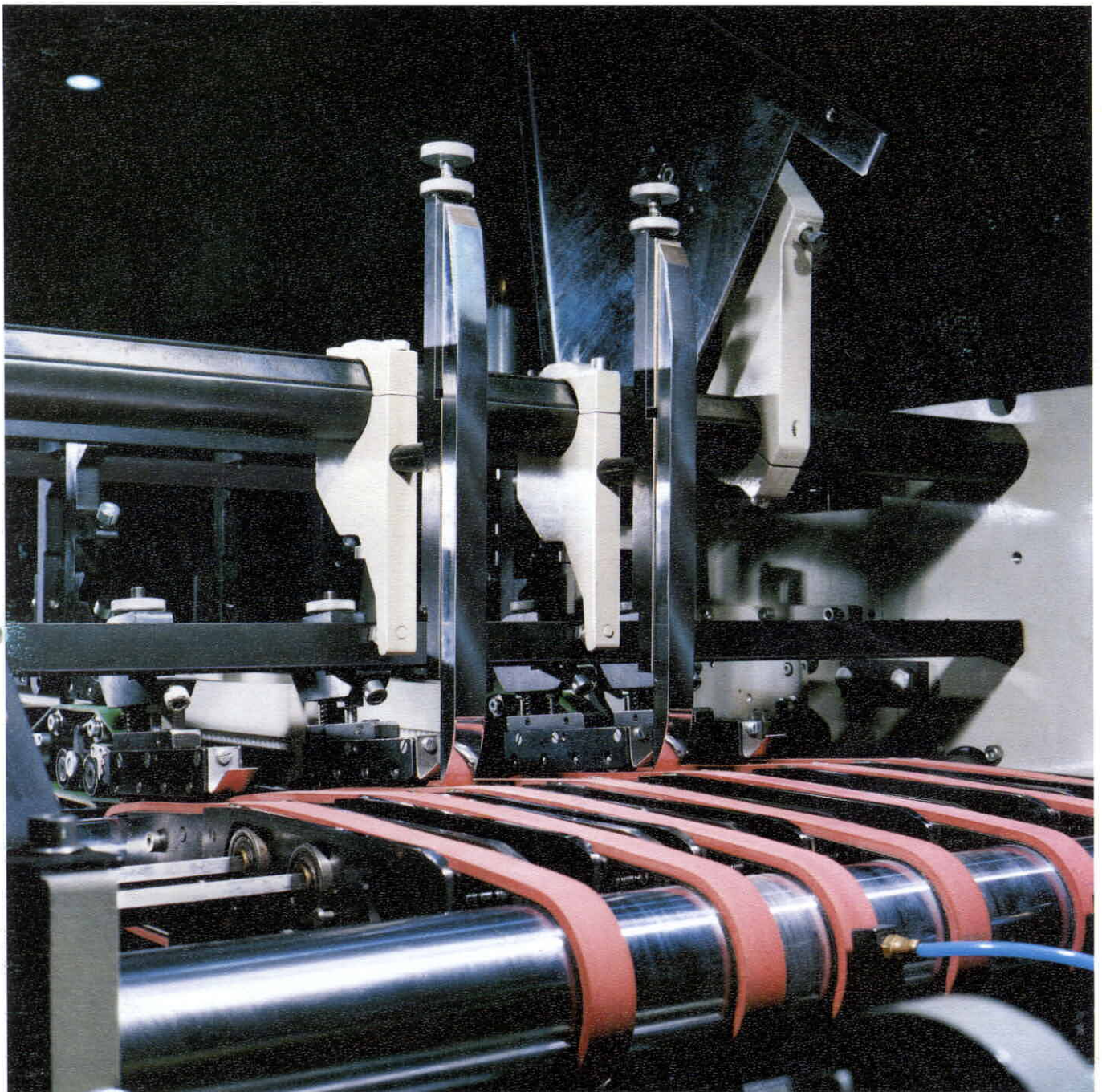


# DIANA 105-2

**The Compact Solution:  
Universal High-Speed Folding  
Carton Gluer**

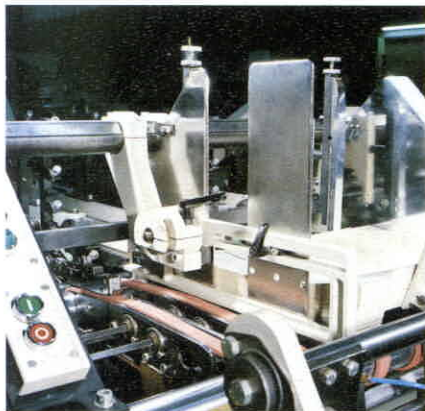


# DIANA 105-2

## High-performance technology for economical operation and great versatility

DIANA technology is designed for economical folding and gluing of all major carton types: from standard straightline folding cartons and lock-bottom cartons to 4- and 6-corner collapsible boxes (trays). Collapsible boxes are folded and glued by an integrated attachment\*; no additional mobile units are required.

Standard equipment on the DIANA includes the novel timed belt feeder for rapid changeovers from untimed to 1-up or 2-up operation, the squaring station for registering blanks in timed operation in lateral as well as travel direction, and the split carrier/roller bar system in the prefolder which gives the DIANA a great deal of flexibility for handling a wide range of cartons.



Trouble-free blank feeding with the DIANA timed belt feeder.

For initial and repeat settings, a digital position indicator ensures short makeready and quick, smooth start-ups with a significant reduction in start-up waste. That makes handling small orders economically feasible.

### Electronics increase productivity and simplify operation

The DIANA 105-2 can now be enhanced with an electronic notebook\*. The machine operator need only select the carton type to be handled and enter a few dimensions in the process control computer. He can then check all the positions of the machine components involved on the terminal screen, and with the help of the digital position indicator transmit them to the DIANA. This can be done by hand or with a compressed air motor\*.

