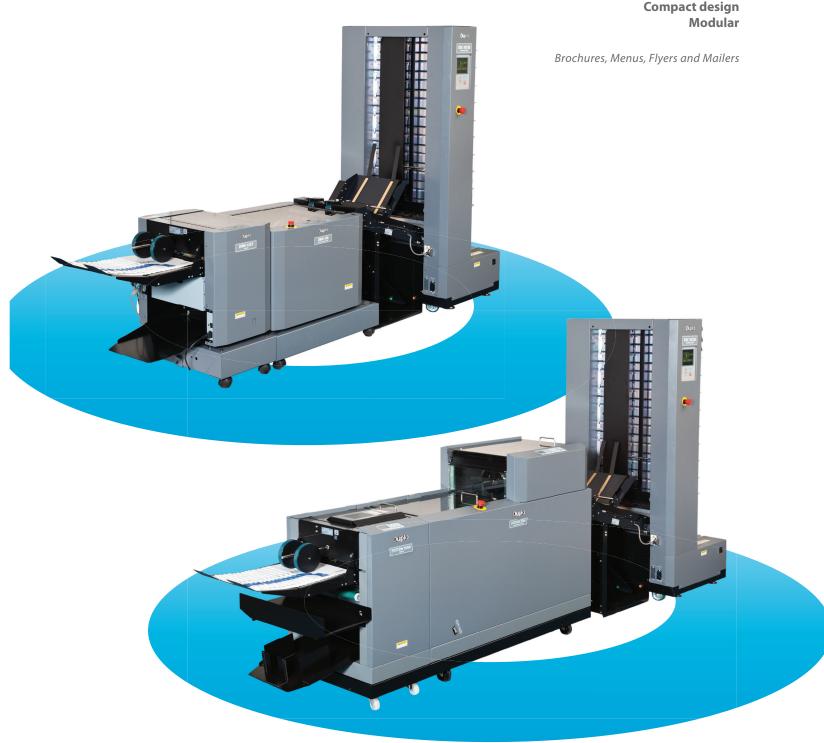




# **DSC 10/20** SUCTION COLLATOR

## HIGH-SPEED BOOKLETMAKING WITH A COMPACT COLLATOR

Fully automated bookletmaking systems Quick and simple set-up Compact design Modular



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### **SALES OVERVIEW**

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- 2. Target customers
- 3. Upgrade benefits
- 4. Machine compatibility
- 5. Competitive comparisons
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# **PRODUCT OVERVIEW**

## **1 OVERVIEW**



Duplo presents the 120C and 350C Suction Booklet Sytem. The 350C system consists of the new DSC-10/20 Suction Collator and DBM-350 Bookletmaker. This system is ideal for high production bookletmaking, producing stitched books at 3,000 books per hour. The 120C system consists of the DSC-10/20 and DBM-120 Bookletmaker, this system is great for small businesses with limited space.



## 2 MARKETS & APPLICATIONS

DSC-10/20 + DBM-120 DSC-10/20 + DBM-350 DSC-10/20 + DCR-ST

System 5000 System 3500 350C Booklet System System 2000 120C Booklet System Mini System

Duplo already offer a range of sophisticated Bookletmaking Systems, however the DSC-10/20 brings two brand new systems to the product range offering the customer and even better upgrade path.

The price/performance of the new systems are well suited to provide a perfect finishing solution. The customer can upgrade their collator or bookletmaker to advance in the upgrade path

|                     | DFC-100            | DSC-10/20           | DC-10/60 Pro        |
|---------------------|--------------------|---------------------|---------------------|
| Feeding Method      | Friction           | Suction             | Suction             |
| Feeder Capacity     | 28mm               | 35mm                | 65mm                |
| Stacker Capacity    | 78mm               | 100mm               | -                   |
| Min Paper Size      | 140 x 160mm        | 139 x 210mm         | 120 x 148mm         |
| Max Paper Size      | 320 x 450mm        | 320 x 450mm         | 350 x 500mm         |
| Paper Weight        | 53 - 127gsm        | 53 - 157gsm         | 50-300gsm           |
| Speed               | 70 spm (straight)  | 120 spm (straight)  | 150 spm (straight)  |
| Additional Function | Straight, offset,  | Straight, offset,   | Straight, offset,   |
|                     | interleave, block, | interleave, block,  | interleave, block,  |
|                     | paper ejection,    | paper ejection,     | paper ejection,     |
|                     | tandem             | tandem, hand-marry, | tandem, hand-marry, |
|                     |                    | waiting mode        | waiting mode        |
| Dimensions (wxdxh)  | 820 x 618 x 1000mm | 745 x 780 x 1708mm  | 630 x 750 x 1972mm  |

## 3 FEATURES AND BENEFITS (SUMMARY)

### **DSC-10/20 SUCTION COLLATOR**

### **Operating Speed = Productivity**

The Mid-range DSC-10/20 Suction Collator can reach speeds of 120 spm (straight) rivalling many high end collators on the market e.g Watkiss Vario and Nagel S8.

### Automatic Belt Suction Feeder = Reliability & Productivity

The belt suction feeder ensures consistent delivery of the sheets, into the machine at high speed and with minimal risk of marking, a problem typical of competitive devices using bottom feed systems.

### **Colour Touch Screen Control Panel = User-Friendly**

The colour touch screen control panel is very easy to navigate, the tabs allow the operator to make any adjustments or switch to a different collating mode.

### 35mm Feeder Capacity = Less user intervention

A 35mm feed pile height is complementary to the rated speed and minimises any re-load time. The 35mm capacity means that the operator can perform other tasks, maximising productivity in the workplace.

### Modular = Connects to DBM-120, DBM-350 and DBM-500

Unlike other machines on the market, the modularity Duplo's collators and bookletmakers provide the customer with a flexible upgrade path. Customers who have a DFC-100 friction collator can upgrade to the DSC-10/20 if they wish to increase production or feed different types of stocks.

### **Compact Size = Ideal for small businesses**

The DSC-10/20 has been designed to take up minimal space whilst maintaining a high performance. With such a small footprint, the DSC-10/20 is ideal for small/medium businesses with limited space.

## FEATURES AND BENEFITS OF DBM-120/120T (SUMMARY)

### **User-Friendly = Less down-time**

- Automatic size change in 14 seconds
- 10 pre-set sizes and 3 custom sizes
- Easy to see/clear jams
- Feeds a wide range of stocks

### Hand Feeding = Flexible operation

- Ideal for feeding pre-collated sets
- Saves loading time
- Great for very short runs

### Four Finishing Modes = Produce a range of applications

- Side stapling
- Corner stapling
- Folding
- Saddle stapling

### **Toggle dial = Quick set-up**

• Makes it easy to scroll through the menu and adjust the job parameters

### Hand Feeding = Flexible operation

- Easy to locate it places with limited space
- A great solution for the smaller busines

## FEATURES AND BENEFITS OF DBM-350/350T (SUMMARY)

### Versatile operation = Limited restrictions

- Produce booklets or simply collated sets (optional corner stitch available)
- Integrated spine press to produce flatter books
- A variety of paper sizes including 100 x 105 mm with the optional small booklet kit
- Ability to upgrade the stitching heads to a Hohner or Hohner loop stitching heads.

### Accurate = High quality bookletmaking

- Centre registered belt drive for controlled delivery
- Twin drive belt conveyor
- Fine adjust stitch/fold/all paper guide positions) by 0.01mm
- Adjustable trim length from 1 to 20 mm

### High Productivity = Ideal for tight deadlines

High production speeds, both in terms of running speeds and running time:

- 3000 A5 booklets per hour
- Heavy-duty build
- Ability to by-pass folder and spine press

### User Friendly = No need for a skilled operator

- Settings of the bookletmaker can be adjusted on the collator tower
- 20 job memory programs with automatic set-up
- Easy to clear jams
- Feeds a wide range of stock weights with little adjustment
- Conveyors shingle the books for ease of handling.

## 4 FEATURES AND BENEFITS (DETAIL)

### DSC-10/20 COLLATORS

Benefit: Productivity Bin Loading up to 35mm



## *Speed up to 7,200 (A4)SPH* Ability to increase workflow and increase profitability.

### Auto-ejection of "miss/double" sets

Allows for non-stop production with each faulty set diverted, ensuring no loss of production giving on average a 20% increase in production.

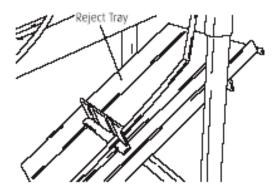
### **Block modes**

Up to 2 towers can be programmed to continuously feed, ensuring non-stop production.

### **Benefit: Accuracy**

### Auto-ejection of "miss/double" sets

Allows for non-stop production with each faulty set diverted, ensuring no loss of production. Giving at least a 20% increase in output.



### **Detection position**

The double sheet setting can be moved to either the front/back of the sheet, in cases of solid print areas, allowing more control of the job.

### Miss/double/jam sensors

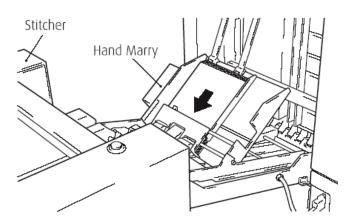
Each station has self setting detectors to ensure each set is complete and accurate.

### **Benefit: Versatility**

Unique feed system with quiet independent fans No need for an expensive noisy compressor.

### Hand-marrying

This enables the operator to merge extra sheets with the set collated. This will enable each job to be collated in one pass when more pages are required within the set. This feature can also be used to finish incomplete books.



### **Benefit: Ease of operation**

### Built-in auto-setting software

Detects the length of each sheet for maximum set speeds ensuring compatibility with the attachments.

