

31/2009 | 2009-12-21 | P.1/5

## **United Printing & Publishing – Abu Dhabi: on a quest to enhance its print product**

**Along with its recently acquired Rotoman 65, United Printing & Publishing chose to enhance its end print product by relying on bespoke vendors such as Meccanotecnica and Kolbus the leading book sewing and perfect binding manufacturers.**

The Meccanotecnica sewing machine model chosen by UPP is the Aster 180/51, with a maximum size of 320x510mm and with which a top performance with 2 up signatures coming from web press is guaranteed. The Aster 180 is easy to operate, fast to makeready and provides a high sewing quality at a speed of 180 cycles/min. Equipped with a Siemens PLC S7 Swivel touch screen colour control panel from which the operator can quickly and easily do the programming during machine run, it displays production data, machine speed and alarm messages and stores up to 30 different sewing programs that can be recalled during production. With the Aster 180, it is all about automation, the machine speed is automatically changed in case of books with complex signatures and servo mechanisms automatically position the opening head, the chain in the transport saddle, the accelerator wheel and the height of the delivery belt. An automatic compressed air control and treatment system, with a pressure regulator and filtering device, is fitted at the entrance to the sewing machine, capable of separating any condensation and impurities coming from the external supply.

UPP's new Kolbus binding line that was delivered consists of a KM 412C Perfect Binding machine with 30 clamps, paired with a ZU 841 Gathering machine with 24 stations and a Three Knife Trimmer HD 153.P.

The Perfect Binding machine KM 412C, can reach speeds of up to 15,000 cycles per hour, can process a large material range and is equipped with the Kolbus Copilot System for an easy operation. Features included in the Copilot System are a touch screen displaying machine control information as graphics, +/- keys for fine adjustments on the individual stations during production run, a Remote Diagnosis for implementation of remedy measures in case of malfunctions, automatic format and hang-out adjustments, and last but not least the Kolbus 3.60 which gives the operator information on the production data such as the degree of utilisation, operating times, downtimes, quantities produced, etc...

Dynagraph traces its roots back to the 1970s. Dynagraph is at the cutting edge of transfer of printing technology.

Dynagraph for Printing Industry llc, Dubai serves as a regional hub, operating from the commercial capital of the United Arab Emirates to coordinate all activity in the Gulf.

Dynagraph for Printing Industry Sal (Offshore) and Dynagraph Lebanon sal cover the near eastern markets.

Dynagraph is a small to medium size business with 90 employees.

Dynagraph aims for a balanced product mix between supplies, prepress, press, after press, converting, consumables and services

In prepress with both standard and bespoke hard and software solutions from DTP to high-end systems Dynagraph deals with manufacturers such as Fuji Film Graphic Arts or DuPont.

In press, sheet and webfed manroland is Dynagraph's partner provides a wide range of highly developed presses and services, whether in commercial, packaging or publishing printing.

In after press, our partners in this sector are leading manufacturers like Kolbus, MBO, Schneider\_Senator, Theisen & Bonitz, and others.

Kolbus offers the most extensive machine range in the industry. Hardcover as well as adhesive bound products such as catalogues, magazines, schoolbooks, paperbacks, and a variety of other products.

For special types of projects for the packaging and converting industry, Dynagraph works together with world leading manufacturers and foremost suppliers of products for solid board, corrugated board and flexible packaging industries e.g. Mark Andy, Winkler+Dünnebier,

Dynagraph for Printing Industry llc  
Corporate Marketing & Communication  
P.O.Box 35495  
Dubai, United Arab Emirates

Press Officer: Diana El Kara  
Phone: +971 4 3477724  
Fax: +971 4 3476761  
E-Mail: delkara@dynagraph.net

**[dynagraph.net](http://dynagraph.net)**

The press will have an unlimited variation and extension opportunities with its newly acquired Gathering machine ZU 841 (up to 18,000 cycles/h) with 24 gathering stations and 24 STA 840 bundle feeders. The Gathering machine is fast to makeready and its design makes it optimally accessible, it can be loaded from both sides. For maximum separation reliability, the separation of sections or single sheets takes place using a combination of suction cups, a separating air nozzle and a suction belt. The sections or single sheets are transported directly and straight in the transport direction of the gathering chain. Additionally it is equipped with a reject unit model AS 841 for the automatic delivery of incorrectly or incompletely gathered products/length and width monitoring.

