

Feeding System	<ul style="list-style-type: none"> <li>• Belt suction feed system using a fan and pump</li> <li>• Elevator feeder system</li> </ul>
Maximum Paper Loading Capacity	24.02" (610 mm) maximum stack height
Paper Size	Maximum length: 20.5" (525 mm) Minimum length: 8.5" (210 mm) Maximum width: 14.25" (364 mm) Minimum width: 4.75" (120 mm)
Paper Type	Art/coated paper, laminated paper: 84.9 to 300 gsm, fine paper: 64 to 300 gsm
Buffer Capacity	10 sheets depending on paper type
Processing Speed	Maximum 400 sheets per minute (A4 SEF) at transportation speed of 2,800 mm per second * Exception when using end mark and barcode detection function * When continuously feeding without intervals between sets * Varies upon paper type
Conveyance Speed	Paper type which can be conveyed at 2,800 mm per second: fine quality paper above 80 gsm, coated paper above 100 gsm Paper sizes which can be conveyed at this speed: A5 SEF, A4 (SEF/LEF), A3 (SR), LT, LD, CD. Conveys other paper sizes at speeds below 2,000 mm per second. The quantity of sheets in buffer is less than five sheets.
Control Panel	Liquid crystal display unit with a jog dial (attached to the main unit), controls are through PC
Additional Functions	Hand feed (sheet and set); end mark detection (CCD sensor); anti-static bar (SIMCO)
Dimensions (WxDxH)	54" x 46" x 32" main unit only 60" x 46" x 32" with ejection guide and I/F Box
Power Source	AC 100 - 240V, 50/60Hz
Power Consumption	3 - 1.5A 300W
Weight	638 lbs.
Power Source (I/F Box)	AC 100 - 240V, 50/60Hz
Power Consumption (I/F Box)	0.5A, 7W
Duplo Connectable Devices	DBM-500; DBM-500T; SCC; DKT-200
Options	Cover Feeder; Barcode Kits (DSF-5000, Cover Feeder, Long Stacker)

*Production rates are based on optimal conditions and may vary depending on stock and enviromental conditions. As part of our continuous product improvement program, specifications are subject to change without notice.*

# DSF-5000



*higher productivity, higher volume*

**DOCUMENT SHEET FEEDER**

# Duplo

# Duplo

# DSF-5000



DKT-LS Long Stackers   DKT-200 2-Knife Trimmer   DBM-500T Trimmer   DBM-500 Bookletmaker   DSF-5000 Sheet Feeder

## >>> High speed sheet feeding for all digital applications and pre-collated offset printed jobs

Duplo's high speed DSF-5000 Document Sheet Feeder introduces a new level of technology to the Duplo line of feeders. The flagship DSF-5000 will complement Duplo's existing DSF-2000 Feeder. Designed for customers with higher production volume demands, it can process pre-collated digital or offset printed documents at a maximum production rate of 400 sheets per minute. It is ideal for customers with medium to high print volumes, those looking for faster turnaround times and more flexibility with paper sizes.



the flexibility to feed a range of papers and applications that would not be possible with other sheet feeders.

The DSF-5000 modular design allows it to be used with a wide range of Duplo equipment. For fully automatic bookmaking, it can be configured with Duplo's DBM-500/DBM-500T Bookletmaker and Trimmer. Users needing to feed separate covers can opt for the 2-bin DSF-CF cover feeder. High quality full-bleed applications can be made in-line with the SCC Slitter/Cutter/Creaser module.

Higher volume users can opt for the DKT-200, Duplo's newest two-knife trimmer. The DKT-200 precisely trims off the head and foot of completed books, and an optional gutter cutter doubles output by allowing for 2-up printing.

The DSF-5000 feed reliability is unmatched in the industry. The proven Duplo belt suction feed system combined with a new and innovative paper separation system provides consistent dependable feeding. The new paper separation system utilizes both a fan and a pump to provide air flow to three sides of the paper stack. This produces superior separation especially beneficial with large sheets printed on digital printers which characteristically leave high static between sheets. The DSF-5000 will reduce feed errors and increase production for any customer.

