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DBMI SADDLE SYSTEM

INTELLIGENT, FULLY AUTOMATIC, PRECISE SADDLE STITCHER FOR OFFSET AND DIGITAL BOOK PRODUCTION

SUBMITTED BY KEMTEK PRINT SOLUTIONS

Duplo International, the UK based supplier of print finishing solutions, launched at drupa 2012 its fully automated saddle stitcher, capable of producing the widest variety of flat books from CD size to A4 landscape, with in-line scoring and trimming and a make-ready time of less than 60 seconds. Since the exhibition a score of DBMi systems were installed in a range of countries including the UK, USA, Germany, Finland, Belgium, Spain, Ireland to mention just a few. It was also the highlight of the Africa Print exhibition in Johannesburg in August 2012. The DBMi saddle stitcher was recently nominated for the German International Print Technology Award 2012.

Designed for off-set and digital printers, the system, which provides versatile and flexible solutions for the current saddle stitching market consists of two or four Hohner stitching heads and up to six DSC-10/60i suction collators, which have intelligent feeding capabilities for custom feed sequences.

In the duetto configuration, pictured above, the operator can choose whether to produce books from the towers or the sheet feeder, the latter to be used to finish precollated, digitally printed material.

The extremely user friendly DBMi system

offers state of the art intelligent automation, leading to a reduction in set up times and costs, making it perfect for short run digital and higher volume offset print book production. The PC controller allows storing an infinite number of job programmes, leaving the operator to simply

click on a job number setting up the entire system within 60 seconds. A large range of book sizes and thicknesses are available to cover all of the printer's requirements. Books up to 120 pages (30mm) can be produced and even the more popular A4 landscape format presents no problem for this versatile system.

THE SYSTEM CAN HANDLE A LARGE VARIETY OF PAPER SIZES:

- Max sheet size: 356mm (W) x 610mm (L)
- Min sheet size: 120mm (W) x 210mm (L)

FINISHED (TRIMMED) BOOK SIZE IN ONE-UP PRODUCTION:

- Min: 120mm (W) x 75mm (L)
- Max: 356mm (W) x 304mm (L)

FINISHED (TRIMMED) BOOK SIZE IN TWO-UP PRODUCTION, USING GUTTER CUT OPTION:

- Min: 114mm (W) x 75mm (L)
- Max: 174mm (W) x 304mm (L)
- (min size can be reduced to 90mm (W) x 75mm (L) with single stitch)

The system's range of inbuilt features such as double and miss sheet detection, paper jam and stitching sensors ensure that it operates with utmost precision and accuracy at all times, which ultimately reduces wastage.

Finished books are presented onto an external delivery conveyor to allow for easy off loading, whilst all trim waste is delivered automatically into an external hopper for recycling.
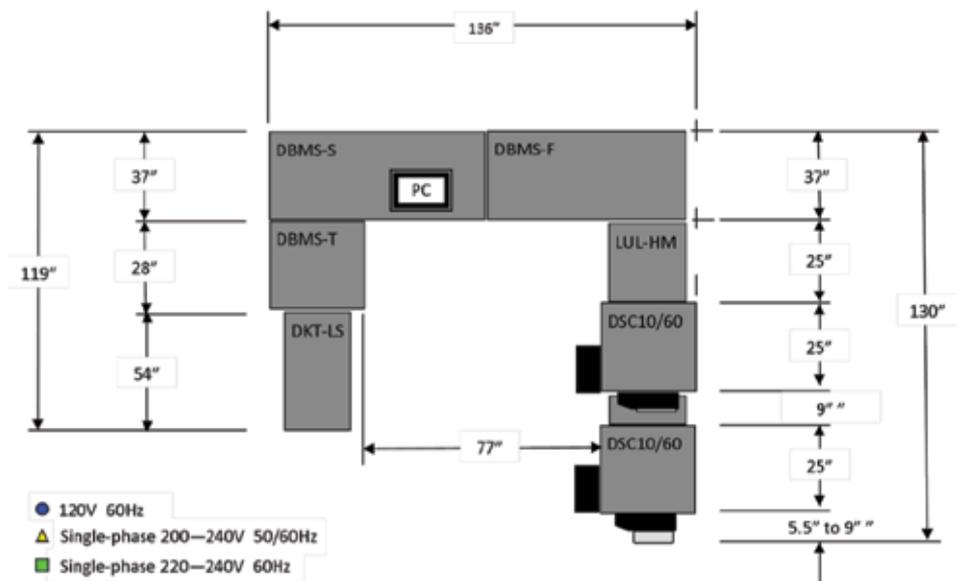
THE DBMI CAN BE USED FOR A WIDE RANGE OF APPLICATIONS SUCH AS:

- Brochures/catalogues
- Car/boat and luxury sales brochures (A4 landscape)
- Instruction manuals: mobile phones/games, cameras
- Educational course work: Schools and universities
- CD and CD Rom books
- Menus
- Medical Journals
- Programmes: Sport, theatre, music events
- Loop stitched and 2 hole punched books for ring bound applications
- Advertising and publishing manuals
- Tourist industry: Travel brochures, and guides
- Financial markets for producing personalised reports.

The DBMi Saddle System can be configured with the DSF-2200 Sheet Feeder, extending its versatility even further. The DSF-2200 makes it possible for operators to feed pre-collated digital jobs up to 200 sheets per minute.

Saddle stitching at a glance: Take an inside look of the powerful and versatile DBMi as booklets are easily collated, scored, stitched, trimmed, and delivered.

2-tower DBMi System

A Hereford based commercial printer bought the DBMi system recently to extend their production. It will replace a 6 year old Duplo system that served them well but the need for more productivity and the possibility of better quality convinced the owner to make the investment. 'The new technology is so much easier for the operator to set up and use,' he said. The sheets will be taken from the ten-colour press directly to the collating towers of the DBMi system and the finished books, coming off the end of the line, directly into the cartons for delivery.

A similar system installed a few months ago in Northern Ireland produces about 100,000 books a week now, significantly increasing the productivity of the printshop. The DBMi system

was successfully launched recently in the United States too during Graphexpo in Chicago. Videos of the event as well as the product itself are available on youtube and on Duplo International's website.

The DSC-10/60i Collators deliver subsets of up to 10 sheets directly into the DBMS Saddle Stitcher, feeding them first into the Scoring and Folding Unit (DBMS-F) where each subset is aligned, jogged, scored, and plough folded. Two side guides jog each subset to accurately align them prior to scoring and folding.
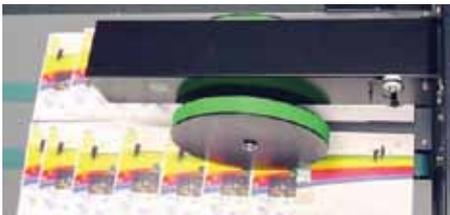
Sheets can be delivered set-by-set or sheet-by-sheet, when processing custom feed jobs using the IMBF (Intelligent Multi-bin Feeder). Once scored and plough

Customise the feeding process. Merge digital with offset, black and white with colour, and link bins for higher capacity and productivity.

Two jogging areas jog each subset prior to scoring and folding to ensure the precise alignment of the sheets.
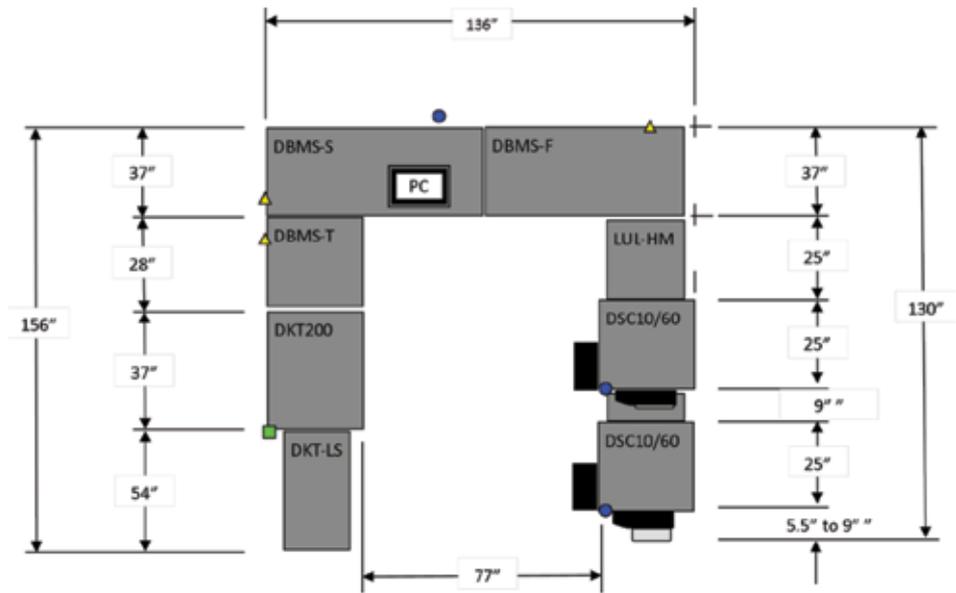

Process 2-up applications up to 9,000 booklets per hour with the optional DKT-200 Two-Knife Trimmer and gutter cutter.

