DBMi SADDLE SYSTEM
INTELLIGENT, FULLY AUTOMATIC, PRECISE SADDLE STITCHER
FOR OFFSET AND DIGITAL BOOK PRODUCTION
The DBMi Saddle System is Duplo's heaviest-duty, high volume collating and saddle stitching system. With its ability to process 24" length sheets, the DBMi is the first in its class to deliver the increasingly popular, letter landscape booklet. Designed to handle both traditional offset work as well as shorter-run digital jobs with equal ease and efficiency, the DBMi combines PC-based programming and intelligent feeding with state-of-the-art scoring and folding to produce high quality, thicker, flatter books up to 4,500 booklets an hour.

What's more, its modular design enables users to add three-knife trimming capabilities with the optional DKT-200 Two-Knife Trimmer, which can also process 2-up applications, boosting its production up to 9,000 booklets an hour! Whatever your book production requirements are, the DBMi Saddle System delivers the automation and precision needed, all on demand.

PC-CONTROLLER: 60-SECOND CHANGEOVERS

Equipped with Duplo's user-friendly PC Controller software, the DBMi becomes incredibly simple for operators of any skill level to operate, program new jobs, and manage the settings of both the collators and saddle stitcher. The intuitive software guides operators step-by-step throughout the process and gives them complete control over the job parameters and adjustments to allow them to precisely set the scoring, folding, stitching and trimming positions. Additionally, operators can use the hard-drive to store a virtually unlimited number of jobs, which can be instantly recalled to quickly and easily change over and set up the entire system within 60 seconds without any manual adjustments!
DSC-10/60i SUCTION FEED COLLATORS: MAXIMUM PRODUCTIVITY

The DBMi Saddle System utilizes the new DSC-10/60i Suction Collators. The unique 8-belt air suction feed system along with Air Management System (AMS) make these collators the most reliable in the industry. Incorporating Duplo’s patented dual fan technology, each bin comes equipped with two individual fans – one to produce a stable flow of air for paper separation and the other to generate consistent suction for feeding. With adjustments conveniently located beside each bin, the Air Management System (AMS) enables operators to easily fine-tune the amount and strength of air, if necessary. The DSC-10/60i Collators feeds a wide range of paper weights and stocks up to 300 gsm with consistency and precision.

The high resolution optical sensors add an extra level of reliability by ensuring miss or double feed errors are identified. Faulty sets are diverted into a reject tray to allow continuous operation and can easily be recovered by simply correcting and inserting them into the hand feed station. Maximize productivity by connecting up to 6 towers for a total of 60 bins. Link bins together, using the Intelligent Multi-Bin Feeding feature, for non-stop productivity.

INTELLIGENT MULTI-BIN FEEDING

Perform custom feed applications and fulfill a variety of unique job requirements by using the IMBF (Intelligent Multi-Bin Feeding) feature that comes standard with the PC Controller software. Seamlessly merge black and white documents with color media, combine un-collated offset with collated digital output, and create one-to-one marketing booklets by inserting variable data material. Take full control of the feeding sequence, select the bins to feed from, and specify how many sheets to feed from each bin. Saddle stitch these sets using the DBMS or stack them using the optional DBM-400STR high capacity stacker.

POPULAR APPLICATIONS

- CD
- 2-UP
- LETTER LANDSCAPE

Extension trays conveniently support sheets up to 24” in length.

Customize the feeding process. Merge digital with offset, black and white with color, and link bins for higher capacity and productivity.
DBMS SADDLE STITCHER: THICKER, FLATTER BOOKS

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. Once scored and plough 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.

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

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

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.

For a square spine finish, the DSS-350 module can be added in off-line mode for booklets up to 20 sheets.
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.

See the DBMi in action!
The DBMi Saddle System can be configured with the DSF-2200 Sheet Feeder, extending its versatility even further. Configurable with the DBMS Saddle Stitcher, with or without the DSC-10/60i Collators, the DSF-2200 makes it possible for operators to feed pre-collated digital jobs up to 200 sheets per minute. The DSF-2200 feeds a wider range of paper sizes as large as 14” x 24” down to 4.13” x 7.87” and features an air management system, ultrasonic feed detection, and anti-static device. The standard Optical Mark Reader (OMR) ensures variable data sets are processed accurately. Optional 1D or 2D barcode reader kits can be added to ensure full set integrity.

Duplo has engineered the revolutionary DBMi Saddle System to meet the demands of offset and digital printers. Its efficiency, productivity, and wider specifications to accommodate larger sheet sizes enable print providers to cut labor costs and reduce downtime all while increasing their profits and product offerings. As with most Duplo products, the modular design of the DBMi makes it possible to increase its versatility, if and when you need to, making the most out of your investment.