The dual Double Feed Detection system is also unmatched in the industry. The DSF-5000 utilizes both optical and ultrasonic sensors for unsurpassed double feed detection reliability. The light emitting sensor measures the amount of light that passes through a sheet to detect when a double feed has occurred. The ultrasonic sensor measures an ultrasonic wave after it passes through a sheet to determine when a double feed has occurred. This gives the DSF-5000

## DSF-5000 CONFIGURATIONS\*

**A** DSF-5000 + DSF-CF + DBM-500 + DBM-500T + DBM-LS1



**B** DSF-5000 + DSF-CF + SCC + DBM-500 + DBM-500T + DBM-LS1



**C** DSF-5000 + DSF-CF + DBM-500 + DBM-500T + DKT-200 + DKT-LS



\* All configurations above shown with optional cover feeder.

## DSF-5000 FEATURES

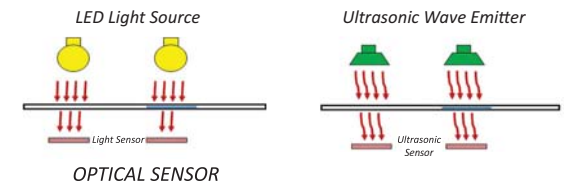
### >>> VACUUM BELT FEED

Duplo's proven belt suction feed system provides accurate and reliable feeding unparalleled in the industry. The large pickup area of this system provides reliable feeding even for difficult, curled high-static digital stacks. It also allows for a wide range of paper stock from 64 to 300 gsm.



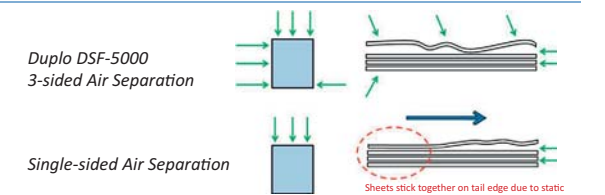
### >>> DUAL DOUBLE-FEED DETECTION SYSTEM

Duplo's dual Double Feed Detection System assures accurate detection. The optical detection system has been proven in Duplo's industry leading collating towers for years. The ultrasonic sensor eliminates false double feed errors caused by different color paper or ink. As a result, the DSF-5000 is capable of feeding a wide range of print jobs accurately and reliably.



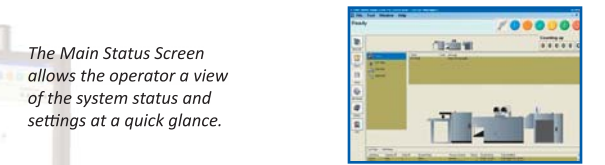
### >>> THREE-SIDE AIR SEPARATION

The air separation system flows air from eight different locations on three sides of the sheet. The high air flow and location of air slots provide clean separation of the top sheet from the stack. This results in consistent feeding and excellent production output by drastically reducing stoppage caused by paper miss-feeds.



### >>> PC CONTROLLER

The user-friendly DSF-5000 PC Controller offers the operator control of the entire system at one convenient station. All functions can be performed on Duplo's PC-based software. The software is intuitive utilizing numerous drawings and icons to explain any function.



The Main Status Screen allows the operator a view of the system status and settings at a quick glance.

### >>> HIGH CAPACITY AIR BED STACKING TRAY

The 24" high stacking capacity reduces load frequency allowing higher production output. The unique air bed allows easy adjustment and alignment of a large, difficult to handle paper stack.



Air flows up from tray and floats paper stack. Stack positioning is much easier due to the reduction of friction between stack and tray.

### >>> ANTI-STATIC KIT

The anti-static kit is included as standard equipment with the DSF-5000. The electric field generated by the anti-static bar neutralizes any static on a sheet of paper as it passes through the bar. This prevents sheets from attaching to each other, drastically improving feed reliability and performance.



Static is eliminated as sheets pass through the anti-static bar.

### >>> END MARK READER

The DSF-5000 comes with an end mark reader as standard equipment. The end mark designates the end of a set. This feature is especially useful for jobs with variable sheet count. The end mark will only notify the system of the end of the set, it will not ensure full set integrity on a sheet-by-sheet basis. Full set integrity can only be achieved by using the DSF-5000 barcode reader option.



### >>> BUFFER SECTION AIR

A bed of air floats the sheets into the buffer section to provide consistent stacking of the sheets within the buffer area. The air bed also reduces friction between the top sheets as part of the anti-scratch design.