There is virtually no limit to the number of carton dimensions that can be stored for repeat orders.

A printer\* can be connected to the process control computer to provide the operator with printouts of the makeready data.

A fixed disc is provided for data storage; a floppy disc for backup data protection.

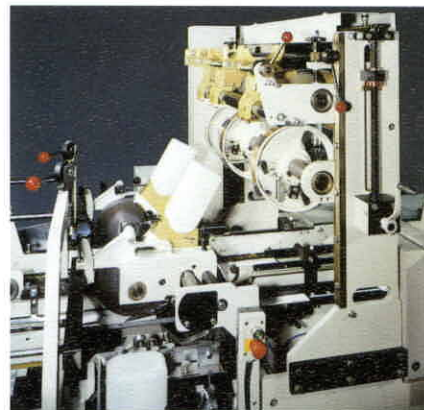
### Proven concepts make for better carton quality

The concept of the motorized lift-in/lift-out tuck-in unit\* simplifies the makeready of difficult lockbottom cartons and simultaneously improves folding and gluing accuracy.



Short makeready, quick start-up and minimal start-up waste with the digital position indicator, measuring scales and compressed air motor\*.

For handling collapsible boxes, the following features have proved especially beneficial: independently operating gears for backfolding, vacuum boxes to keep the blanks flat, a backfolding hook shaped to conform with the folding sequence, and the use of strip\*, spot/pattern\* or jet\* glue applicators.



The use of strip\*, spot\* or jet\* glue applicators enables you to handle a wide variety of cartons.



\* accessory equipment

# DIANA 105-2

## To meet the needs of the market today and tomorrow

### Future-orientated performance and durability based on versatility and simple operation

Proof that this is not just sales talk are our short makeready times – as a rule, between 5 and 30 minutes. And that also applies to most lock-bottom cartons and collapsible boxes.