Also sets up the correct fold pressures and in-feed height of belts of attachments (DBM-350/350T), making each job a simple push button operation.

### Hand-marrying

This enables the operator to merge extra sheets with the set collated. This will enable each job to be collated in one pass when more pages are required within the set. This feature can also be used to finish incomplete books.

### Miss/double/jam sensors

Each station has self setting detectors to ensure each set is complete and accurate.

### **DBM-120**

The DBM-120 can be either hand-fed or connected online to a Duplo collator creating a 2,400 booklet/hour finishing system. Flat lying staples and the optional DBM-120T edge trimmer result in a strong and professional booklet.

### **Benefit: Productivity**

### User-friendly = Quick automatic set-up

Changing between booklet sizes takes just seconds. Select the required size, and the side guides adjust automatically. For smaller books, the staple positions can be brought closer together if required.

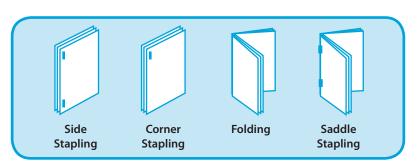
### Hand Feeding = Flexible operation

The DBM-120 can be used as a standalone bookletmaker and manually fed through the hand feeder. This is ideal for very short run or pre-collated jobs such as those from a digital printer.



## Four Finishing Modes = Produce a range of applications

The DBM-120 is capable of side stapling, corner stapling, folding and saddle stapling so just about any finishing requirement is possible.



### **Toggle dial = Quick set-up**

A simple toggle dial screen allows the operator to input and store up to 13 separate programs for quick recall later.



### **DBM-350 BOOKLETMAKER**

## **Speeds up to 3,000(A5)bph = High Production** Fast turnaround of jobs, giving at least a 50% increase in production over the competition.



### Automatic set-up of all positions = User-Friendly

Stitch; Fold; Side Guides; Back Knock-Up (Stitch); Fold Positions; Fold Rollers; Corner Stitch; Sheet Length

This allows any operator in the print department to use the machine. Saving costs on employing experienced finishing staff. Also gives an increase in production.

The standard heavy-duty stitching heads can be upgraded to Hohner.

### Accessories = Convenience

No need to insert any accessories to control the book when changing paper sizes. This ensures each job changeover is completed within 50secs.

### **Corner stitch tray = Produce Various Applications**

Built-in receiving tray for corner-stitching enables the operator to change jobs from booklets without the need to remove any part of the machine.

### **Benefit: Accuracy**

### Centre registered belt drive = Control

Offers the customer more control of the paper, i.e.:- A5 landscape.

### **Drive belts = High Quality**

Drive belts in the fold section ensure each book is driven to the back stops. The belts stop revolving whilst the fold knife is activated to prevent any marking.

### "Out of wire" sensor = No Need to Waste Books

Machine stops when the spool is empty preventing wasted books.

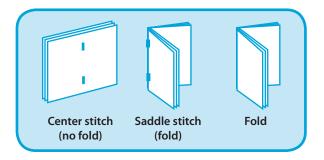
### Self-setting fold rollers = Automated Precision

All folding rollers are calibrated automatically for paper thickness for each job, ensuring each booklet has the correct spine pressure.

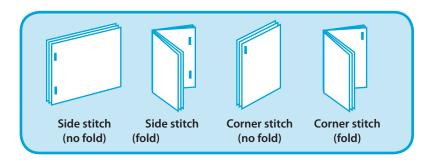
### Auto set-up of sheet and set work = Quick Set-up

The DBM-350/350T has the ability to accept both digitally printed pre-collated sets and litho printed stock from a conventional press. This enables the printer to offer his customer both options without the need to purchase another bookletmaker.

### **Range of finishing output**



### With corner stitch kit (optional)



(This option can only be used when the Square Spine is disconnected).

### **Benefit: Ease of operation**

### 20 memory job programs = Quickly Switch Jobs

Allows the operator to simply select the job number and set up each job within 50 secs.

### LCD control panel = Easy to Navigate

A simple and operator friendly control panel, enables all measurements and fine adjustments to be input and stored for the DBM-350 and 350T

### **DBM-350T TRIMMER**

**Benefit: Productivity** 

### Heavy duty = Robust

A solidly constructed design enables books up to 4.2 mm in thickness to be trimmed at speeds of up to 3,000 (A5) bph.

### Automatic trim position = Less Downtime

Each job is automatically set for the finished book size minimising operator intervention and set-up time.

### **Benefit: Accuracy**

### Automatic in-feed and drive belts

The belts are automatically set for the paper gap between each set of belts (x3). This feature not only saves time but ensures that each book is correctly delivered to the trim and conveyor positions.

### Skew adjustment = Precise

The DBM-350 features two skew adjustments. The first is located on the front of the machine. It adjusts the angle of the folding stopper to correct folding misalignment. The second dial is located inside the machine. This will adjust the guides for the collated sheets before they reach the stitching heads. This is useful if the sheets have been pre-guillotined incorrectly.



## 5 DESCRIPTION OF OPERATION

The 120C and 350C Suction Booklet System have been designed to be easy and simple to operate, and to allow the customer to obtain high productivity resulting in a quality finished product and a profitable production line.

### **SET-UP**

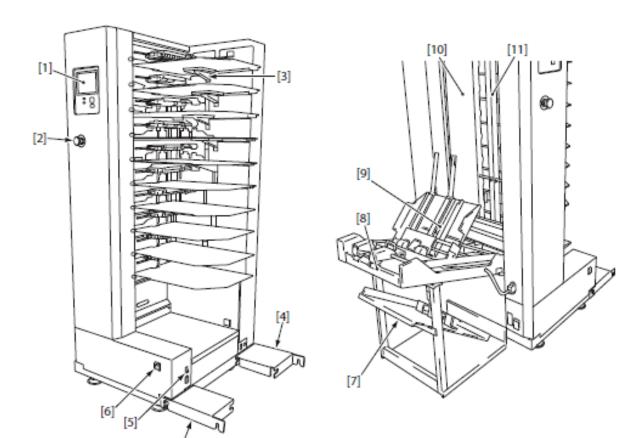
- The paper stock is loaded into the bins of the DSC-10/20 (35mm capacity), positioned to one side and held in place with the magnetic guides.
- The set is then calibrated for miss/double detection by a simple selection on the touch screen.
- The book size dimensions and all of the stitch/fold and 3-side trim finished sizes are entered on the control panel of the DBM-120/350 and stored for future use. These programs can then be simply uploaded, or edited for future use.
- Once the program is selected, the DBM-120/350 automatically sets itself up to all of the input measurements within 50secs.

### FEEDING (DSC-10/20)

- The vacuum feeding system is designed to feed a wide range of litho and digitally printed paper from 53-157gsm, with the minimal amount of adjustment. (300gsm for covers)
- Both the air and vacuum are controlled by silent fans. Air is distributed through the front of the stack to create lift and separation.
- The belts have a vacuum channel between them, allowing each sheet to be fed accurately from the top of the paper stack, and inserted into the pick-up rollers.
- The set is then delivered by a twin belt drive into the DBM-120/350. This top feed process is extremely gentle with paper stocks, and minimises the risks of marking and mis-feeding.
- Should a miss or double feed occur then the set is automatically diverted to the reject tray, with no loss of production. This set can then be simply corrected and inserted by hand into the DBM-120/350.

## **6 COMPONENTS**

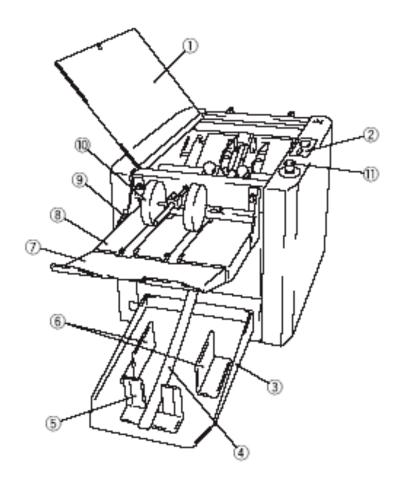
### DSC-10/20 SUCTION COLLATOR



| No   | Name                      | Function   |  |
|------|---------------------------|--|--|
| [1]  | Control Panel             | Consists of the touch panel, keys and lamps.                                     |  |
|      |                           | Used for operating or setting the machine.                                       |  |
| [2]  | Emergency Stop Switch     | Press this switch to stop operations in emergency.                               |  |
| [3]  | Paper Feed Table Base     | Supports the paper feed table  |  |
| [4]  | Connecting Plate          | Used for connecting and securing two towers together.                            |  |
| [5]  | Main Power Switch         | When pressed, the power turns ON and the machine sets into the standby<br>state. |  |
| [6]  | Power Switch              | Turns ON/OFF the power of each tower.  |  |
|      |                           | When connecting two towers, the power of both towers can be turned ON/           |  |
|      |                           | OFF using the switch of tower A.   |  |
| [7]  | Reject Tray               | When feed error occurs, faulty sets are ejected to this tray.                    |  |
| [8]  | Lifting Unit              | Transports collated paper to the downstream unit.                                |  |
| [9]  | Hand Marry                | Set paper here when feeding paper manually.                                      |  |
|      |                           | Enables manual feed of sets consisting of up to 10 sheets of paper at a time.    |  |
| [10] | Vertical Conveyance Board | Conveys the fed paper.   |  |
| [11] | Sub Guide                 | Presses the edge of the paper being conveyed to prevent the paper from           |  |
|      |                           | rising.  |  |