*Deliver thicker and flatter books on demand with the DBMi Saddle System – the first saddle stitcher in its class to bring you letter landscape books!*
SPECIFICATIONS

DBMS SADDLE STITCHER & TRIMMER

TYPE
Automatic saddle stitcher and trimmer

PAPER SIZE
Width: 4.72" - 14.01"/120 - 356 mm
Length: 8.27" - 24.01"/210 - 610 mm

FINISHED SIZE NO TRIM
Width: 4.72" - 14.01"/120 - 356 mm
Length: 2.95" - 9.96"/75 - 253 mm

FINISHED SIZE WITH TRIM
Width: 4.72" - 13.78"/120 - 350 mm
Length: 2.95" - 9.96"/75 - 253 mm

SPEED
Up to 4,500 sets/hour

PAPER CAPACITY (STITCH/FOLD)
Up to 30 sheets

PAPER TYPES
Bond, coated

FACE TRIM
0.04" - 1" (1 - 25 mm) (2.95"/75 mm when trimming 12 sheets or less)

TRIM THICKNESS
0.24"/6 mm (30 sheets folded, equivalent to 60 sheets)

NUMBER OF STITCHER HEADS
2 standard, 3 or 4 optional

CONTROLLER
PC-based, MS Windows Operating System

JOB MEMORIES
Unlimited (determined by hard-drive capacity)

POWER
200 - 240V 50/60Hz, 3 outlets, 2.4A

DIMENSIONS (W x D x H) & WEIGHT
DBMS-F TURN/FOLD SECTION
Dimensions: 64" x 37" x 32"/1627 x 941 x 805 mm
Weight: 693 lbs./314 kg

DBMS STITCH SECTION
Dimensions: 73" x 37" x 46"/1846 x 935 x 1187 mm
Weight: 942 lbs./427 kg

DBMS-T FACE-TRIM SECTION
Dimensions: 29" x 28" x 47"/719 x 700 x 1187 mm
Weight: 606 lbs./275 kg

OPTIONS
3 Stitch Head Kit; 4 Stitch Head Kit; DKT-200 (requires D-Port Converter)

DSC-10/60i COLLATOR

NUMBER OF BINS
10, 20, 30, 40, 50, 60 (10 bins per tower)

PAPER SIZE
Width: 4.1" - 14"/105 - 356 mm
Length: 5.8" - 24"/148 - 610 mm

PAPER WEIGHT
52 - 300 gsm

BIN CAPACITY
2.6"/66 mm

SPEED
Bookeymaking: Up to 5,000 sets/hour
Collating: Up to 10,000 sets per hour

FEED SYSTEM
Patented dual fan feed system for each bin

CONTROLLER
PC-based, MS Windows Operating Systems

POWER
120V 60Hz 8.4A

DIMENSIONS (W x DxH)
Dimensions: 24" x 33" x 78"/610 x 830 x 1972 mm

WEIGHT
674 lbs./306 kg

OPTIONS
Extension Tray Kit; DSC-10/60 Bridge; LUR (requires D-Port Converter)

DKT-200 2-KNIFE TRIMMER (optional)

BOOKLET SIZE
Width: 4.13" - 4.80"/105 - 356 mm (no trimming); 4.81" - 14.02"/122 - 356 mm (2 side trim no gutter cut); 7.96" - 14.02"/202 - 356 mm (2 side trim with gutter cut)

FINISHED SIZE
Width: 4.72" - 13.94"/120 - 354 mm

TRIM WIDTH
0.04" - 1.18"/1 - 30 mm, gutter: 0.24"/6 mm

TRIM METHOD
2 upper blades, 2 lower blades

TRIM THICKNESS
Within 5 mm (no gutter): fine 81.4 gsm/22 lb.
Within 2.4 mm (gutter): fine 81.4 gsm/22 lb.

POWER
220 - 240V 60Hz 4.4A 640W

DIMENSIONS (W x DxH)
Dimensions: 37" x 32" x 47"/940 x 813 x 1194 mm (with stacker)

WEIGHT
1,040 lbs./472 kg

OPTIONS
DKT-G 6 mm Gutter Cutter; DKT-K Batch Kicker

DKT-200 specifications are subject to DBMS specifications.

Some configurations shown may not be immediately available.

2-TOWER DBM SYSTEM

2-TOWER DBM SYSTEM WITH DKT-200

2-TOWER DBM DUETTO SYSTEM WITH DKT-200