### Sustained quality through proven technology

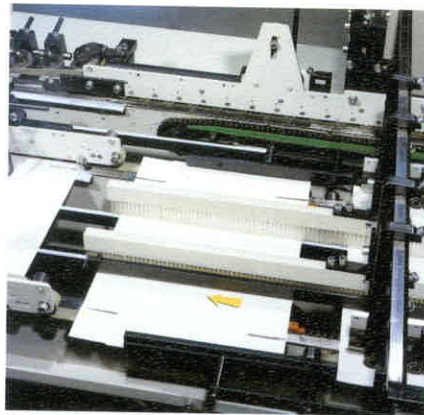
The DIANA quality control systems\* reduce waste. An electronic code reader\* identifies cartons and monitors their print and register accuracy. An automatic ejector\* effectively 'kicks out' defective cartons.

An electronic glue film monitor\* ensures precise glue application.

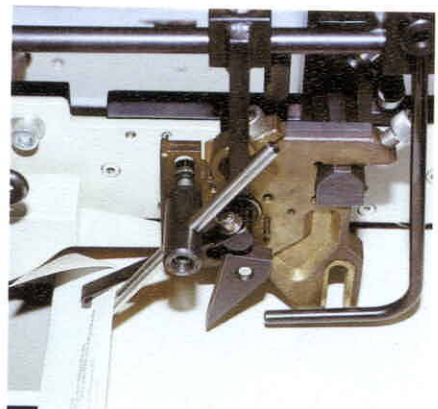
### Ingenious technical details make the DIANA an economical choice

The centralized feed belt clamping arrangement, for example, permits