The Hohner stitch heads automatically move into position when the job is recalled on the PC Controller. Optional 3-stitch and 4-stitch head kits are also available.

● 120V 60Hz
△ Single-phase 200—240V 50/60Hz
■ Single-phase 220—240V 60Hz

2-tower DBMi System with DKT-200

● 120V 60Hz
△ Single-phase 200—240V 50/60Hz
■ Single-phase 220—240V 60Hz
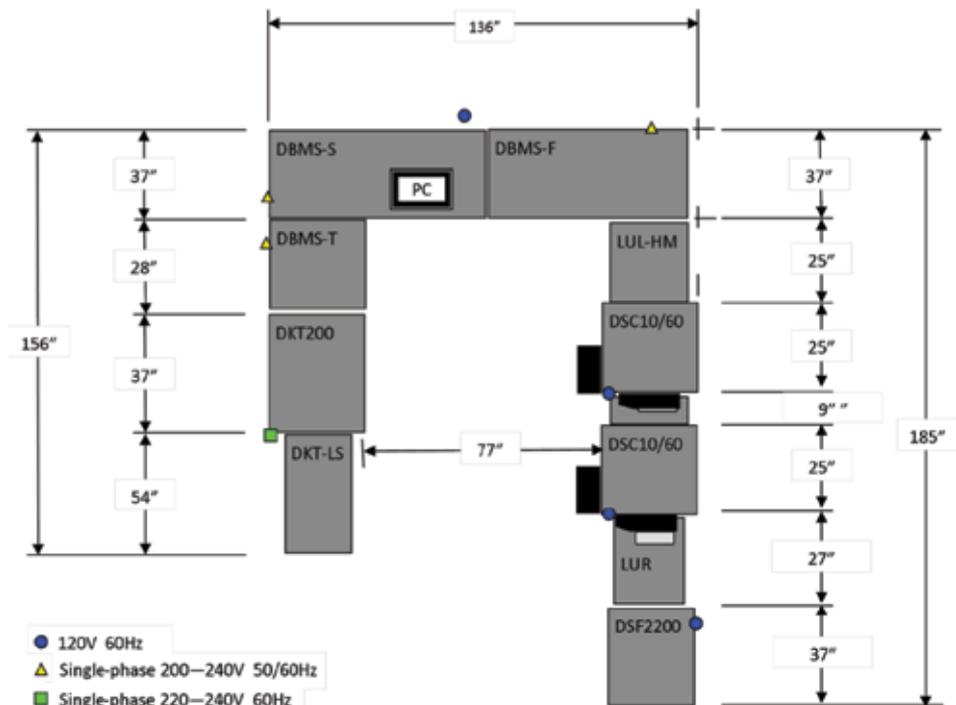
2-tower DBMi Duetto System with DKT-200

folded, all subsets are accumulated in the buffer area and compiled into a complete set. Breaking the sets into subsets allows for superior scoring and folding – resulting in thicker, flatter books.

Complete booklets are then transported into the Stitching Unit (DBMS-S) where 2 (standard), 3 or 4 stitches can be utilized for different job applications. The system utilizes heavy-duty Hohner stitch heads and can switch from 2 to 4 stitches as the job requires. When four stitch heads are installed, the two outer heads are driven separately from the two inner heads. Twin drive belts maintain

the registration of each book during the process to ensure accurate stitching along the spine.

In the Tucker Unit (DBMS-T), stitched booklets are moved up for final trimming. Books can be face trimmed only or for three-side trimming capabilities, the optional DKT-200 Two-Knife Trimmer can be added. With the DKT-200, books are trimmed at the head and foot for a full-bleed finish and with the gutter cutter, users can process 2-up applications, producing up to 9,000 books an hour.

Finished books are neatly delivered on the

long stacker. A stitch detection sensor records incorrectly stitched books, which are then separated on the conveyor for easy removal. Additionally, the optional batch kicker can be used to separate batches on the stacker at a predetermined count.

The DSS-350 Square Spine module can also be added in off-line mode to produce booklets with a square spine finish. 🖐

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