

EMD *Duotex*
Feeding Technology

Kannegiesser[®]
PARTNER IN LAUNDRY TECHNOLOGY



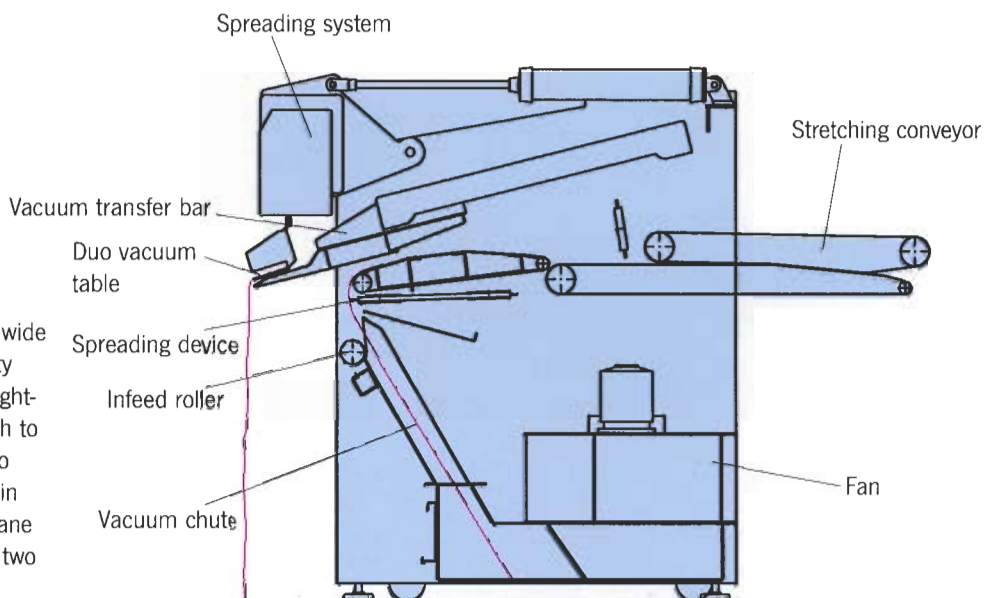
Feeding machine Duotex Model EMD

Universal combination feeding machine designed for two main applications

- medium capacity at a high quality output
- high capacity in 2 lane operation

Model EMD 01 Model EMD 01 + 2

These models are ideal for feeding a wide range of items for which a high quality standard is required. These include light-weight polyester cotton sheets through to table cloths. Maximum capacity: up to 850 large items per hour, processed in single lane or in combined 1- and 2-lane operation or maximum 1350 items in two lane operation. Of course also small pieces can be fed.



The machine is distinguished by its clear and maintenance friendly design

Various Feeding Possibilities



1 lane large items



Combined 1 and 2 lane operation



2 lane operation from the lane centreline

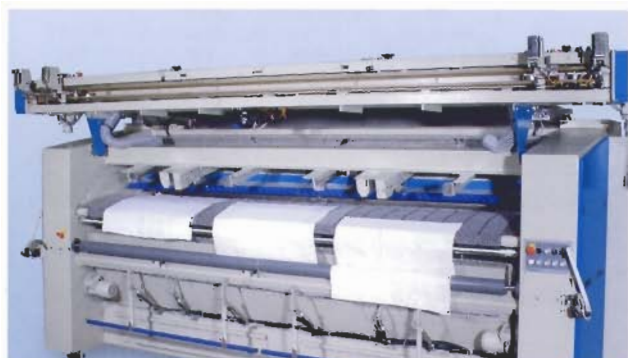
Operating modes



1 lane with centre station



First lane: clamp feed from the lane centre
Second lane: manual feeding onto the vacuum transfer bar



Multi-lane small item feeding on the inclined vacuum table

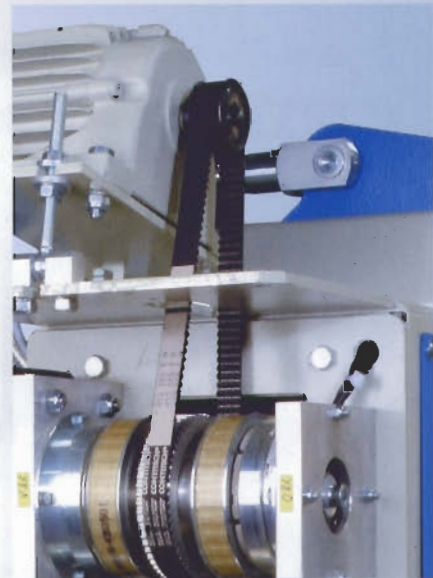
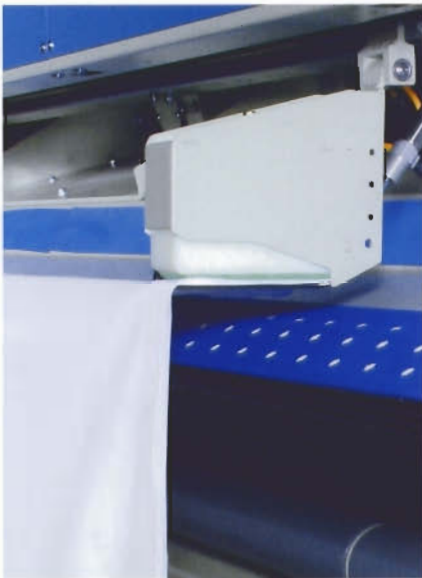
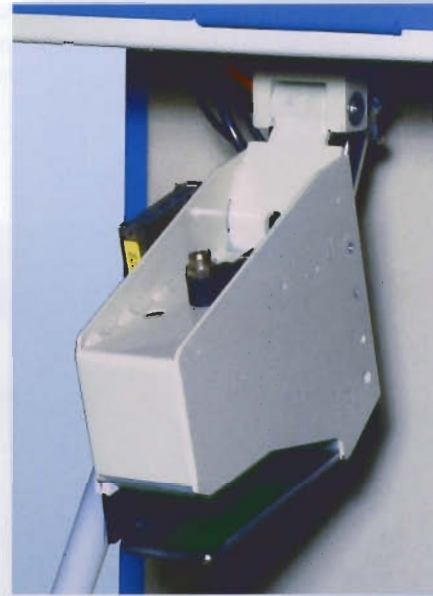