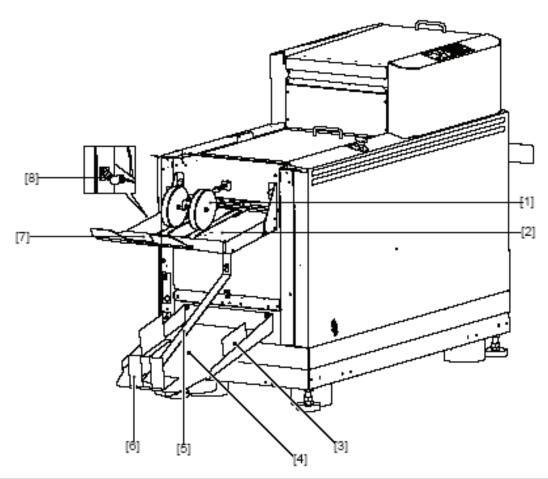
[4]

### **DBM-120 BOOKLETMAKER**



| No. | Name                            | Operation   |
|-----|---------------------------------|---|
| 0   | Top cover                       | When opened during operations, the unit will make an emergency stop.  |
| 2   | Control panel                   | Refer to "6. OPERATING".  |
| 3   | Side-stapled paper<br>stacker   | Side-stapled paper and corner-stapled paper are ejected onto this stacker.<br>Rejected paper are also ejected here.                             |
| ۲   | Paper holder                    | Holds the paper sets ejected.   |
| 5   | Paper holding guide             | Used for side-stapling and corner-stapling the paper.   |
| 6   | Guide                           | Used for side-stapling and corner-stapling the paper.   |
| Ø   | Saddle-stapled paper<br>stacker | Saddle-stapled/folded paper and center-folded paper are ejected onto this<br>stacker.   |
| (8) | Belt stacker                    | Conveys saddle-stapled/folded paper and center-folded paper to the saddle-<br>stapled paper stacker.  |
| 9   | Connector for belt<br>stacker   | Connect the cable of the belt stacker.  |
| 0   | Paper guide roller              | Holds the saddle-stapled/folded paper and center-folded paper as an aid for the<br>belt stacker.  |
| 0   | Emergency stop switch           | Press this switch only to stop operations in emergency. Normally, use the stop<br>key of the upstream unit (collator, etc.) to stop operations. |

### **DBM-350 BOOKLETMAKER**



| No. | Name                | Function   |
|-----|---------------------|--|
| [1] | Paper guide roller  | Holds the saddle-stitched/folded paper as an aid for the belt stacker. |
| [2] | Belt stacker        | Sends stitched and folded or folded booklets to the fold stacker.      |
| [3] | Guide               | Aligns unfolded booklets in the non-fold stacker.                      |
| [4] | Non-fold stacker    | Receives unfolded booklets.  |
| [5] | Paper holder        | Holds a booklet ejected.   |
| [6] | Paper holding guide | Stops unfolded booklets ejected to the non-fold stacker.               |
| [7] | Fold stacker        | Receives folded booklets.  |
| [8] | Stacker connector   | Connects the power cord of the belt stacker.                           |

## 7 INSTALLATION REQUIREMENTS

| ltem                 | Dimensions<br>W x D X H (mm) | Shipping Weight (kgs) |
|----------------------|------------------------------|-----------------------|
| DSC-10/20            | 1050 x 920 x 1880            | 293                   |
| BRIDGE UNIT          | 870 x 450 x 340              | ТВА                   |
| STACKER UNIT         | 630 x 600 x 400              | ТВА                   |
| DBM-120              | 1300 x 700 x 550             | 120                   |
| DBM-120T             | 537 x 550 x 576              | 83                    |
| DBM-350 BOOKLETMAKER | 820 x 650 x 1030             | 230                   |
| DBM-350T TRIMMER     | 920 × 650 × 841              | 80                    |
| ASM-350 SQUARE SPINE | 707 x 745 x 1242             | 132                   |

#### **PRODUCT SPECIFICATIONS** 8

### MODEL

### DSC-10/20

| Туре                   | Suction Collator                              |
|------------------------|---|
| Number of Bins         | 10 Bins                                       |
| Feed System            | Belt Suction Feed System by fan Motor         |
| Bin Capacity           | 35mm (400 sheets 64gsm)                       |
| Maximum Paper Size     | 320 x 450 mm                                  |
| Minimum Paper Size     | 139 x 210 mm                                  |
| Paper Weight           | 53 - 157 (300 gsm for cover)                  |
| Speed                  | 7,200 sph                                     |
| Error Detection        | Double Feed, Feed Error, Paper Jam            |
| Additional Functions   | Preset, Alternate Mode, Block Mode,           |
|                        | Interleave Insert Mode, Paper Reject, Waiting |
| Dimensions (W x D x H) | 745 x 760 x 1708 mm                           |

### **DBM-120**

#### Set-Up Time Automatic Size Changes in 14 secs Automatic Size Changes in 14 secs Programmes 10 pre-set sizes, 3 custom sizes On-Line / Off-Line Yes / Yes Yes / Yes Max Book Thickness (80gsm) 80 page book (20 flat sheets) 80 page book (20 flat sheets) Max Corner Stitch Thickness (80 gsm) 25 flat sheets **Staple Positions** Saddle/Side/corner/Fold only Max Speed Up to 2,400 A5 book / hr Up to 2,400 A5 book / hr Booklet Size (W x L) Max (booklet) size: 320 x 225 mm Max (booklet) size: 320 x 225 mm Min (booklet) size: 148 x 100 mm\* Min (booklet) size: 148 x 100 mm Max (sheet) size: 320 x 450 mm Max (sheet) size: 320 x 450 mm Min (sheet) size: 148 x 200 mm\*\* Min (sheet) size: 148 x 200 mm\* Side/Corner Stapling (L x W) Min 139 x 210 mm Max 231 x 320 mm Stitch/Staple Style Staple **Detection Systems** Jam, misfeed, staple empty Waste bin full Max Trim Cut 20 mm **Trim Adjustments** 0.4 mm increments 5000 Staple Capacity 537 x 550 x 576 mm Dimensions $(W \times D \times H)$ 1300 x 700 x 550 mm

Mode

**DBM-120T** 

83kg

230V 50Hz 1.5A

\*with optional small booklet kit and DBM-120 trimmer min booklet size is 148 x 100 mm \*\* with optional small booklet kit

230V 50Hz 1A

120kg

Net Weight

Power Supply/Consumption

### **DBM-350 BOOKLETMAKER**

### **PRODUCT SPECIFICATION**

| Product name              | DBM-350   |  |
|---------------------------|---|--|
| Machine type              | Automatic Bookletmaker  |  |
| Feed process connectivity | By Collator: DC-10/60, pro DC-10/60, DC-8/32  |  |
| Set speeds                | 3,000 booklets p/h (10 sheets A5)<br>2,700 booklets p/h (10 sheets A3)<br>3,000 booklets p/h (side/corner stitching A4)   |  |
| Book thickness            | 300gsm cover + 19shts of 80 gsm   |  |
| Book sizes                | Min 148 x 85mm* Max 320 x 230mm   |  |
| Stitching heads           | Deluxe Stitcher model 2601DDPHD251/2  |  |
| Stitch positions          | Saddle, corner and side   |  |
| Counters                  | Total   |  |
| Book accuracy             | +/- 0.01mm on paper guides/stitch/fold positions  |  |
| Features                  | <ul> <li>Automatic set up of :-</li> <li>1 Stitch /Fold/Trim positions</li> <li>2 Side Guides in stitch and fold area</li> <li>20 memory programs</li> <li>Accepts sheet x sheet and set x set</li> <li>Built -in corner-stitch tray</li> <li>35-60/sec set-up time</li> <li>Flat paper path</li> <li>Small Booklet Kit (optional)</li> <li>Hohner Stitch heads (optional)</li> </ul> |  |
| Trimmer Connectivity      | DBM-350T  |  |
| Dimensions (w x d x h)    | 820 x 650 x 1030 mm   |  |
| Power                     | 220-240V 50/60Hz  |  |
| Weight                    | 230kg   |  |

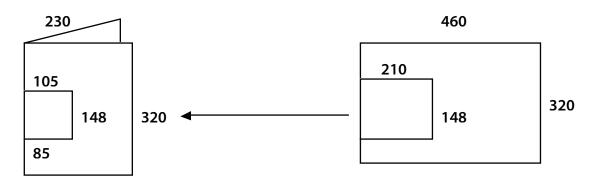
\*105 x 100 mm with small booklet kit

### DBM-350T TRIMMER

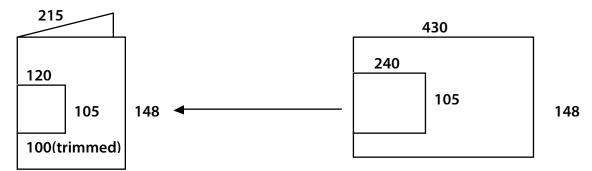
### **PRODUCT SPECIFICATION**

| Product name           | DBM-350T  |
|------------------------|---|
| Machine type           | Automatic Trimmer   |
| Feed process           | Fed through by DBM-350 Bookletmaker   |
| Set speeds             | 3,000 booklets p/h (10 sheets A5)<br>2,700 booklets p/h (10 sheets A3)<br>3,000 booklets p/h (side/corner stitching A4)   |
| Trim thickness         | 300gsm cover + 19shts of 80 gsm   |
| Book sizes (untrimmed) | 148 x 105 – 320 x 230 mm  |
| Trim margin            | 1 - 20 mm   |
| Counter                | Total   |
| Programmable           | By programs on the DBM-350  |
| Trim mechanism         | Top / bottom two-blade  |
| Features               | <ul> <li>Automatic set up of:</li> <li>Trim position</li> <li>In-feed belt height</li> <li>Drive belts for positive control (upper &amp; lower)</li> <li>Manual skew adjustment</li> <li>Fine adjustment</li> </ul> |
| Connectivity           | DBM-350   |
| Dimensions (w x d x h) | 920 x 650 x 841 mm  |
| Power                  | 220-240V 50/60Hz  |
| Weight                 | 80kg  |