rapid adjustments. Being able to replace folding and carrier belts without having to bother with removing shafts also yields great time savings.

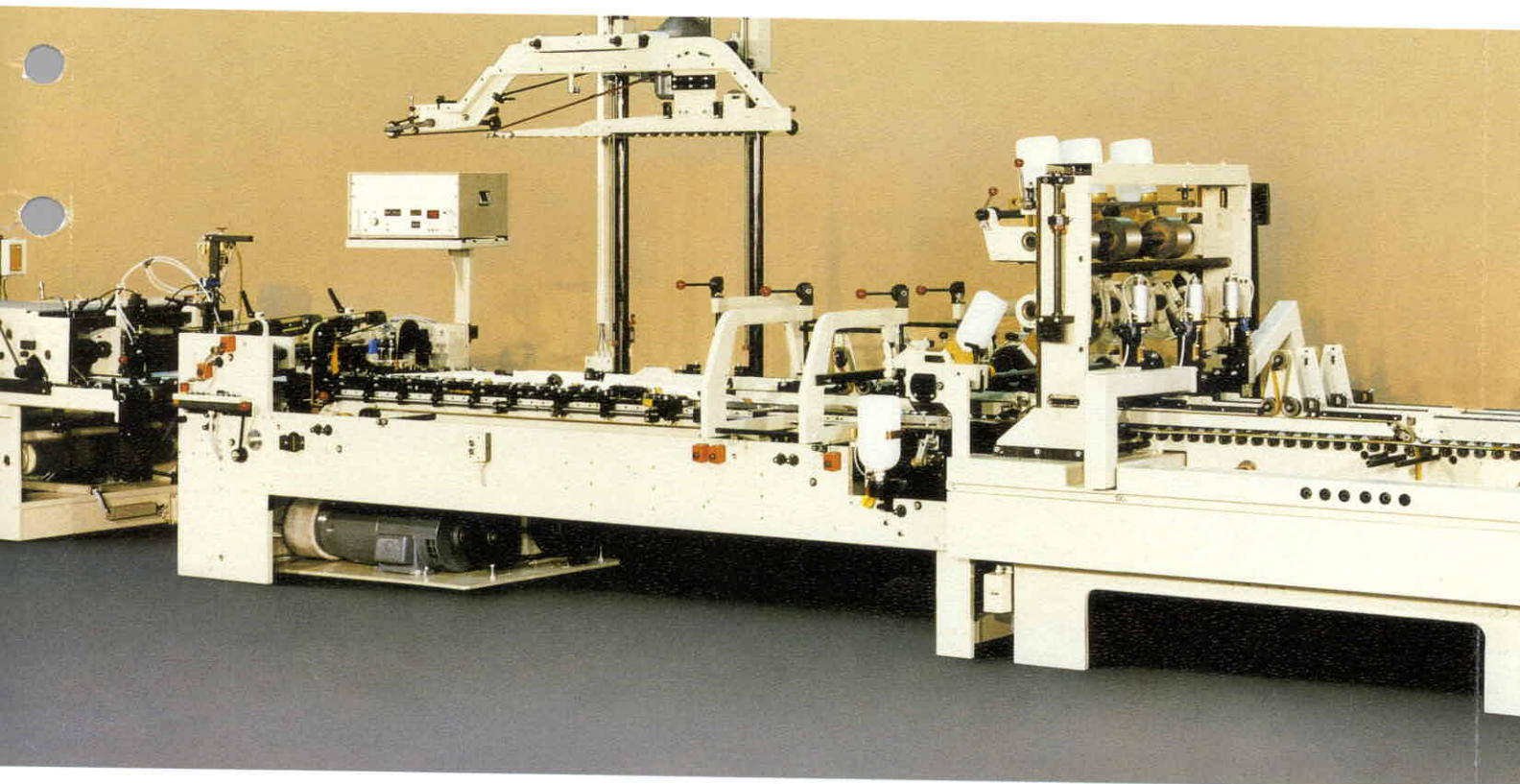
The individualized speed regulation of the folding and carrier belts leads to exemplary folding results. The roller bar rapid lift-off feature simplifies adjustments and removing jammed blanks. A high-performance bottom glue unit together with overhead glue units\* with individual height adjustment ensure that glue is applied faultlessly. The