1 or 2 lane manual feed onto the vacuum transfer bars

Clamping, Spreading

The two large-surface clamps are height adjustable to ease the feeding process. They automatically close when fed.

Clamp with item guide edge



The new spreading technique ensures an excellent leading edge for the item

Spreading principle: Measuring followed by spreading

Clamp carriage drive

The automatic spreading system combined with the proportional control of the spreading force ensures a perfectly square and straight leading edge and lane centre feeding.

In line with the patented spreading principle "measuring followed by spreading", an automatic measurement takes place before the first stretching of the item which in turn results in a very fast yet gentle spreading. This is particularly beneficial where a wide range of articles has to be processed.

Despite its extremely dynamic drives, the machine is notable for its smooth operation. The use of high performance timing belts and a lint resistant rail profile make the drive of the clamp carriages almost maintenance-free.

Transfer, Smoothing and Stretching

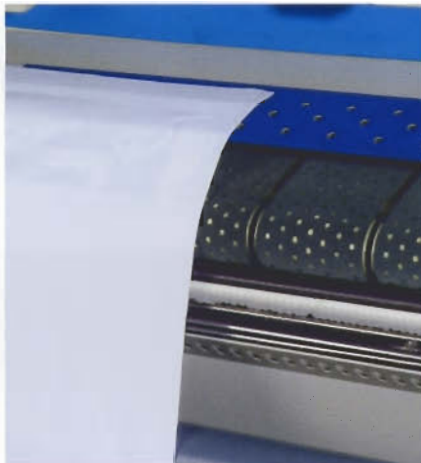
Following spreading, the vacuum transfer bar moves against the item, the clamps lower to the vacuum transfer bar, open, and the items leading edges full surface is placed on the vacuum transfer bar.



Transfer position of the clamp onto the vacuum transfer bar

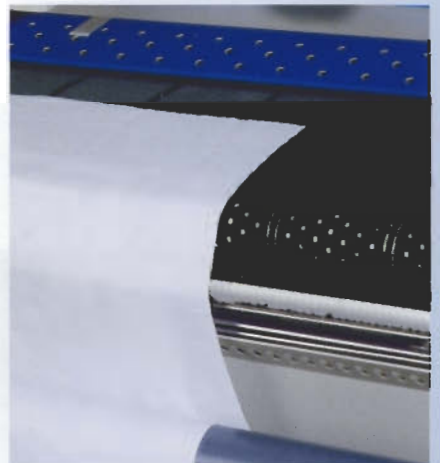
The vacuum transfer bar moves forward taking the leading edge of the item with it. Without altering its natural attitude, the item is transferred onto the transport belts, the speed of which is synchronised with that of the vacuum transfer bar.

The efficient vacuum acting beneath the perforated transport belts ensures that all items are safely held in place, from the light-weight polyester cotton sheet to the heavy cotton duvet cover.



Transfer with the speed regulated transfer profile. The leading edge of the item is transferred in its natural attitude

As soon as the leading edge of the item is spread and lies on the vacuum transport belts, the infeed roller transports the item into the vacuum chute, which is designed to fully shake-out even the very long pieces. The strong, uniformly distributed air flow causes an intensive shake-out action. During their transfer into the transport system of the feeding machine, the items are pulled over smoothing brushes running in opposite directions.



