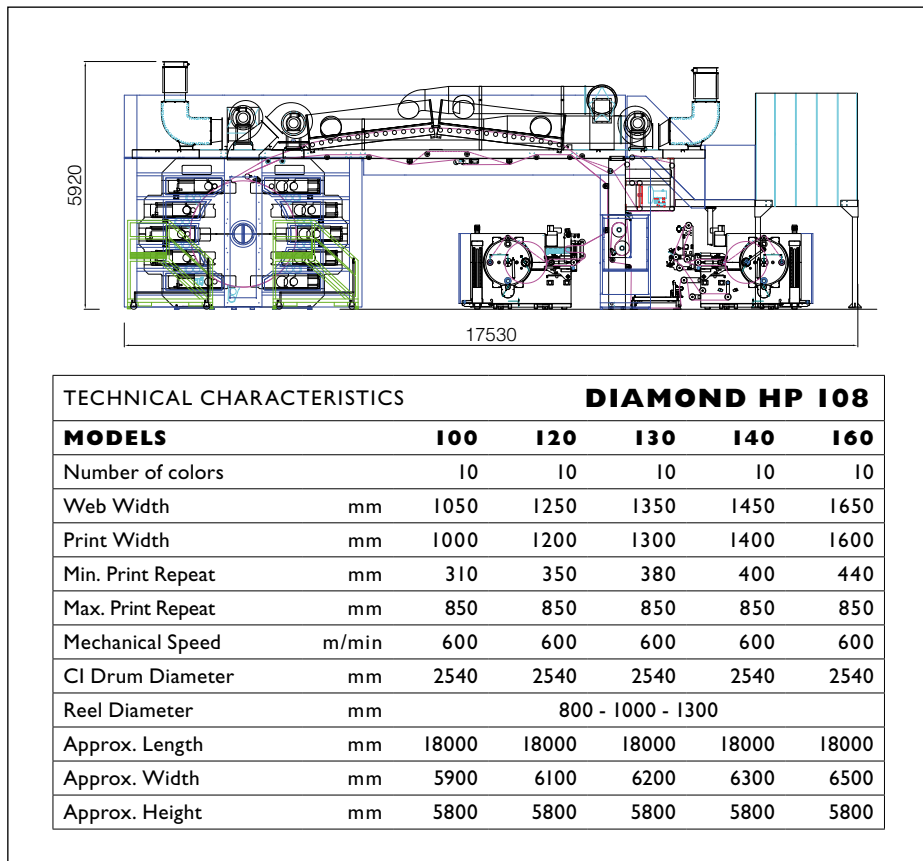
TECHNICAL CHARACTERISTICS		<b>DIAMOND HP 812</b>				
<b>MODELS</b>		<b>100</b>	<b>120</b>	<b>130</b>	<b>140</b>	<b>160</b>
Number of colors		8	8	8	8	8
Web Width	mm	1050	1250	1350	1450	1650
Print Width	mm	1000	1200	1300	1400	1600
Min. Print Repeat	mm	350	380	380	400	440
Max. Print Repeat	mm	1250	1250	1250	1250	1250
Mechanical Speed	m/min	600	600	600	600	600
CI Drum Diameter	mm	2300	2300	2300	2300	2300
Reel Diameter	mm	800 - 1000 - 1300				
Approx. Length	mm	18000	18000	18000	18000	18000
Approx. Width	mm	5900	6100	6200	6300	6500
Approx. Height	mm	5800	5800	5800	5800	5800

# HIGH SPEED AND QUALITY PRECISION:

## DIAMOND HP 108

The DIAMOND 10 color series features two models differentiated only by maximum repeat length. The DIAMOND HP 108 with a standard repeat is most commonly used in conventional flexible packaging applications and the DIAMOND HP 112 with its longer repeat is well suited for shrink films and industrial applications. These robust presses are equipped with a very efficient drying system on both the CI section as well as the drying tunnel, in order to reduce solvent retention even at high printing speeds.

Depending on the configuration they can be equipped with either ladders or lift platforms to assist the operator with sleeve changes on the upper decks.



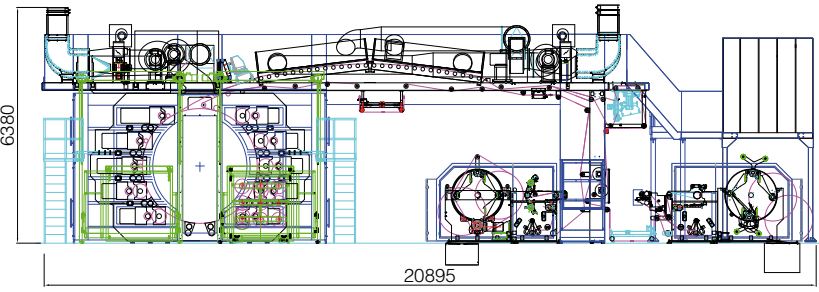


# EXCELLENCE IN FLEXOGRAPHIC PRINTING

## DIAMOND HP 112

The DIAMOND HP 112 model best serves the industrial & high volume sack and bag market, as well as those applications requiring long print repeats.