The HD 153.P is the ideal Three-Knife Trimmer for high performance production with a speed of 6,600 cuts per hour. It is easy to use, after input of all necessary data its set-up is automatic. Equipped with the Kolbus Copilot system, it assists the operator allowing inter-machine data exchange as well as automatic machine settings, all book block dimensions entered are double checked by the Copilot.

Equally installed at UPP, the simple to use fully automated PL 771 Palletiser used for palletising any volume of books or brochures at a speed of 1,800 stacks per hour.

For the production of flap brochures, UPP is the first in the Gulf region to have acquired the Front Cutting machine XCR 100 (max. 6,000 cycles/h), which horizontally cuts the front side of the book with the gate fold cover.

As Book Production Line UPP opted for the compact BF 512, which includes a book forming and pressing machine, running at 30 cycles per minute. Its processing works as following, leaving every production stage closely monitored and controlled, guaranteeing a precise and reliable process. The product is transported via the star feeder, where the pushers grips the block and pushes it into an upright position into the next station. At the rounding and backing station, a symmetrical and perfectly shaped block is formed. The subsequent steps include gluing, gauzing and head and tail applications. After which the book block passes through the casing-in station, and when aligned in the forming station, it finally goes through joint forming and form pressing.

For the hardcover binding of book a Kolbus casemaker DA 260 with semi-automated settings was delivered. It is quickly and easily made ready for a single operator friendly production. Equipped with a decentralised drive concept, the finished cases are automatically moved out of the machine upon malfunctions, which leads to less material waste and low downtimes. The top quality of this casemaker, running at 40 cycles/min, is ensured by its turn-in system where the cases are pressed from the head to tail to place the open flaps in upright position and

through its double cylinder system at the gluing station which permits a thin and uniform glue application.

For its products cutting, UPP chose the PK 170 board cutter and the XKS Cloth Cutter.

Only rotary cutters ensure the required precision of board covers cut from board sheets. The PK 170 model operated in 2 manual operating cycles: longitudinal and cross cutting, with infinitely adjustable infeed and cutting speed and the advantage of a slip-free pull-in of the board thanks to rollers made of rubber/steel combination.

With the Cloth Cutter XKS, UPP will be able to choose to combine a splitting and cross cutting or only longitudinal splitting of the roll materials. Other advantages of the cloth cutting machine are:

- An easy access with its movable delivery conveyor
- Operator friendly thanks to its easy to open bearings for the material shafts allowing a fast material roll change
- Short make ready time when setting the circular cutters to different web widths using a fast release and clamping device and setting gauge for the circular cutters.
- Precision adjustable web tension regulation
- A smooth material infeed and flat laying of finished blanks due to an adjustable flattening device.



A proper perfect bound book goes inline with a perfect sewn book block and Meccanotecnica with the Aster 180/51 offers the right prerequisites.



The Kolbus perfect binding line includes the KM 412C binder with the conveyor and cooling/drying system as well as an inline three Knife Trimmer HD 153P.



The Kolbus model ZU 841 gathering machine with 24 stations coupled with the KM421C.



The fully automated PL 771 Palletiser



The first of its kind manufactured by Kolbus in the Gulf region the Front cutting machine XCR 100.



A BF 512 has equally been ordered for the rounding, backing and casing-in of book blocks in hard, flexible and plastic covers and subsequently pressing and joint-forming of books.



The Kolbus casemaker DA 260 for the making of the hardcover for books.



The PK 170 Board cutter