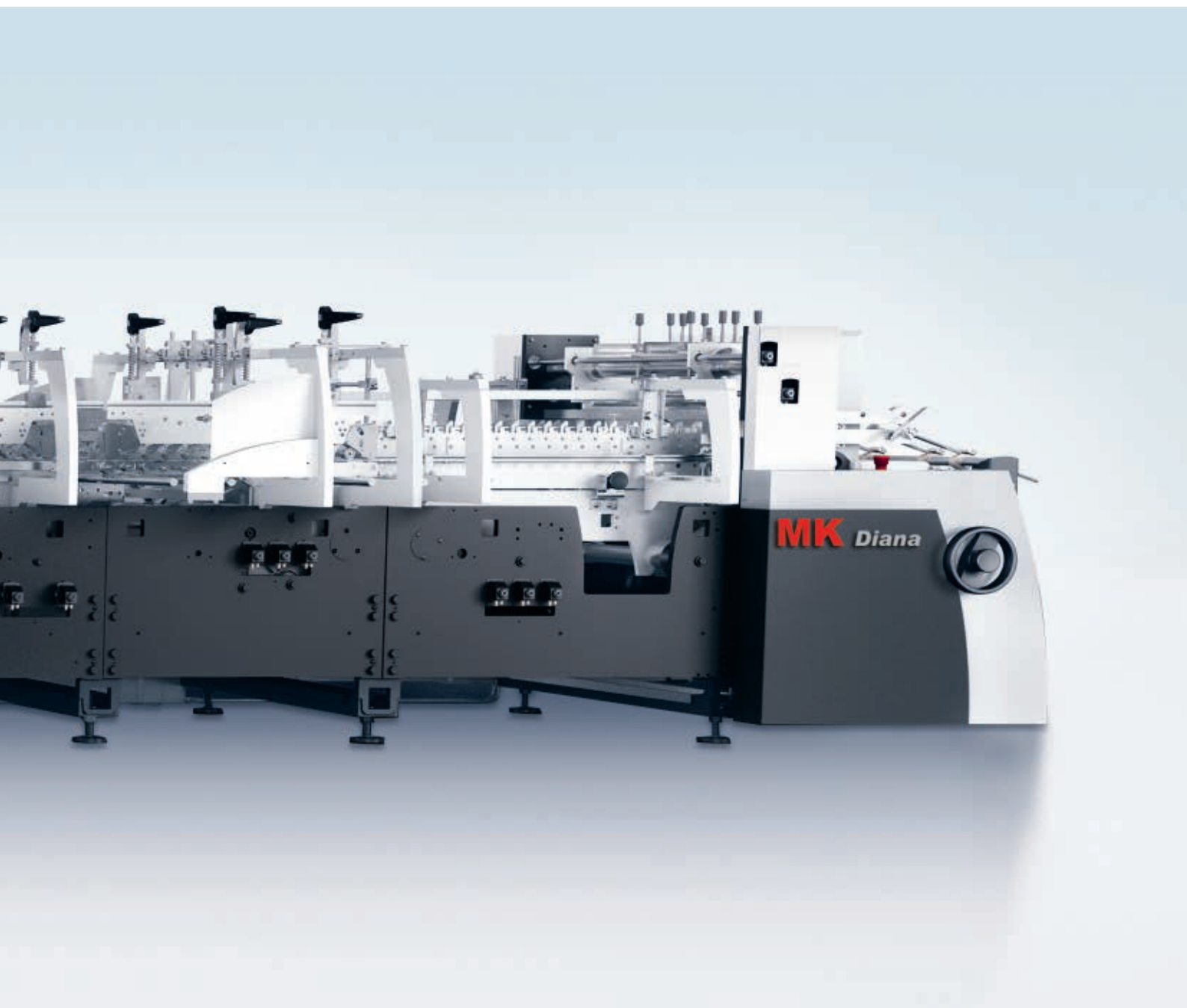


Equipment



Intelligent Folding Box Processing. **Diana Smart 55/80/115.**



HEIDELBERG

Features and Benefits.