This model maintains all the features of the DIAMOND series and can be equipped with in-line print/coating flexo units for back printing and/or coating and in-register varnish, either air dried or UV cured.



TECHNICAL CHARACTERISTICS		DIAMOND HP 112				
MODELS		100	120	130	140	160
Number of colors		10	10	10	10	10
Web Width	mm	1050	1250	1350	1450	1650
Print Width	mm	1000	1200	1300	1400	1600
Min. Print Repeat	mm	350	380	380	400	440
Max. Print Repeat	mm	1250	1250	1250	1250	1250
Mechanical Speed	m/min	600	600	600	600	600
CI Drum Diameter	mm	3100	3100	3100	3100	3100
Reel Diameter	mm	800 - 1000 - 1300				
Approx. Length	mm	21000	21000	21000	21000	21000
Approx. Width	mm	5900	6100	6200	6300	6500
Approx. Height	mm	6800	6800	6800	6800	6800



# HIGH PERFORMANCE FLEXO



## ShopWareHP®

The operator control console can either stand alone or be integrated in the press layout. The console contains the touch screen of the **ShopWare®** press control system which provides operator access to the press Management Information System and the Control and Visualization System.

**ShopWare®** provides menus which show:

- the main press overview graphic depict critical press temperatures, actual tension zone readings as well as the actual press running speed
- registration and impression data which includes actual registration settings, print pressure settings and job specific P2P parameters, all of which can be stored to job specific recipes (of which over 5,000 can be stored)
- **SprintWash®** parameters
- press productivity histograms which can be reviewed by shift, day, month, or year.
- critical press operation information that includes running speed, press alarms and press diagnostics.

A modem is integrated into all presses allowing remote connection for troubleshooting purposes by our Service Division technicians.





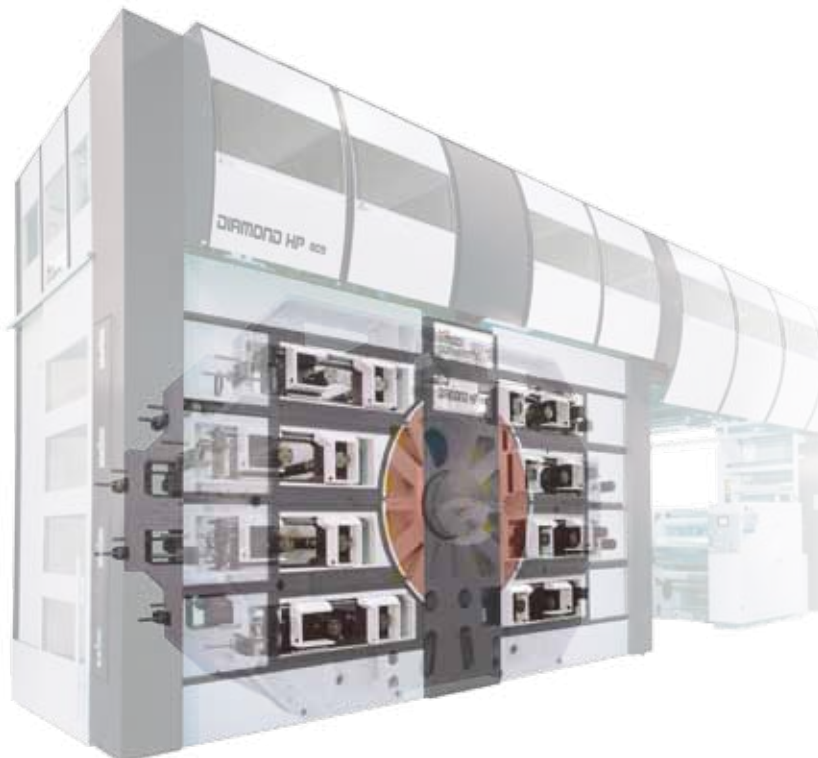
Shaftless Winder

The DIAMOND HP can be equipped with a wide range of fully automatic winders, both shafted or shaftless, to accommodate the different substrates utilized in flexible packaging. Roll diameters range from 800 to 1800 mm.



## LogiPack®

All winders can be equipped with an integrated roll lift system and with **LogiPack®**, a robotic system that assists in core preparation and printed roll disposal to facilitate roll changes in high speed print operations.



### The Uteco Direct Drive Evo®

All sleeve plate mandrels are directly and rigidly connected to their AC vector drive brushless servomotors and the CI drum is directly and rigidly connected to the main motor (this technical solution is covered by a Uteco international patent). Uteco's Direct Drive Evo® technology assures excellent register tolerance during steady state and varying press speeds at any repeat length.



TECHNICAL CHARACTERISTICS		DIAMOND HP RANGE				
MODELS		808	809	812	108	112
Print Width	mm	1000 ÷ 1600	1000 ÷ 1600	1000 ÷ 1600	1000 ÷ 1600	1000 ÷ 1600
Min. Print Repeat	mm	310 ÷ 440	350 ÷ 440	350 ÷ 440	310 ÷ 440	350 ÷ 440
Max. Print Repeat	mm	850	1070	1250	850	1250
Mechanical Speed	m/min	600	600	600	600	600



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