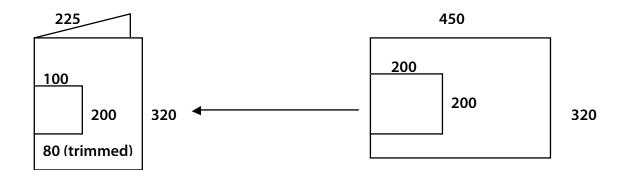
### DBM-350 STANDARD



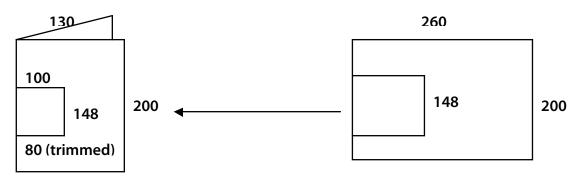
### SMALL BOOKLET KIT



### DBM-120 STANDARD



SMALL BOOKLET KIT



## 9 TRAINING SCHEDULE

### Content

- Identification of components
- Familiarity with service manuals
- Understanding specifications
- Programming and general operation
- Practice with programming and sample jobs
- Updates and latest technical bulletins
- Health & safety issues
- Installation procedure
- Troubleshooting & fault finding

### Location

Technical Department Duplo International Limited Sandown Industrial Park Mill Road Esher Surrey KT10 8BL United Kingdom

### **Alternative Locations**

It can be possible to provide service training for a number of companies in an alternative location. The host distributor needs to provide one machine plus all options in a suitable environment. During build-up for an exhibition is not acceptable.

### To Arrange a Training Course

Visit the PTC, go to "Technical" then "Information" and select the new "pre-training sheet" and follow the instructions for arranging training.

Instruction and installation manuals can also be found on the PTC. If you have any other questions, please use the following email address:

training@duplointernational.com

Technical Help Desk - 01372 478219

### **10 MANUALS**

|                  | English | French | Italian | Spanish | German | Russian | Polish |
|------------------|---------|--------|---------|---------|--------|---------|--------|
| USER MANUAL      | Y       | Y      | Y       | Y       | Y      | Y       | Y      |
| LCD USER DISPLAY | Y       | Y      | Y       | Y       | Y      | Y       | Y      |
| SERVICE MANUAL   | Y       | Ν      | Ν       | Ν       | Ν      | Ν       | Ν      |
| PARTS LIST       | Y       | Ν      | Ν       | Ν       | Ν      | Ν       | Ν      |

In accordance with standard Duplo policy, manuals are available as laid out above. Machines will be shipped with an English operator manual as standard.

User manuals in other languages as well as the service manual and parts list are available to download from the Product Technical Centre (PTC) on the www.duplointernational.com website.

A registered password is required to enter the PTC. If you do not have one apply at webmaster@duplointernational.com

## **11 OPTIONS**

### **Bridge Unit**

The bridge unit allows the customer to connect 2 DSC-10/20 Collator towers together in tandem. This provides the user with the opportunity to produce an 80-page book. The customer can use both towers to send a collated set to the bookletmaker or to the optional stacker.



### Stacker

This unit fits on to the right side of the collator as a built in stacker, this coincides with the collators main advantage of being a compact machine. The optional stacker can be used to either straight stack or offset stack and can reach speeds of 7,200 sph.

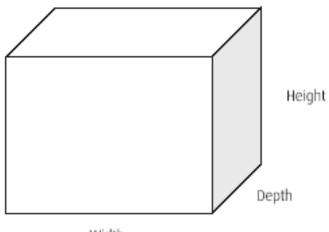


## **11 PRODUCT ORDERING DETAILS**

| Order Code | ltem                   |
|------------|------------------------|
| 14A-21     | DSC-10/20              |
| 15H-32     | Optional Bridge Unit   |
| 15H-31     | Optional Stacker       |
| 11C-44     | DBM-120 Bookletmaker   |
| 11F-44     | DBM-120T Trimmer       |
| 13Y-21     | DBM-350 Bookletmaker   |
| 13Z-21     | DBM-350T Trimmer       |
| 13Y-31     | Small Booklet kit      |
| 062-048A   | ASM-350                |
| 914-882    | ASM-350 Connection Kit |
| 13Z79270   | Narrow Waste Bin       |

## **13 SHIPPING DETAILS**

| ltem                 | Dimensions<br>W x D X H (mm) | Shipping Weight (kgs) |
|----------------------|------------------------------|-----------------------|
| DSC-10/20            | 1050 x 920 x 1880            | 293kg                 |
| Bridge Unit          | 870 x 450 x 340              | ТВА                   |
| Stacker Unit         | 630 x 600 x 400              | ТВА                   |
| DBM-120 Bookletmaker | 1300 x 700 x 550             | 120kg                 |
| DBM-120T Trimmer     | 537 x 550 x 576              | 83kg                  |
| DBM-350 Bookletmaker | 1620 x 680 x 1130            | 272kg                 |
| DBM-350T Trimmer     | 1120 x 690 x 600             | 87kg                  |
| Small Booklet kit    | 670 x 150 x 100              | 2.7kg                 |
| ASM-350 Square Spine | 707 x 745 x 1242             | 132kg                 |



Width

### Delivery Schedule

The model is available now.

# **SALES OVERVIEW**

## **1** APPLICATIONS

The 120C and 350C Suction Booklet System can be used for a wide range of output including:

- Magazines
- Brochures
- Catalogues
- Medical journals
- Programs Sport, Theatre
- Course work Educational
- Collated work for binders i.e.:- for DuBinder; DB-200, wire, coil, ring binding.
- Loop stitch brochures for ring binders (optional)
- CD books
- N.C.R. set collating
- Menus













## 2 TARGET CUSTOMERS

### **Existing users**

The easiest place to start is by using your current database of users of the Mini System

- Upgrade & trade in potential
- Customers whose jobs and requirements have changed
- Customers who have invested in digital print

### By market segment

- Small medium commercial printers
  - Digital printers
- Inplants ie:-
  - Banks
  - Legal firms
  - Accountancy firms
  - Insurance companies
  - Local and central Government departments
  - Health authorities.
  - Universities and colleges
- Print finishers





### **Types of user**

The 350C Suction Booklet System will in general appeal to medium end user customers, those that require:-

- Average volume of books approx 50,000 books per month
- Producing both litho/digital work
- Producing books with a need for accuracy (CD books)
- Reduce their costs and time with guillotining operations
- Those with several high speed colour presses
- The need to produce work on high quality stocks
- The print finisher who relies on a fast turnaround.

### **Types of user**

The 120C Suction Booklet System will in general appeal to small-medium end user customers, those that require:-

- Producing both litho/digital work
- Short print runs
- The need to produce work on high quality stocks
- The print finisher who relies on a fast turnaround.
- Businesses with limited space

### Sales issues to discuss with the customer

- Thickness of the books ie:- number of pages
- Types of publications CD, Menu's, journals etc
- Types of paper stocks Laminated, Board, NCR
- Paper sizes and max/min book size
- How are they printed digital or litho? Is it sequentially printed or set work
- Run lengths do they see these increasing
- How much at present do they send work out to a print finisher and what are the costs involved
- Work out the cost savings of producing in-house.
- Do they collate NCR and is it pre-numbered
- Do they produce ring/wire bound manuals i.e.:- loop stitch option
- How quickly do they need to turn around the jobs
- How much experience have the operators with finishing
- Have you identified all of the customers needs, including their present and future requirements.
- What are their business objectives and how does this aspect fit in/compliment this

### **3 UPGRADE BENEFITS**

### **DFC-100**

- Friction collator
- Max speed 70 sph
- Max paper size: 320 x 450 mm
- Min paper size: 140 x 160 mm
- LCD Screen
- Connects to DBM-120 only
- 28mm feed capacity
- 78mm stacker capacity
- No waiting mode
- No Hand marry

### DBM-120/120T

- Max speed 2,400 A5 bph
- 13 Programs (3 Custom)
- Auto set-up of Fold/Trim positions
- Stapling heads 5,000 staple capacity
- Automatic Trimmer (120T)
- Max book size: 320 x 225 mm
- Min book size: 148 x 100 mm
- Central paper register
- No 6 page inserter
- Toggle screen
- No ability to add DSF feeder
- Paper jams difficult to clear
- Fold rollers are manually adjusted
- Stitch capacity 20 sheets 80gsm
- Limited adjustment 0.5mm steps
- Paper control
- Staple empty sensors
- No fold skew adjustments

### DSC-10/20

Suction collator Max speed 120 spm Max paper size: 320 x 450 mm Min paper size: 139 x 210 mm Colour touch screen Connects to DBM-120/350/500 35mm feed capacity 100 mm stacker capacity Waiting mode Hand marry

### DBM-350/350T

Max speed 3,000 A5 bph 20 Programs Auto set-up of Fold/Trim positions Heavy duty stitching heads (upgradable to Hohner) Automatic Trimmer (350T) Max book size: 320 x 230 mm Min book size: 148 x 85 mm Centrally registered and improved control in both stitch/fold area 6 page inserter

Connects to sheet feeder Books removed by lifting the roller assemblies in the stitch/fold areas. Automatic fold roller gap Stitch capacity 20sheets 80gsm Fine paper adjustments of 0.1mm, 1mm steps centrally controlled alignment of the book in the stitch/fold areas for greater control "Out of wire" sensors stop the machine to avoid wasting books Controlled by a simple control knob on the outside of the machine.