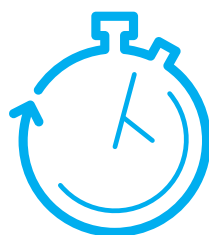
Diana Smart 55/80/115*.

Fast processing.

Up to

450 m/min

belt speed.



More than

150.000

straight-line cartons per hour.

Braille embossings
during processing possible
(retrofitable).

Smallest, processable
carton width: 45 mm.



Safe operation.

Confirmed by GS approval.

Precise ejection

of faulty cartons without any limitation.

Fully automated
set-up with AutoSet.
Time saving of
more than

50 %

during set-up.

Highest precision

for Single servo-drives.

More than

100 years

of experience in building folder gluers.

Highest quality

due to inline-inspection of
entire printed image with
the new Diana Inspector.



Completely Flexible Due to Modular Design.

Diana Smart 55/80/115.

The only constant feature of the Packaging business is change. The life cycle of many consumer goods is getting shorter. At the same time the number of variants proliferates in order for a brand to stand out from the crowd. One size fits all is a thing of the past.

Special applications like braille embossing or inline quality inspection raises the folding carton gluing process to a new level of complexity but the need turn around smaller run lengths as quickly as possible put fast machine make-ready and operator friendly set-up at a premium.

In response to the changing needs of our customers we have extended our folder gluer portfolio into the medium performance segment with the Masterwork Diana Smart. Based on the successful Diana X model range, the Diana Smart series is characterized by a compact design, without compromising quality and with a maximum machine speed of 450 m/min is perfectly suited to handle a wide variety of applications in the format of 55, 80 and 115 cm working width and up to a carton length of 600 mm, including:

- Straightline cartons
- Lockbottom cartons
- Double-wall- and partition cartons
- 4-/6-corner collapsible cartons
- Miniature cartons
- Mailing envelopes and many more

The material range from 200 – 600 g/m² solid board and up to E-flute the Diana Smart covers a wide range in terms of stock.