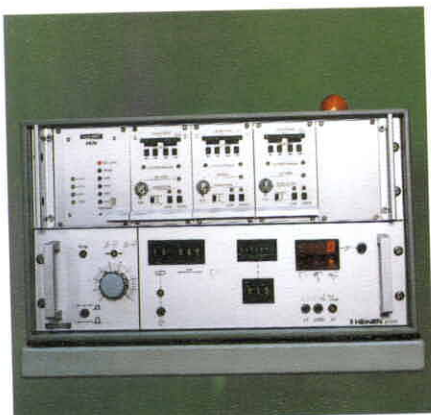
High folding accuracy with the blank squaring station in timed operation.



Short makeready times for lockbottom\* and collapsible\* cartons with pre-assembled folding hook module.



controlled "left-before-right" folding action guarantees twist-free handling of even the most complex blanks. The blank-dependent control of the compression and delivery section (stacker) ensures reliable bonding of the glue seams in a 3 meter (10 foot) long pressing section that can be extended if necessary.



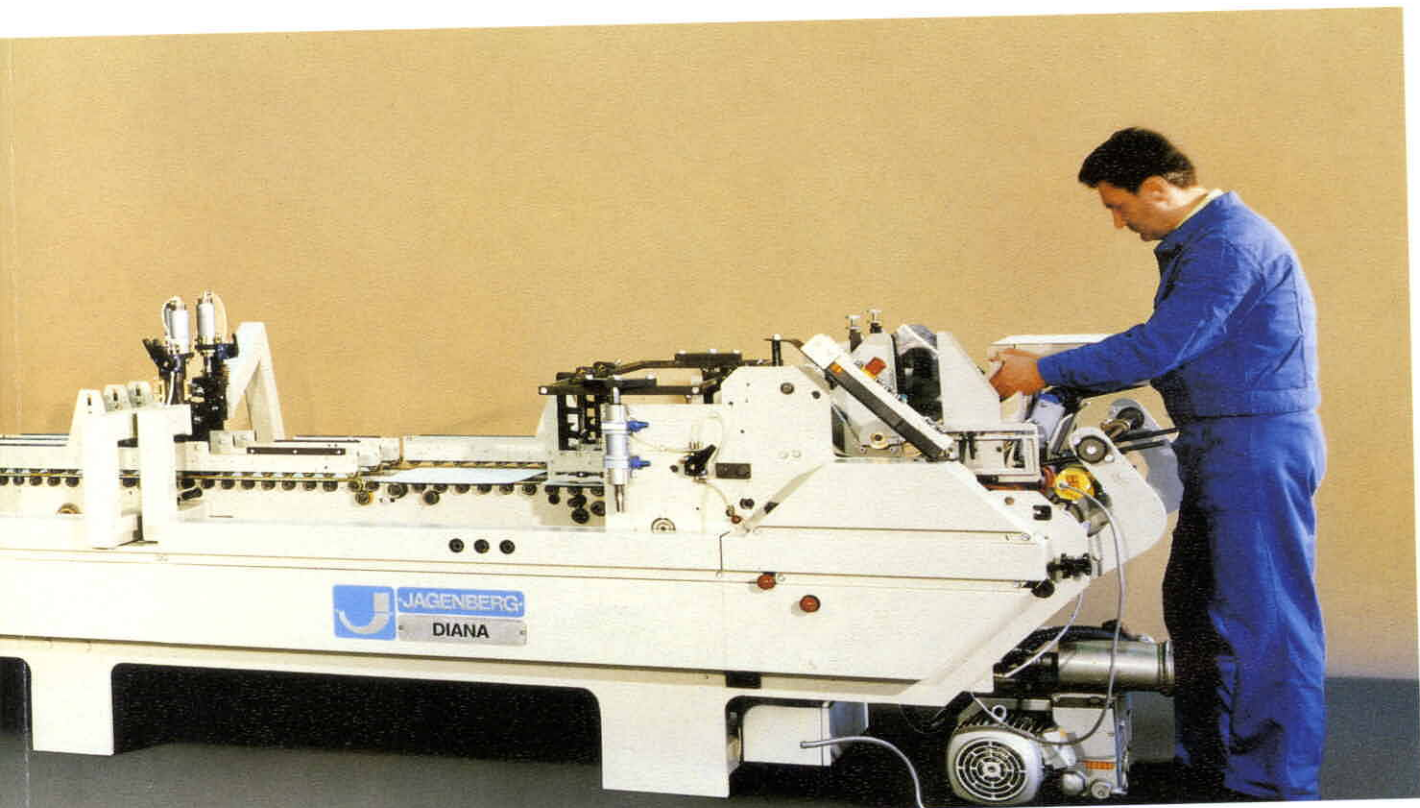
Assurance of high quality with electronic glue film monitor\* and blank-dependent control of the compression and delivery section.



Gentle folding and high performance through special backfolding hook shape\* and vacuum box\* for keeping the blanks flat.



Simple adjustment and perfect folding of the most difficult lockbottom cartons with the motorized tuck-in unit\*.



# JAGSET Automatic Makeready\* High-Tech Features Reduce Idle Times



JAGSET – Progress made by JAGENBERG.

JAGSET – automatic makeready and storage capacity for a virtually unlimited number of cartons. This means your efficiency factor increases every time you do a repeat order. The ideal production speed is quickly attained and waste is almost completely avoided.

The JAGSET software includes makeready programs to calculate the best setting for straightline folding cartons, lockbottom cartons with or without prefolding, and 4- and 6-corner collapsible boxes. Exact positioning data on any manual corrections made can also be retained. Naturally, the JAGSET also offers storage and retrieval capacity for data on speciality work.