The interaction of vacuum transfer bar and the Duo vacuum ensures a square and straight leading edge of the item

Special Program for Table Linen

Following the sensitive, automatic spreading the vacuum transfer bar lays the item onto the perforated transport belts with Duo vacuum. Subsequently, the item enters the wedge shaped infeed zone of the stretching conveyor and triggers a photocell for a brief intermediate stop. As the conveyors have two separate drives, the stop function allows the leading

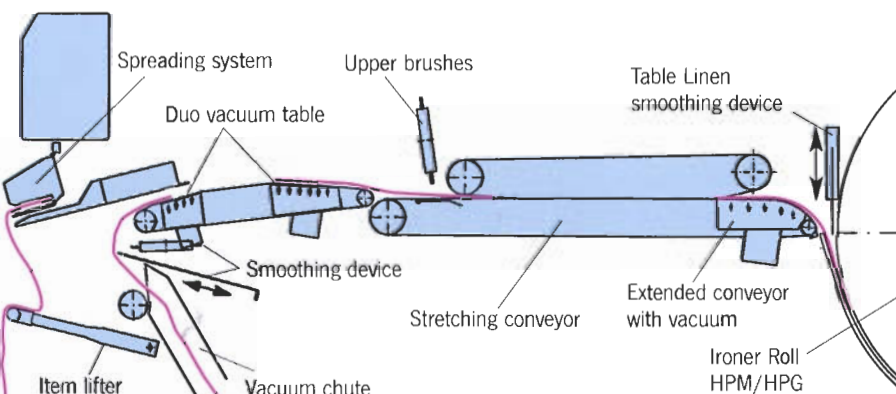
edge to be stretched and smoothed which is very beneficial for the selvedge.

If required, upper brushes can be added to smooth out the side edges of the item. If tablecloths (e.g. round cloths) are to be fed manually, the feeding belts will stop automatically by program once an item has been laid on them. Consequently, the

tablecloth can be placed on the resting transport belts and be adjusted manually. The belt restarts moving as soon as the hand is removed from the photocell beam.

Options:

- Special equipment for treating table linen
- Direct vacuum feed
- Table Linen smoothing device in the High-Power Ironer
- Upper brushes



Operating and Control System

The machine controls are accommodated in the IBT Control Panel, which has a large easily readable display, easy to use keys and directly available selection menus, together with operator guidance for the required individual programs. The IBT Control Panel is both convenient and practical.

Production mode:

The required feeding program is selected from the program memory by entering the program number or by selecting the program name, and is then displayed on the screen.

Programming mode:

The function of programming is to optimise

the various parameters of the feeding system, such as spreading forces, spreading plates, timed deposit etc. for the relevant laundry type. In the programming mode, a brief explanatory text appears on the screen for each parameter, guiding the operator to compile the best article program which is then stored in the program memory and can be called up at any time during production.

Fault Finding mode:

The input and output level of the machine controls and all movements are displayed on the screen. Faults are also displayed in plain text to improve and accelerate machine maintenance.



The production, programming and fault finding modes are easy to handle on the terminal. The picture shows the optional IBT-Net.

Possible combinations: Processing from the Large Item Buffer and Feeding System ERGOMAT or feeding via the Pick-Up Machine PU12

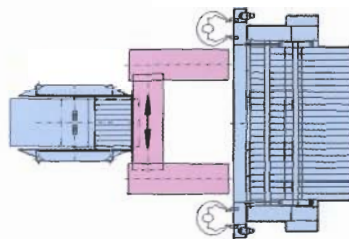
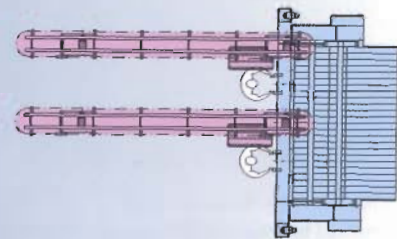
A more consistent output can be achieved by installing a DUOTEX, operating in the 2 lane mode, with the large item storage and feeding system ERGOMAT, as the operator is relieved from the strenuous operation of untangling work and the items are ergonomically fed into the feeding machine. An item buffer

is created between separation and feeding to help compensate the natural performance fluctuations and to increase the overall capacity.

A notable increase of the per capita capacity can be achieved by the installation of the PU 12 Separation Unit.



Transferring and clipping the corner of the items using an ergonomically correct body posture – This is all the operator has to accomplish.



Technical Data

Model	Working Width mm (inch)	Number of Lanes Large Items/Small Items	Dimensions			Working Air Pressure (Pe) bar (PSI)	Air Consumption st Pe l/piece	Connected Electric Load kW	Weight kg
			Width mm (inch)	Length ¹⁾ mm (inch)	Height mm (inch)				
EMD-01	2700 (82")	1 or 1/3 or 1/4	4500 (177.1")	2371 (93.3")	1850 (72.8")	6.5 (97.5")	4.7	6.2	2500
	3000 (118")		4500 (177.1")						
EMD-01+2	2700 (82")	1/2 or 1/2/3 or 1/2/4	4500 (177.1")	2371 (93.3")	1850 (72.8")	6.5 (97.5")	4.7	7.8	2500
	3000 (118")		4500 (177.1")						2500
	3300 (130")		5000 (196.8")						2800
	3500 (138")		5000 (196.8")						2800
	4000 (158")		5500 (216.5")						3100

1) Length of feeding conveyor 800 mm

Indirect noise level in the work place 75 dB Measurements according to DIN 45 635, Part 1/DIN 45 649 Part 1
Summary on large piece programme

Subject to alterations in detail