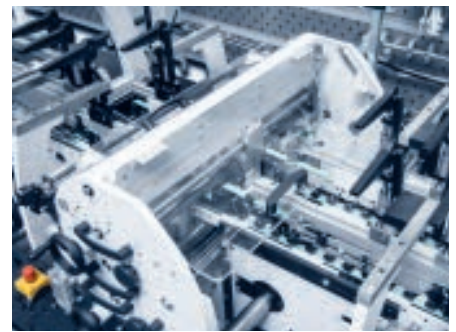
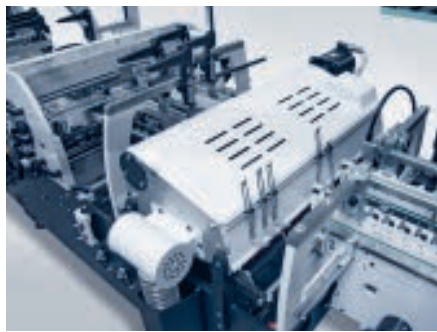
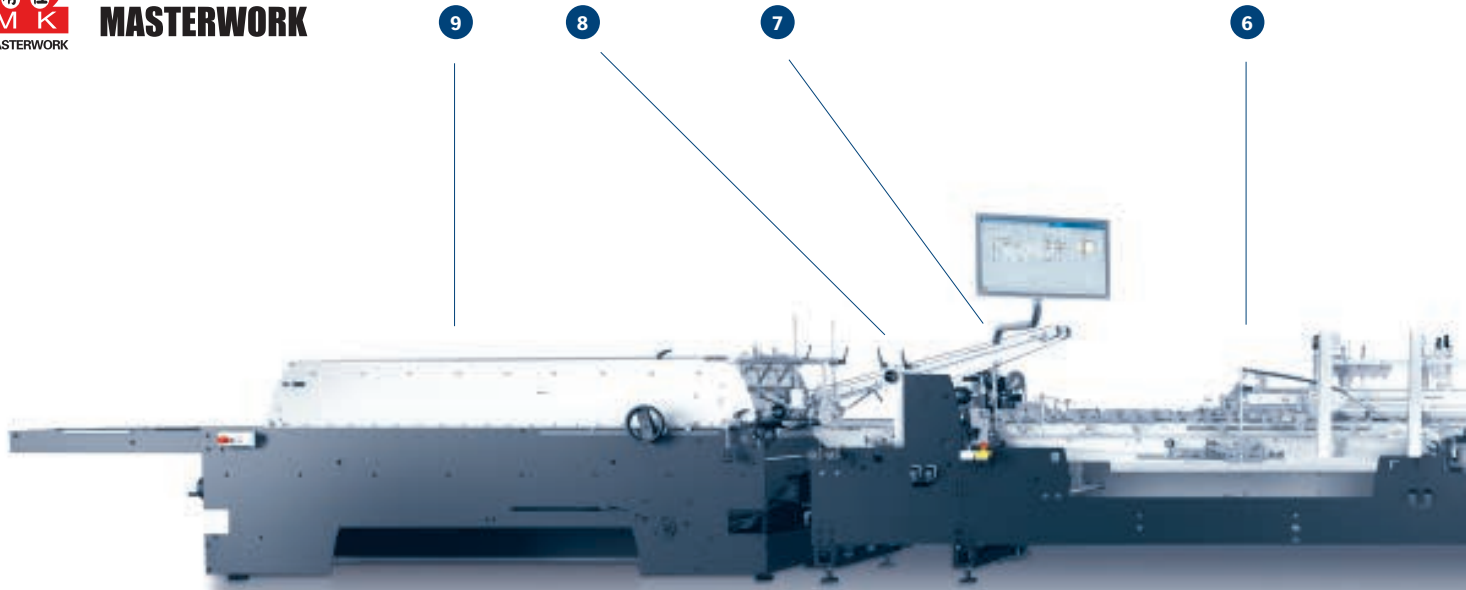
The Diana Smart's control system – based on an intelligent SPS concept – simplifies formerly laborious and time-consuming set-up processes. Whilst the SmartSet function will store all settings for repeat jobs, the DigiSet function even calculates the carrier positions for the initial make-ready and with AutoSet and AutoSet plus, the labor of moving the carriers is eliminated, they find their final position automatically, at the push of a button.

In combination with the Diana Inspection Control Module and the Diana Braille module the Diana Smart is well equipped to meet the highest requirements e.g. to suit the pharmaceutical market.

When equipped with the Stack Turner, Diana Feeder, as well as Diana Packer or the FAS 480 semi-automated packer material handling around the machine is greatly simplified and automated to achieve a smooth production workflow and reduce the cost of labor.

The Diana Smart is exclusively distributed by Heidelberg and is backed up by the worldwide sales and service network of Heidelberg.

[→ heidelberg.com/folding-carton-gluing](https://www.heidelberg.com/folding-carton-gluing)



1 Feeder with Blank Aligning Module

- Short set-up times
- Friction feeder with adjustable belt guides
- Belt replacement in less than 60 seconds without pulling a shaft
- Individual drive for precise speed control
- Transport carriers are adjustable in lengths
- Suction feeder (option)
- Alignment can be done either to the left or to the right
- Aligning linear is adjustable sidewise in order to skip window cut-outs
- Optional upper/lower center carrier

