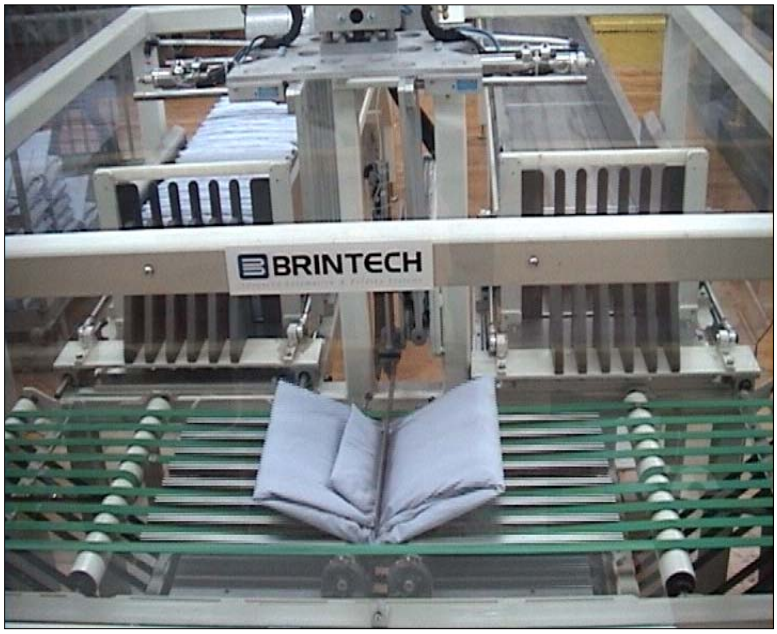
MARS

Book-Fold Folding and Stacking System for Fitted Sheets



The Mars system automatically folds fitted sheets into a book-fold pattern.

Utilizing Brintech's innovative and technologically advanced design, the Mars folds the sheet around a cardboard creating a book-fold, which is highly demanded in the textile industry.

Folded sheets are stacked in two troughs (above) by Brintech's advanced Fold-N-Stack unit (left).

Final folded size ranges from 6" x 9" to 14" x 14" (15cm x 23cm to 35cm x 35cm). The Mars will fold and stack up to 600 fitted sheets per hour.

- Advanced Design
- High Speed Operation
- Precise Folds
- Reduced Maintenance

Advanced Solutions for Textile Manufacturers

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Advanced Automation & Folding Systems

MARS

The Mars system automatically folds fitted sheets into a book-fold pattern. It accommodates various material types including *poly/cotton, sateen,* and *flannel*. The Mars folds the sheets around a cardboard, creating a book-fold. A standard fold can also be achieved, with or without a cardboard. Folded sheets are stacked in two troughs.

Folding and Stacking Method

The Mars will fold fitted sheets with 4 lateral folds and 4 crossfolds.

- The 1st crossfold is accomplished with a reverse conveyor and air blast assistance.
- The 1st, 2nd, 3rd, and 4th lateral folds are made by mechanical blades over adjustable skis.
- The 2nd crossfold is accomplished by a linear folding arm.
- The 3rd crossfold is made by a mechanical folding arm (Swing Arm Unit).
- Cardboard Inserter can insert a cardboard into the sheet before the 1st lateral fold is made.
- Brintech's unique ***Pressing Unit*** presses down each folded item after the 3rd crossfold to enhance package quality (optional).
- The 4th crossfold is accomplished by Brintech's advanced ***Fold-N-Stack*** unit, which uses mechanical arms with knife assistance in order to fold the sheet.
- As the last fold is completed, the ***Fold-N-Stack*** stacks the sheet vertically on one of two troughs. 1st quality items are stacked on the 1st trough, and 2nd quality items are stacked on the 2nd.

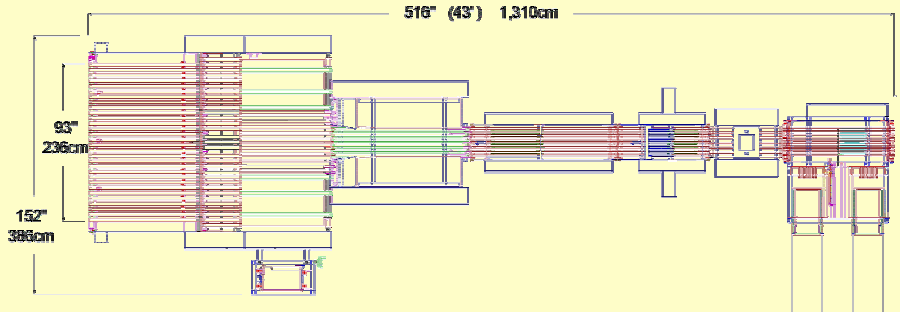
Control System

The Mars is controlled by a high-speed computer (PLC) with up to 70 folding programs. Operator interface is a 10.4" color active matrix touch screen, which displays trouble-shooting messages and allows for output tests.

The PLC can be linked to an office computer with Brintech's ***Machine-to-Office Computer Link***, which enables customers to collect data and monitor the status of the system in real time via web page on their office computer. This link also enables Brintech's support staff to connect to the machine's computer via Internet and to perform diagnostic tests, trouble-shooting, and software upgrades without being physically present at the customers' plant.

Features & Benefits

- A vacuum suction unit is built into the second section of the inlet conveyor to help with manual feeding.
- 2nd and 3rd quality sorting is made by the operator using push-buttons on the inlet conveyor.
- The Mars is equipped with indicator lights and a sound alarm: Production Pacer, Cardboard Unit Monitor, Machine Jam Alert, and Stacker Troughs Full Signal.
- All drive motors are controlled by ***frequency inverters***, which increase folding accuracy, eliminate the use of brake motors, and minimize the mechanical shock and stress to the drive systems. The use of these inverters also reduces maintenance, downtime, and prolongs the life of the system.
- Cardboard Inserter will accommodate various cardboard types, including corrugated.
- All lateral fold skis will automatically adjust to proper width according to the folding program selected by the operator.



Specifications

Minimum Sheet Size
Twin

Maximum Sheet Size
King, Cal. King

Minimum Folded Size
6" x 9" (15cm x 23cm)

Maximum Folded Size
14" x 14" (35cm x 35cm)

Folding Speed
Up to 600 sheets per hour

Air Connection
1" NPT ~ 10cfm

Electric Connection
220VAC +-5% 3Phase
60Hz 7KW (380V 50Hz)

1101 Court Drive
Charlotte, NC 28211
Tel: (704) 365-5499
Fax: (704) 365-1871
www.brintechinc.com