### 4 MACHINE COMPATIBILITY

### DSC-10/20

- DBM-120/T
- DBM-350/T
- DCR-ST
- Optional built-in stacker

### DBM-120/T

- DC-10/60
- DC-10/60 Pro
- DSC-10/20

### DBM-350/T

- DC-8/32
- DC-10/60
- DC-10/60 Pro
- DSC-10/20



## 5 COMPETITIVE COMPARISON

In today's market there a number of manufacturers of suction collators and booklet makers, including Horizon (Japanese), Watkiss (UK), Nagel (Germany), Plockmatic (Sweden) and Uchida (Japanese).









### PLOCKMATIC

### **BOOKLETMAKER: BM 2000 BINDER**

The Plockmatic BM2000 bookletmaker is a fullyautomatic bookletmaker that can be used inline with the VF1008 Feeder Pro, or offline as a stand-alone unit. An optional inline trimmer (pictured below), can also be added to this unit. The BM2000 is designed to feed precollated/sorted sets either manually or through a collating tower for a truly automatic bookletmaking system.

### **Positive points**

- Handles CD-size booklets
- Four fold rollers for best folding performance
- Automatic folding & stapling
- Speeds of up to 3000 booklets per hour
- Automatic jam detection
- Corner staple as standard
- Can be connected to Oce and Ricoh systems

### Negative points - Stitch area

- Only 10 programmable memories (compared with 20 on the DBM-350).
- No hand-marry unit as standard. This is only available as an option.
- Uses staple heads which will need constant reloading.
- Spine press and trimmer are optional
- No small cut waste removal. No air separation to blow small cuts into the waste bin
- Trimmer reduces the speed of the system to 2,400 bph
- The Spine press reduces the speed of the system to 1,800 bph
- Inferior book control. Only has side joggers.

### PLOCKMATIC VF1008 FEEDER PRO COLLATOR

The VF1008 Feeder Pro is an 8 bin suction collator which attaches to the BM-2000 Binder, FTR 2000 Trimmer and SQF Squarefolder to make the Plockmatic 1000 System.

### **Negative points**

- · Restricted to 8 bins
- Produces 3,800 sets an hour (the DSC-10/20 produces 7,200 sets per hour)
- Not compatable with other Plockmatic bookletmakers
- Not very heavy duty





### NAGEL

### FOLDNAK100 BOOKLETMAKER

The Foldnak 100 can achieve a top speed up to 3,000 booklets/h with various formats. A variety of stitching heads can be used on this model such as Hohner, ISP, Nagel Ri-210 and Rapid. The Foldnak 100 bookletmaker can handle large formats of digital printing systems as well as minimum formats (CD-booklets and smaller). The machine also operates online in connection with the Nagel feeders and collators - Robo-Feeder and S8, Trimmer 100 and SP Plus Square Press as well as stand-alone machine.

### **Positive points**

- Solid construction
- Variety of compatible stitching heads/staplers (Hohner, ISP, Nagel and Rapid)
- Can handle large sheet sizes up to 364 x 521
- Compatibility: Will link to Nagel feeders and collators Robo-Feeder and S8, Trimmer 100 and SP Plus Square Press
- Can attach up to 4 stitching heads
- Spine press
- Recently developed reject tray

### **Negatives Points:**

- An external compressor is used to blow air into the side guides of the stitch section to help knock up digital stock and reduce static – leads to more noise and also added cost. The DBM-350 can easily knock up digital stock without the need of a compressor.
- No back jogger, the collated pages are only side jogged
- Trimmer must be bought separately the trimmer comes with the DBM-350.
- The Nagel Ri-210 staple heads only have 210 staples per cartridge, this would lead to regular user intervention.
- No memory programs to recall jobs longer set-up times
- No upgrade path Nagel do not produce any machines that run faster or can handle larger jobs.

### FOLDNAK40 BOOKLETMAKER

### **Positive points**

- Can fold CD booklets to SRA3
- Processes thick books: Maximum booklet 25 sheets (80 gsm)

### **Negatives Points:**

- Slower Production speed: 1500 p/h
- Manual adjustments: Sheet width, sheet length, belt stacker, roller gap, folding without staple and joggers
- Frequent reloading of staple cartridge: 210 staples per cartridge









### HORIZON

### **COLLATOR: HORIZON VAC 100**

10 station vertical suction tower built by Horizon (Japan) with the ability to add up to a further 5 towers of 10 bins. Uses a compressor on each tower to feed each individual bin. Air/Vacuum is supplied from the compressor via a rotary suction drum to lift and feed each sheet.

The tower is programmed via a touch screen control, with the ability to divert the sets bi- directionally. The VAC 100 can accept a wide range of Horizon booklet makers > SPF11; SPF20A; SPF200A; "Stitchliner"; Stackers> ST 20, ST40, ST60

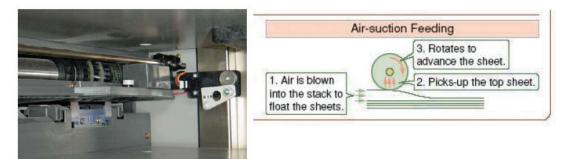


### **Positive points**

- Heavy duty. Horizon manufactured equipment gives the impression of heavy-duty construction, aided further by the fact that their equipment also extends into the
- higher industrial production arena eg with large format folders.
  Feeds sheets & sets. The tower has the ability to feed one sheet per bin as well as multiple sheets if feeding
- pre-collated jobs. This does offer versatility, but a piece of equipment trying to do two jobs will rarely be as good as one specified for one particular process.
- Speed. Speeds can run up to 10,000 A4 SPH into jogger, 3,500 into SPF20A, 4,500 books into SPF200A and 5,500 into a "Stitchliner"
- Bi-directional towers. Allowing the operator to make use of all of the stations when exiting L/R into Booklet maker or Stacker without the need to remove any attachments giving a significant increase in productivity
- Retro-compatible. Links to previous/existing range of booklet makers
- Wide range. A range of solutions which provides them with a wide rang of pricing strategy options. Suction: towers: MC80 HAC-120 SAC –150 TAC-8/TC8; Stitch/Fold units: SPF11/FC11,SPF20, SPF20A, "STITCHLINER"
- Paper error check. (VAC60H only) this CCD device checks for possible operator loading errors for each bin

### **Negatives Points:**

Feed problems. Feed drum has a smaller feed area sited to one side of the bin, which can cause feed
problems when collating large or curled stocks. The feed drum action can also result in marking the sheets.



- Adjustments required. There is an adjustment on each bin to control the curl of the sheet under the feed drum. There is no need on DSC-10/20 as it has a large flat feed area. Duplo is therefore easier for the operator to run and does not suffer from this downtime.
- Noisy air system with poor control. Requires a 3-phase noisy compressor for each tower which is sited in the operator's step. A compressor has difficulty in supplying air to separate the paper which leads to miss/double sheets being fed. The DSC-10/20 has individual silent fans to control the amount of air on each bin. The 3-phase power supply can also increase the customer's purchase cost and service issues.
- Servicing required. The compressor needs servicing and in the event of failure will mean no production. The DSC-10/20 has 10 individual non-serviceable fans.

- No divert tray. This leads to loss of production when there are misses and doubles. The DSC- 10/20 has "auto divert" mode for non-stop operation (The customer can achieve non- stop production with the Horizon, but only if they purchase an ST40 Stacker @ £2-3,000!). Divert tray included on SPF200A Model
- Intermittent feeding. The rotary drum can cause heat problems on some stocks, causing intermittent feeding affecting accuracy and productivity.
- Doubles/misfeeds. The VAC100A only has 2 front small blowers for separation which means that heavier stocks or stocks with static will be problematic.
- Double detection issues. On the Horizon there is no control of the double sensor position which can cause a problem detecting each sheet.
- Awkward hand-marrying operation. The HM feed tray (for booklets) for SPF20A is at the back of the tower which means that the operator cannot see what is happening within the booklet maker. (Hand-marry tray is now positioned at the front of the SPF200A).
- Slippage & skew. A single conveyor drive belt sited on one side, can cause paper slippage and sheet skew. The DC-10/60 pro has a twin belt drive for greater control.

### **BOOKLETMAKER: HORIZON SPF20A/FC-20A**

Automatic booklet maker and Trimmer. Centre registered alignment of books, that uses a single drive belt with pegs to drive the book forward into the fold section. Features 12 memory programmable positions, and Hohner wire heads (4 max). Solid build quality, that utilizes Horizon's previous booklet making technology.

Connects to the following suction/friction collating towers

- VAC100 10 station latest model (suction)
- VAC60H 6-36 stations (suction)
- MC80 8 station (suction )
- HAC –120 12-48 (friction)
- SAC-150 15 –60 bin (friction)
- TAC-8 8 station A2 (suction)
- TC-8 8 station B3 (suction)

### Positive points – Stitch area

- Solid construction
- By-pass for corner stitching. Uses trimmer as by-pass.
- Price competitive
- Sheet by sheet capability. Able to accept both set and single sheets
- Collator compatibility. Will link to VAC100, MC80 HAC-120 SAC –150 TAC-8/TC8 vertical suction towers.
- Horizon branding. Has a strong global presence, and a large range of finishing products
- 12 memory programs. Instant recall of jobs

### Negative points – Stitch area

- "Peg" system causes jamming. Uses a single drive in-belt within the stitch area. The sets are then pushed into the fold position by a "peg" that is attached to the belt. This peg falls away from the belt into the machine, causing the book not to be taken into the fold position and the next set jamming. Leading to a loss of production and damaged books.
- Accessory bars For A3. When producing A3 sheets or side /corner stitching the operator needs to insert support bars in the stitch area. If the operator forgets to remove it can cause the machine to jam.
- No auto eject. Leads to a loss of production (Only available on SPF200A).