2 Diana Inspector

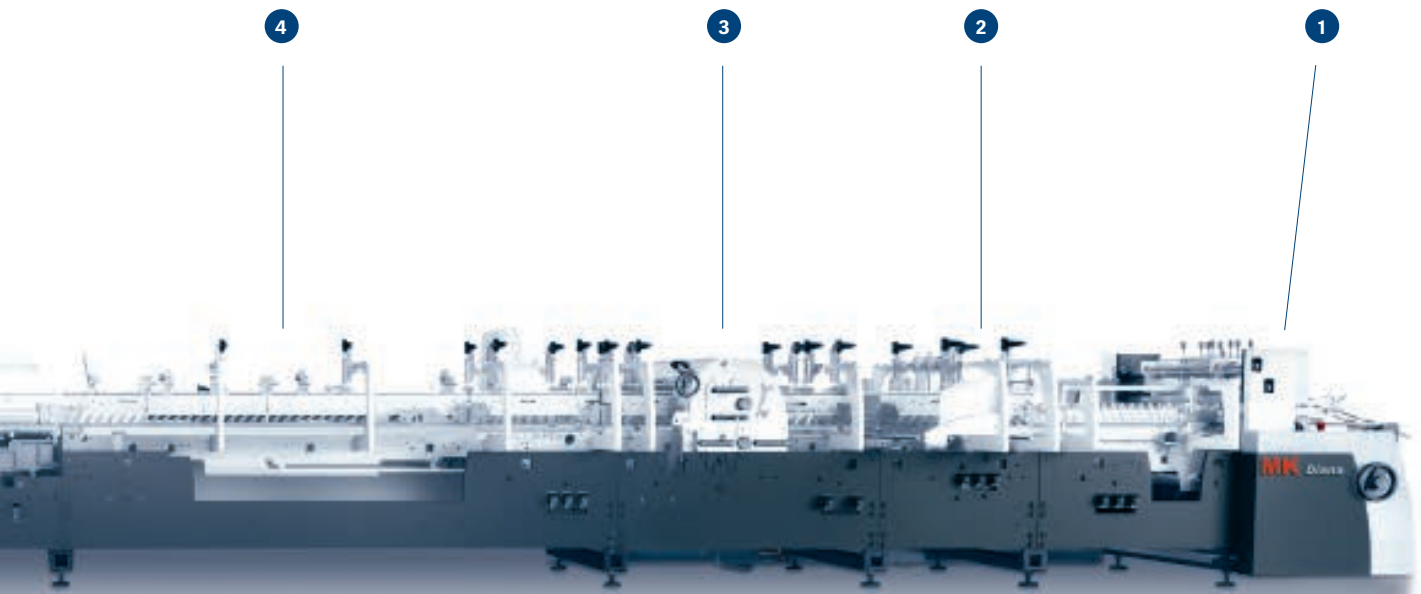
- 100 % inline inspection of the entire print image
- Suction belt technology stabilizes the image for the inspection
- Inspection of defined areas with different resolutions
- Inspection of hot foil and metalized materials or other high reflective surfaces
- Setting values can be saved for repeat Jobs
- Measuring and detecting color variation bigger Delta 2,5
- Automatic ejection of defective or skew cartons is possible
- Automated reporting
- Reliable carton transport
- Low energy consumption (LED lighting)

3 Diana Braille Module

- Braille tool can be positioned across the entire working width
- Two tools can be used in parallel
- 4- or 5-line Braille tools available
- Reliable carton transportation at the embossing stage
- Systemic embossing quality control
- Module length shorter than 1,400 mm regardless of the number of Braille tools

Diana Braille Module with cross adjustment (option):

- Perfect for short and long run productions
- Tools can be changed quickly inside the machine
- 5-line Braille tool solution
- Smart software assistance for best Braille quality



4 Prefolder

- Excellent accessibility thanks to low side frames on operator and drive side
- One lower carrier each right and left side
- One upper roller bar on the right side and two upper roller bars on the left side
- Short upper carrier for rear drive side available as option
- Belt folding on drive side
- Optional lockbottom device

5 Combimodule

- Three lower and five upper carriers
- Processing 4- and 6-corner collapsible cartons
- Comfortable and fast set-up to process lockbottom carton
- First Backfolding shaft in the rear prefolder, second Backfolding shaft in the Combimodule
- Safety light gates for full body protection without obstructing the make-ready

6 Folding Station

- One left and right telescopic roller bar on either side which can be shifted
- Left-before-right folding or right-before-left folding as standard
- Lower center carrier, can be hinged downwards (option)
- Removable upper central transport (option)
- Lowered sidewalls for good accessibility
- Belt folding up to 45 mm open blank width possible (option)

Decisive Characteristics. The Facts at a Glance.