From just a few dimensions, the micro-processor calculates all positions for the machine elements tied into the automatic makeready system. With the particular code num-

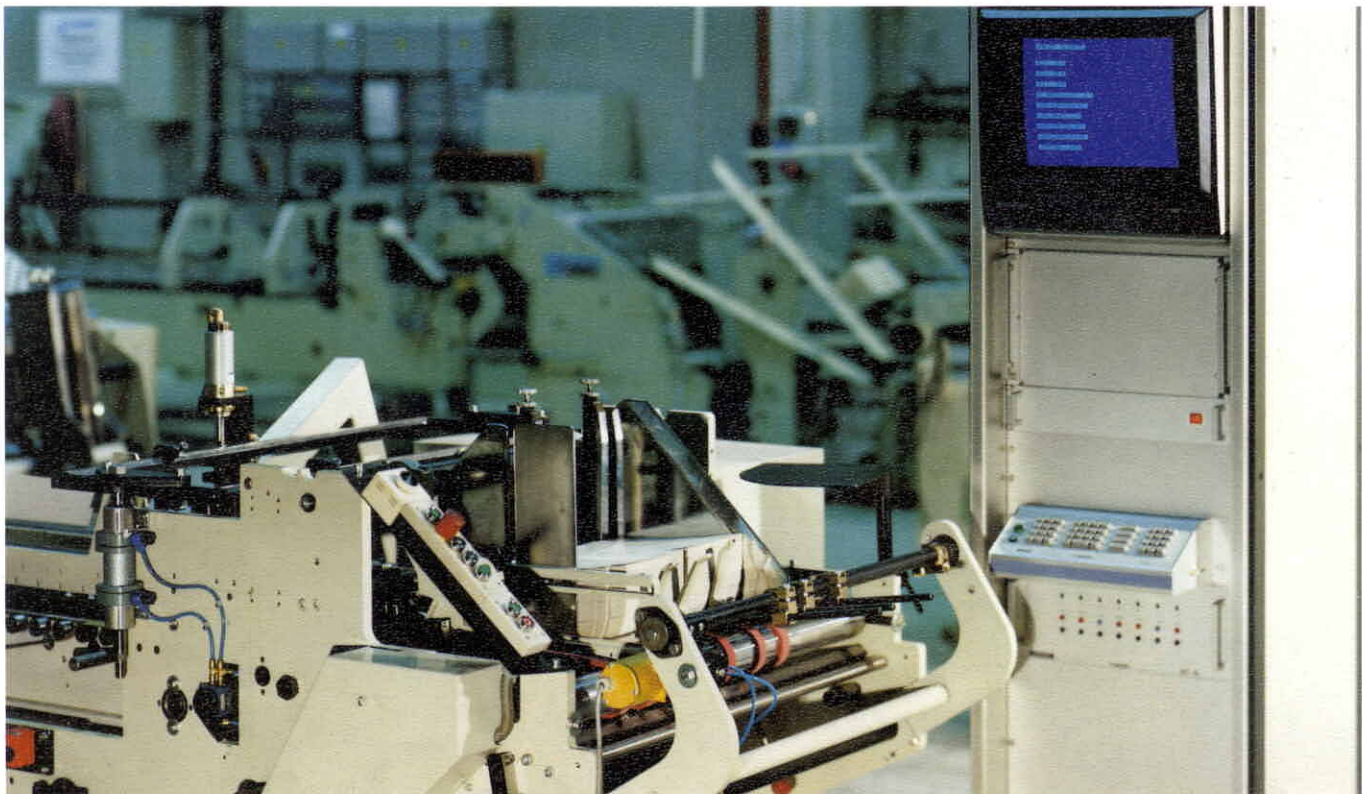
ber assigned to each carton, every setting stored can be retrieved immediately with an accuracy of  $\pm 0.2$  mm – a degree of precision that simply cannot be achieved by hand. The machine operator can enter data during production without stopping the machine. All participating machine elements are moved almost instantly into the correct position by the JAGSET automatic makeready system. After a few additional manual settings have been made on the elements that are not part of the automation process, production can begin immediately.

The 10 DIANA folding carton gluers that can be equipped with the JAGSET system:

- DIANA 40/70/90
- DIANA 85/105-1/125
- DIANA 105-2
- DIANA 185-1
- DIANA Sprint
- DIANA Lockset



Makeready gear motors.