- No hand-marry unit as standard. This is only available as an option. It is also placed at the back of the tower, where the operator cannot view the booklet maker. (Only available on SPF200A model).
- Hohner style 4-heads. Can be fitted with up to 4 heads, but uses the older style "Hohner" heads.
- Sensor faults.
  - Infeed sensor that reads the set can jam or stick which causes the stitcher not to function.
  - Sensor under the stitch heads that activates the knock-up is affected by solid printed sheets, which causes the machine to shut down.
  - Outfeed sensor in stitch area that makes the back-stops return is also affected by changes in stock weights and solids. This causes the book to then jump over the stops resulting in a wasted book.
- "Out of wire" sensors. Has no out of wire sensors which can cause a wastage of books, due to a missed stitch taking place. (Only available on SPF200A model).
- Accessory changes. Can corner-stitch via the trimmer, but the side guides need to be changed in the stitch area. Operates at speeds of 2,500sph
- Paper Path Is Not Flat. Where the book goes down into the fold area. This leads to problems with curled stock with the book out of view of the operator, who cannot rectify or see where the fault is.
- No air separation. Needed to improve the knocking up of the sets especially digital/laminated.
- Only 2 bottom drive belts (trimmer). The DBM-350T has 3 twin drive belts for greater control.
- Accessory removal for small books. A guide has to be fitted that pushes the book onto the belts of the conveyor. This guide must be removed for smaller books (A5-A6).
- No waste bin full sensors.
- No small cut waste removal. No air separation to blow small cuts into the waste bin
- Difficult to remove jams. In the fold area, as guards and roller conveyor has to be lifted each time.
- Digital stock marking. The fold knife causes marking on digital stock, due to its one piece design.
- Manual settings, of fold roller pressure and conveyor wheels. (Auto fold pressure setting only available on SPF200A).
- Inferior book control. No control of the sides of the book in the fold area. Only stops to control the back of the book.

### **BOOKLETMAKER: HORIZON SPF9**

### **Positive points**

 Small footprint making it easy to set-up in places with limited space

### **Negatives Points:**

- Slower production speed: 1980 p/h
- No upgrade path: Can only be used with a friction collator. This make it difficult for the customer should they start using glossy/digital stocks.
- Manual adjustments: Sheet length, Sheet width, Joggers, Trim length, Trim stopper. The manual adjustments make set-up times long and increase down time.



|                    | HORIZON VAC-100                  | DUPLO DSC-10/20                 |
|--------------------|----------------------------------|---------------------------------|
| Sets/min           | Max. 8,900 sets/hr.              | Max. 7200 sets/hr.              |
|                    | (A4 LEF)                         | (A4 LEF)                        |
| Number of stations | 10-60                            | 10-20                           |
| Feed system        | Suction drum with the air/vacuum | Vacuum belt with air blast,     |
|                    | delivered by compressor          | independent air and vacuum      |
|                    |                                  | delivered to each bin           |
| Paper size         | Max: 350 x 500                   | Max: 320 x 450                  |
|                    | Min: 148 x 148                   | Min: 139 x 210                  |
| Paper weight       | 52 - 208 gsm                     | 53 – 157 gsm (300 gsm cover)    |
| Bin capacity       | 50 mm                            | 35 mm                           |
| Detection          | Miss/Double/Paper jam/Bin empty/ | Miss/Double/Paper jam/Bin empty |
|                    | Rejected set                     |                                 |
| Hand marrying      | Yes (from rear of tower only)    | Yes                             |
| Control panel      | Black and white touch screen     | Colour touch screen             |
|                    |                                  |                                 |
|                    | HORIZON SPF-9                    | DUPLO DBM- 120                  |
| Model              | Staple – folder                  | Staple – folder                 |
| Туре               | Automatic                        | Automatic                       |
| Speed              | 1,980 bph (A5)                   | 2,400 bph (A5)                  |

320 x 450mm

148 x 200mm\*\*

20 sheets 1300 x 700 x 550mm

| Speed              | 1,980 bph (A5)     |  |
|--------------------|--------------------|--|
| Max paper size     | 297 x 420mm        |  |
| Min paper size     | 210 x 297mm        |  |
| Folding capacity   | 20 sheets          |  |
| Dimensions (WxDxH) | 1240 x 621 x 796mm |  |
|                    |                    |  |

\*\*With Small Booklet Kit

|                        | HORIZON SPF-20A     | DUPLO DBM- 350                |
|------------------------|---------------------|-------------------------------|
| Model                  | Stitcher - folder   | Stitcher – folder             |
| Туре                   | Manual              | Automatic                     |
| Speed                  | 4,050 bph (A5)      | 3,000 bph (A5)                |
| Max paper size         | 320 x 460 mm        | *350 x 500 mm                 |
| Min paper size         | 148 x 210 mm        | 120 x 180 mm                  |
| Paper weight           | 64 to 157 gsm       | Inner: 64 to 127.9 gsm Cover: |
|                        |                     | 64 to 300 gsm                 |
| Folding capacity       | 20 sheets of 60 gsm | 19 sheets of 80 gsm +         |
|                        |                     | 300 gsm cover                 |
| Stitching head         | Hohner              | Deluxe stitching heads        |
|                        |                     | (upgradeable to Hohner)       |
| Number of stitch heads | 0-2                 | 0-2                           |
|                        | (Optional 3-4)      |                               |
| Dimensions (WxDxH)     | 1990 x 790 x 1110   | *1820 x 650 x 1030            |
| Hohner loop heads      | Optional            | Optional                      |

\*DBM-350T trimmer is 920(W) x 650(D) x 841(H) mm (incl. Belt Stacker)

### WATKISS

### **COLLATOR: SLIMVAC/VARIO/DIGIVAC**

Watkiss is a UK manufacturer who produces a range of Circular & Vertical collators.

- Circular Model WA25 with 25 A4 bins. This model is now out of date and very rarely sold.
- "Slimvac" Modular Vertical Suction/Friction Collator. Customers can purchase additional bins one at a time up to 16 as required. Feeding is performed by a suction feed belt, (or feed tyres in the case of friction). Both suction and friction bins can be connected in one tower. It has a bin capacity of 45mm and a stock weight range of 40-240gsm
- "Vario" Modular Vertical Suction Tower. 8 or 16 bins bin capacity of 100mm (8bins) / 40mm (16bins). Feeding is by suction cups and stock weights of 300gsm max.
- DigiVAC. 8 or 12 bin models only. Bottom fed suction for continuous loading. Bin capacity of 60mm.

### (Latest model).

All models link to the booklet making range of

- Bookmaster (staple) manual
- Bookmaster Pro (staple/fold/trim units) automatic
- Stitch/Fold/Trim automatic wire system

### **Positive points**

- Modular. Add just one bin at a time (Slimvac, Vario models)
- Versatile. Combination of friction/suction interchangeable bins (Slimvac models)
- Continuous Loading. Suction feeding from the bottom of the paper stack (DigiVAC)
- Bin Capacity. 100mm bin capacity (Vario)
- Connectivity. Link to all of the Watkiss booklet makers/trimmers as well as the ability to link with other manufacturers booklet makers/trimmers
- Forward/Reversed Numbered Sets. Alternate cross-jogger can be sited at the front and back of the towers, for forward/reversed numbered sets.
- Bespoke Solutions. Watkiss will work with end users to provide bespoke solutions
- Programmable. Can be programmed to finish sequentially printed sets (Document Finishing System)

### **Negative points – Slimvac**

- Bin Control. Each station has to be separately turned on/off to activate feed
- Inferior Air Feed. Uses a small compressor sited on the top of the machine, this single unit is unable to separate heavy or laminated stocks.
- Awkward Combined Operation. The Slimvac can also be added to the Vario towers, but the 2 operating towers are placed on opposite sides which means that the operator will need to control the machine from each side.
- Poor Loading Trays Operation & Quality. The trays have to be manually lifted to the feed heads, and are made from plastic extrusion and are liable to be easily broken.
- Limited Stock Range and Productivity. The Slimvac is generally sold to small printers/ copy shops where the need to produce a limited stock range and where smaller runs are required.





DigiVAC

### **Negative points – Vario**

- Manual Feed Head Adjustment. Both feed heads require manual adjustment for each job to control the air, vacuum, and the tray height and paper separators The 7 suction cups also require regular cleaning and replacing to prevent deterioration, which is time consuming and an extra cost to the customer.
- Inferior Air Feed. Uses a small compressor either sited on the top of the machine or on the floor. This has problems producing sufficient air to separate heavy stocks.
- Bin control. Each station has to be independently turned on /off leading to longer set up times
- Paper settings. Separate adjustments for separating each sheet by spring steel/plastic edge flicks for different weights of stock.
- Complicated Screen. Complicated control screen that is not user friendly.
- Awkward Operation. Further towers can be added but when placed in line the operation has to be controlled from either side, making it a problem for the operator and print room layouts.
- Friction/Suction Combination At A Cost. Has the ability to add a friction feed bin where the paper stocks do not require suction, but at a cost of £1,000.

### **Negative points – DigiVAC**

- Bottom Feed Marking. Uses a feed head from the Slimvac/Vario range, which is then turned upside down so the sheets feed from the bottom of the paper stack. This feature can lead to some digital stocks marking due to the weight of the paper pile.
- Paper Control. Each station must be individually controlled for paper curl, depending upon the weight of each paper stock. This can lead to a significant increase in set up times.
- Load-On-The-Run Issues. Although you can load whilst running, the amount of paper that you can load each time is only 4 to 5 mm or it could stop the feed due to the extra weight being placed on top of the pile. This can then cause misses/jams and marking.
- Bin Control. Each station has to be independently switched on/off
- Paper Control. separate settings for paper, card, gloss and carbonless separation for Air Blow/Tapson/off control springs are required.
- No Bin By Bin Air Control. Uses a heavier pump but with no individual air control for heavier/laminated stocks, leading to potential feeding issues.
- Set Integrity Problems. Requires more attention by the operator, as when loading whilst running can cause the operator to load the page into a different bin by mistake. As this is a continuous operation the operator would not normally check for page order.

Bookletmakers: Watkiss Bookmaster & Trimmaster/Bookmaster Pro Series/PowerSquare 200



Stitch/Fold/Trimmer

PowerSquare 200

Watkiss Automation manufactures 4 models of booklet makers/trimmers

- 1 Bookmaster & Trimmaster. Manual setting staple/fold trim using a staple cartridge of 5,000 staples. Can be hand fed or attached to the Watkiss range of collators.
- 2 Bookmaster Pro series. Automatic setting staple fold/trim. Programmable job memory allows for instant recall of jobs via the touch screen controls. Will connect to the range of Watkiss collating towers.
- 3 Automatic Stitch/Fold/Trim. Automatic wire stitcher/folder and trimmer, compatible with the Vario and DigiVAC.
- 4 PowerSquare 200. Automatic set up. Combined Stitcher/Folder/Spine Forming. Ability to produce in one pass books up to 10mm (200 pages of 80gsm). Only an on-line solution for Oce systems.

### **Positive Points**

- British Manufacturer. Has some relevance in the UK when some customers prefer to buy British manufactured products.
- Connectivity. Links to all of the collator range
- Squareback. Ability to add the "Squareback" book flattener
- Automation. The Stitch/Fold/Trim wire fed system has Automatic settings with programmable memory and custom size input.
- Unique. The Power Square can produce stitched/folded and spine forming books of up to 200 pages of 80gsm in one operation.

### **Negative points**

- Knock-Up Problems. The steep angle of the paper path area can cause knock-up problems with papers especially with static.
- Minimum Sheet Size. A5 A6 min sheet size.
- Magnatek Stitching Heads. The stitch/fold/trim uses a swivel to hold the wire which can lead to wire dropping out as the swivels become dirty or worn. Coated wires are not able to be fed.
- No Out Of Wire Sensors. Leading to faulty books and a loss in production
- No Side Guide Control. Books are not controlled in the fold area, which can lead to books being folded out of square - Bookmaster.
- No Fold Roller Auto Setting. All settings are manually adjustable
- Angled Paper Path can result in jam sheets
- No Real Space Saving\*\* Fits under the Slimvac and DigiVAC models but has to be pulled out to be cleared of jams. So in effect there is no real saving on space.
- Connectivity. The "PowerSquare" cannot link to the Vario or DigiVAC collating range, limiting the customers applications.

### Watkiss specification comparison: Collators

| SPECIFICATIONS  | DSC-10/20  | VARIO  | DIGIVAC  |
|---|--|--|--|
| Model   | Suction tower  | Suction tower  | Suction tower  |
| No of stations  | 10-20  | 1-16   | 8 & 12 bin   |
| Feed system   | Vacuum belt with air blast.<br>Independent air<br>and vacuum delivered | Suction cup feed (7 per<br>head) aided by blowers<br>from a small compressor | Bottom fed system.<br>Belt drive with apertures<br>fed by a separate small |
| Demos Cine man  | to each bin<br>139 x 210 - 320 x 450                                   | 140 x 210 - 364 x 520  | compressor<br>120 x 200 - 350 x 500  |
| Paper Size mm<br>Speeds A4 sets/hour                  | 7,200  | 5,000  | 7,200  |
| Paper weights gsm                                     | 53-157 (300gsm cover)  | 40-300   | 50-300   |
| Exit  | Left/Right (all towers)  | Left/Right (all towers)  | Left/Right (all towers)  |
| Bin Capacity mm                                       | 35   | 88 (over 340mm width 100<br>up to 340 width)                                 | 60   |
| Detection   | Miss /Double/Paper jam/<br>Bin empty/<br>Rejected set                  | Miss/Double/Paper jam/<br>Bin empty  | Miss/Double/Paper<br>Jam/Bin empty   |
| Hand marrying   | Yes  | Yes  | Yes  |
| Configuration Options<br>Booklet makers &<br>Trimmers | DBM-120/T<br>DBM-350/T   | Book master<br>Book master Pro<br>Stitch/Fold/Trim                           | Book master<br>Book master Pro<br>Stitch/Fold/Trim                         |
| Dimensions<br>(w x d x h)                             | 745 x 780 x 1708mm   | Can vary depending upon the no of stations                                   | 660 x 880 x 1620mm   |
| Weight kg   | 232  | -  | -  |
| Power   | 220-240V   | 220-240V   | 220-240V   |

## Watkiss specification comparison: Bookletmakers

| SPECIFICATIONS    | DBM-350                  | AUTOMATIC STITCH<br>& FOLD | POWER SQUARE         |
|-------------------|--------------------------|----------------------------|----------------------|
| Model             | Stitcher folder          | Wire stitcher              | Wire stitcher        |
| Туре              | Automatic                | Automatic                  | Automatic            |
| Paper Size (mm)   | WxL                      | W×L                        | WxL                  |
| Saddle Stitch max | 320 x 230                | 350 x 244                  | 370 x 520            |
| Saddle Stitch min | *148 x 85                | 120 x 80                   | 200 x 120            |
| Folding capacity  | 2.5 mm                   | 2.5 mm                     | 10 mm                |
| Stitching heads   | Deluxe (Hohner optional) | Deluxe (Hohner optional)   | N/A                  |
|                   | Optional                 | Optional                   |                      |
| Loop heads        |                          |                            |                      |
| Processing A5 bph | 3,000                    | 3,300                      | 900                  |
| Dimensions        | 1820 x 650 x 1030mm      | 555 x 888 x 600mm          | 1870 x 1675 x 1300mm |
| (w x d x h)       |                          |                            |                      |
| Weight (kg)       | 210 kg                   | 150 kg                     | 542 kg               |
| Power Supply      | 220/240V                 | 220/240V                   | 220/240V             |

\*Min 105 x 100 mm with small book kit

### Watkiss specification comparison: Trimmers

| SPECIFICATIONS    | DUPLO DBM- 120     | BOOKMASTER PRO    | BOOKMASTER        |
|-------------------|--------------------|-------------------|-------------------|
| Model             | Staple folder      | Stapler folder    | Stapler folder    |
| Туре              | Automatic          | Automatic         | Automatic         |
| Paper Size (mm)   | WxL                | W x L             | WxL               |
| Saddle Stitch max | 320 x 450          | 320 x 241         | 320 x 241         |
| Saddle Stitch min | 148 x 200**        | 140 x 105         | 140 x 105         |
| Stitching heads   | Staple head        | Staple head       | Staple head       |
| Processing A5 bph | 2,400              | 2,500             | 1,800             |
| Dimensions        | 1300 x 700 x 550mm | 546 x 495 x 595mm | 546 x 495 x 595mm |
| (w x d x h)       |                    |                   |                   |
| Weight (kg)       | 120 kg             | 70 kg             | 70kg              |
| Power Supply      | 220/240V           | 220/240V          | 220/240V          |

\*\*With Small Booklet

## **6 DEMONSTRATING**

### THE DEMONSTRATION

- 1 The equipment
- 2 Preparation
- 3 Sequence of events
- 4 Running the jobs
- 5 Explanation of the system
- 6 Questions and answers
- 7 The order process

### 1 Equipment

120C/350C Suction Booklet System with optional stacker

### 2 Preparation

Always prepare the equipment in advance of the day of the demonstration (if at q showroom). Load 4 different paper sizes and weights to show how quick and simple it is to size change even if the customer has brought their own work.

Load each bin to its maximum capacity (35mm).

Prepare in advance a sample of each job to show what you are going to run.

Have examples of customers' jobs and referrals together with brochures, order forms, finance documents.

Do research prior to the demonstration to ensure that you have identified your customer's present and future needs.

### 3 Sequence of events

Inform the customer how the demonstration is going to take place. That way you can be in control.

If you don't do this you could have 1 or more people asking questions and causing distractions.

### 4 Running the Jobs

Always run the jobs immediately, prior to explanation otherwise you could find the customer gets bored and you run out of time.

Give a brief explanation of what you are doing to get each job to run, a more detailed insight can follow on.

## Duplo

### **120C BOOKLET SYSTEM**

SPACE-SAVING BOOKLETMAKING SYSTEM WITH COMPACT COLLATOR

> Fully automated bookletmaking system Quick and simple set-up Compact design 2,400 A5 booklets per hour Modular

> > Brochures, Menus, Flyers and Mailers



DCC 10/20

| DSC-10/20          |   | DBM-120 Bookletm        | aker  |
|--------------------|---|-------------------------|---|
| Number of Bins     | 10, 20  | Sheet Size              | Min 148mm x 200mm <sup>83</sup><br>Max 320mm x 450mm                            |
| Paper Size         | Min.139mm x 210mm<br>Max.320mm x 450mm  | Paper Capacity          | 20 sheets   |
| Paper Weight       | 52-300gsm <sup>#1</sup>   | Corner Stitch Thickness | 25 flat sheets  |
| Bin Capacity       | 35 mm   | Speed                   | 2,400 (A5) booklets per hour  |
| Detection          | Double-feed, Miss feed, Paper   | Number of Staple Heads  | 2   |
|                    | jam, Bin empty  | Staple Positions        | Saddle / side / corner / fold only  |
| Speed              | Speed Bookletmaking - up to 3,000 A5<br>booklets per hour* <sup>2</sup><br>Collating - up to 7,200 sets per | Programmes              | 10 pre-set sizes, 3 custom sizes  |
|                    |   | Dimensions (LxWxH)      | 1300mm x 700mm x 550mm  |
|                    | hour <sup>#2</sup>  | Power Requirements      | 230V 50Hz 1A  |
| Feed System        | Vacuum belt with air sheet<br>separation  | Weight                  | 120kg   |
| Other Features     | Colour touch screen control<br>panel; Block mode; Waiting<br>mode; Interleaving sheet                       | Connecting Devices      | DSC-10/20, DC-10/60 and<br>DC10/60 Pro Collators, DBM-350T<br>Trimmer, DSF-2000 |
|                    | insertion; Hand-marry unit  |                         |   |
| Connecting Devices | DBM-120/350/500; DCR-ST   |                         |   |
| Dimensions (LxWxH) | 745(W) x 780(D) x 1708(H) mm  |                         |   |
| Power Consumption  | 230V 50Hz 4.5A  |                         |   |
| Weight             | 293 kg  |                         |   |