Simple data entry, precise settings, short makeready and quick production start-up with JAGSET automatic makeready equipment\*.

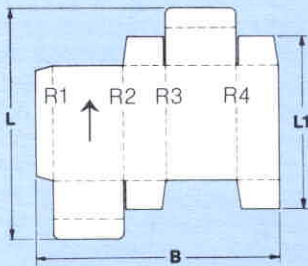
# DIANA 105-2 Setting Range and Technical Data



## JAGENBERG

JAGENBERG AG  
Machinery Division  
Düsseldorf

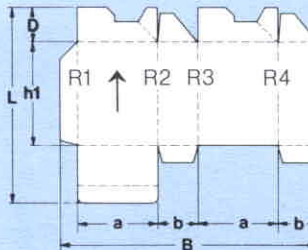
JAGENBERG AG  
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Postfach 1123  
D-4000 Düsseldorf 1  
Tel. (211) 43 93-01  
Telex 8582 741  
Fax (211) 43 93 498



### 1. Straightline cartons

B	50-1050 mm
L max.	900 mm
L1 min.	55 mm

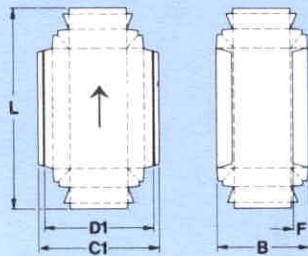
Machine speed: 450 m/min. (1475 ft/min.)



### 2. Lockbottom cartons

B	190-1000 mm
L max.	900 mm
D max.	150 mm
h1 min.	50 mm
a min.	60 mm
b min.	30 mm

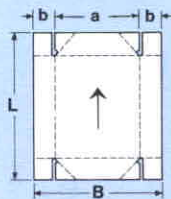
Output max.: 50,000/hour



### 3. Double-wall cartons

B	60- 730 mm
L	85- 900 mm
C1 max.	1050 mm
D1 max.	1040 mm
F min.	15 mm

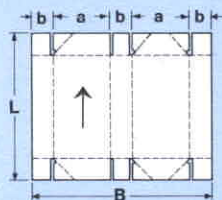
Machine speed: 300 m/min. (1000 ft/min.)



### 4. 4-corner collapsible trays

B	140-1050 mm
L	100- 870 mm
a	70- 730 mm
b	20- 200 mm

Output max.: 30,000/hour



### 5. 6-corner collapsible boxes

B	230-1030 mm
L	120- 870 mm
a min.	70 mm
b	30- 150 mm

Output max.: 25,000/hour

Other dimensions as per infotec.

Cardboard material	folding box-board (gsm)	corrugated board
1. Straightline	200-900	E- and B-flute
2. Lockbottom	250-900	E- and B-flute
3. Double-wall	200-900	E- and B-flute
4. Collapsible	250-900	E- and B-flute

Space requirements length/width	14.0/1.8 m (46' / 6'1")
Net weight	83,000 N (8,300 kg)
Standard packing volume	46 cubic meters (151 cu.feet)
Total connected load	33 kVA

All data given are approximate values.

Further details on the DIANA 105-2 and other machines in our manufacturing program are available on request.

### The JAGENBERG Delivery Program for Universal Folding Carton Gluing and Packing Machines

The DIANA program comprises machines for all major carton types in a variety of price and output categories: universal high-speed machines for the most important carton styles including collapsible boxes, as well as special machines for lockbottom (crashlock) cartons, for mass-producing normal straight-line folding cartons and for manufacturing liquid-proof cartons.

The DIANA modular system permits retrofitting many accessories so that tomorrow's market demands can be met with the machine installed today.

Completing the DIANA program:  
JAGFEED pre-feeder  
JAPACK universal folding carton packer  
SB collator/stacker

We live up to our claim:

**JAGENBERG - Technology for a Competitive World.**

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