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#### DBM-120T Trimmer

| Untrimmed Booklet Sizes | Min 148mm x 100mm<br>Max 320mm x 225mm  |
|-------------------------|---|
| Trimmed Booklet Sizes   | Min 148mm x 80mm*1<br>Max 320mm x 225mm |
| Trim Margin             | 1 to 20mm                               |
| Speed                   | 2400 (A5) booklets per hour             |
| Dimensions (LxWxH)      | 537mm x 550mm x 576 mm                  |
| Power Consumption       | 230V 50Hz 1.5A                          |
| Weight                  | 83kg                                    |

\*1 Based on a 300gsm cover and 157gsm sheets \*2 Dependent upon connected devices and number of bins in use \*3 With optional small booklet kit

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Waiting Mode" feature increases productivity by up to 10%. If a Miss or a Double occurs twice from the same bin, all feed heads will remain at the correct feeding heights to that production can quickly resume.



### **Powerful Feeding** System

The high speed DSC-10/20 Collator features an advanced feeding system capable of handling stocks in a variety of sizes and weights. Each bin is equipped with adjustable high-powered fans that contribute to its accurate and consistent feeding.

### **High Productivity** Despite its small size, the DSC-10/20 is a high production machine, its rapid 7,200

sets per hour speed rivals many of the larger collators on the market.



S.S.

Space-Saving The small footprint of the 120C Booklet System makes it easy to locate in places with limited space. Despite its small size the system can produce a range of applications such as reports, manuals, brochures and comer stapled handouts.

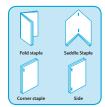
### **Colour Touch Screen** Panel

The large intuitive colour touch screen control panel allows the operator to monitor the progress of each job at all times. Simple error messages such as double and miss feed are clearly displayed and recorded to ensure that there is a true total count of each job.

### Convenient Upgrade Path

The DSC-10/20 collator can connect to a number of bookletmakers making it very easy to upgrade the system should the business's demands grow.





### Dynamic DBM-120 Bookletmaker

The DBM-120 can be either hand-fed or connected online to a Duplo collator creating a 2,400 booklet/hour finishing system. Flat lying staples and the optional DBM-120T edge trimmer result in a strong and professional booklet.

## Hand Feeding

The DBM-120 can be used as a standalone bookletmaker and manually fed through the hand feeder. This is ideal for very short run or pre-collated jobs such as those from a digital printer.

# Stacker An optional built-in stacker is available on the DSC-10/20 collator. The intelligent 100mm stacker can quickly switch from straight to offset stacking should the requirements of the job change.

Small Booklet Kit By using the small booklet kit, the operator can produce booklets as small as 100 x 148 mm.

### Four Finishing Modes

The DBM-120 is capable of side stapling, corner stapling, folding and saddle stapling so just about any finishing requirement is possible with this versatile unit

Quick Automatic Set-up

Changing between booklet sizes takes just seconds. Simply select the required size, and the side guides adjust automatically. For smaller books, the staple positions can be brought closer together if required.







oridge unit



### Specifications

DSC-10/20

| DSC-10/20                 |   | DBM-350 Bookletma        | aker  |
|---------------------------|---|--------------------------|---|
| Number of Bins            | 10, 20  | Sheet Size               | Min 148 x 210 Max 320 x 460   |
| Paper Size                | Min.139mm x 210mm   | Paper Capacity           | 20 sheets *1  |
|                           | Max.320mm x 450mm   | Speed                    | 3000 (A5) booklets per hour   |
| Paper Weight              | 52-300gsm*1   | Number of Stitcher Heads | 2   |
| Bin Capacity<br>Detection | 35 mm<br>Double-feed, Miss feed, Paper  | Stitch Positions         | Saddle, none (fold only). Corner<br>and side (optional)                   |
|                           | jam, Bin empty  | Other features           | Spine press (0-9 presses)   |
| Speed                     | Bookletmaking - up to 3,000 A5<br>booklets per hour*2<br>Collating - up to 7,200 sets per | Programmable Memory      | 20 memory settings  |
|                           |   | Dimensions (LxWxH)       | 1820mm x 650mm x 1030mm   |
|                           | hour <sup>#2</sup>  | Power Requirements       | 230V 50Hz 3.8A  |
| Feed System               | Vacuum belt with air sheet<br>separation  | Weight                   | 230kg   |
| Other Features            | Colour touch screen Control<br>panel; Block mode; Waiting<br>mode: Interleaving sheet     | Connecting Devices       | DC-10/60 and DC10/60 Pro<br>Collators, DBM-350T Trimmer,<br>Sheet feeders |
|                           | insertion; Hand-marry unit  | Options                  | Hohner loop stitching head;   |
| Connecting Devices        | DBM-120/350/500; DCR-ST   |                          | Small Booklet kit; 6 page insert<br>kit: Corner/Side stitch kit           |
| Dimensions (LxWxH)        | 745(W) x 780(D) x 1708(H) mm  |                          | ,   |
| Power Consumption         | 230V 50Hz 4.5A  |                          |   |
| Weight                    | 293 kg  |                          |   |

#### DBM-350T Trimmer

| Booklet Sizes         | Min 105 x 148 Max 230 x 320                   |
|-----------------------|---|
| Trimmed Booklet Sizes | Min 85 x 148 Max 230 x 320                    |
| Trim Margin           | 1 to 20mm                                     |
| Speed                 | 3000 (A5) booklets per hour                   |
| Dimensions (LxWxH)    | 920mm x 650mm x 841mm<br>(incl. Belt Stacker) |
| Power Consumption     | 230V 50Hz 3.3A                                |
| Weight                | 80kg  |
|                       |   |

1 Based on a 300gsm cover and 157gsm sheets \*2 Dependent upon connected devices and number of bins in use \*<sup>3</sup> Cover x 1 300 gsm + 19 sheets 80 gsm

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Duplo presents the 350C Booklet System, a high production collating and bookletmaking system that boasts one of the smallest footprints.



Duplo DSC-10/20

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Waiting Mode The "Waiting Mode" feature increases productivity by up to 10%. If a Miss or a Double occurs twice from the same bin, all feed heads will remain at the correct feeding height so that production can quickly resume.

Hand-Marry The 350C Booklet System, also features a handmarry unit as standard. This is ideal for users wishing to add extra sheets to collated sets.

### **Powerful Feeding** System

The high speed DSC-10/20 collator features an advanced feeding system capable of handling stocks in a variety of sizes and weights. Each bin is equipped with adjustable highpowered fans that contribute to its accurate and consistent feeding.

### **High Productivity**

Despite its small size, the DSC-10/20 is a high production machine, its rapid 7,200 sets per hour speed rivals many of the larger collators on the market.

Collating Modes A variety of collating modes are available on the DSC-10/20 such as Block mode and Alternate mode, both of which contribute to its high productivity.

Low Running Costs Stitching wire has a significant advantage over staple, not only is stitching wire cheaper than stagles, but the quality of the finished book is a great deal better. A spool of stitching wire also has a high yield of stitches allowing for less user intervention when replacing consumables.

### **Colour Touch Screen** Panel

The large intuitive colour touch screen control panel allows the operator to monitor the progress of each job at all times. Simple error messages such as double and miss feed are clearly displayed and recorded to ensure that there is a true total count of each job.

### **Convenient Upgrade** Path

The DSC-10/20 collator can connect to a number of bookletmakers making it very easy to upgrade the system should the business's demands grow.

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### DBM-350 Dynamic **Bookletmaker and** Trimmer

The fully automated Deluxe stitching heads and top speed of 3,000 booklets per hour make the DBM-350/T an ideal solution for high volume, high quality bookletmaking.

### **User-Friendly**

The DBM-350 features a simple and easy to use screen that guides you through the set up process. 20 programmable job memories can also be found on the control panel should the operator wish to quickly switch jobs.



# Small Booklet Kit By using the small booklet kit, the operator can produce booklets as small as 105 x 100 mm, perfect for producing applications such as CD books.

Hohner Loop Stitching Heads Producing booklets with loop stitch can add real value to your documents. The loop stitch option makes it easy to insert booklets into a 2-hole ring binder.

Corner Stitching The corner stitch kit is an ideal solution to keep those collated sets together. By using this option, an even larger variety of applications can be produced.

### **Enhance Quality of** Booklets

The DBM-350 is Duplo's first bookletmaker to feature an integrated spine press, perfect for creating professional looking booklets. The settings of the spine press can easily be adjusted to match the thickness of the booklet.

### **Truly Automatic** Finishing

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There is no need for manual intervention on the DBM-350, the easy touch button set-up makes switching jobs effortless. By entering the parameters of the job, all stitch, fold and trim positions are automatically adjusted.







MID-RANGE BOOKLETMAKING SYSTEM WITH COMPACT COLLATOR

> Fully automated bookletmaking system Quick and simple set-up Compact design 3,000 A5 booklets per hour Modular

Brochures, CD/DVD covers, Menus, Flyers and Mailers



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