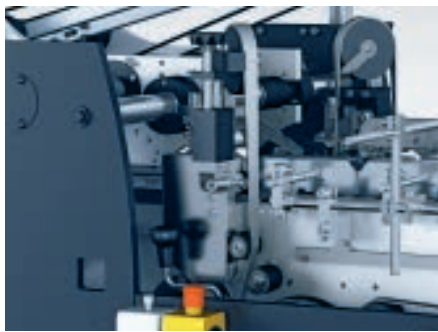
Features::

- Feeder with single servo drive
- Blanking alignment as standard
- Prefolding Module length: 3 m
- Diana Braille 2.0
- Diana Inspector (inline inspection module including inspection of matalized surfaces)
- Folding Station with flexible carrier concept
- Combi Module with modern safety concept for collapsible boxes
- Easy connection to Diana Packer
- Servo motor driven machine sections
- Compression Section length: 4 m, 5 m or 7 m

Highlights:

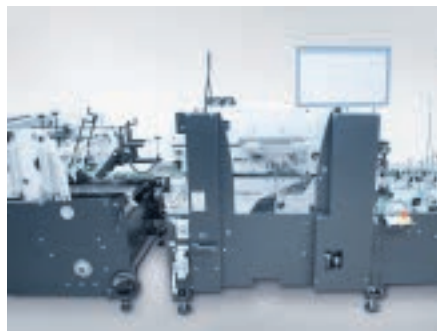
- State-of-the-Art interface with touch-screen
- Ideal accessibility for easy set-up
- Proven, reliable construction of the Diana series
- Solid machine run with very little vibration
- Intelligent belt guidance for simplified belt exchange

➔ heidelberg.com/folding-carton-gluing



7 Pressing Station

- Reduces the reject forces of the folded creasing
- Variable pressure setting by means of ergonomically shaped hand-wheels for operator and drive side
- Suitable for sensitive carton surfaces
- Lateral positioning together with the exterior lower carriers of the folding station

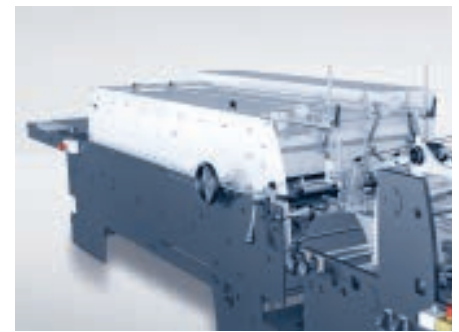


8 Transfer Station

- Electronical speed regulation
- Linear ejector (option)
- Manual longitudinal adjustment of the upper and lower carriers
- Operation unit with touch-screen

Transfer section with integrated linear ejector (option):

- Servo-drives ensure precise operation
- Transport belts are lowered for ejection
- All carton styles and sizes can be ejected at max. speed



9 Compression and Delivery Section

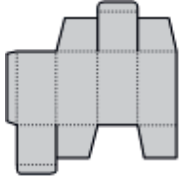

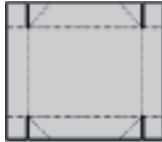

For size 55, 80 and 115 A, B:

- 600 mm wide compression belt
- 2.3 m compression track
- Manual setting of compression zones
- Soft rubber belts for local pressure application (option)

For size 115 C:

- 900 mm wide compression belt
- 3 m compression track
- Four pressure zones with fine adjustment
- Soft rubber belts for local pressure application (option)

Typical Applications and Dimensions

Application		Diana Smart 55	Diana Smart 80	Diana Smart 115
Straight line carton				
max. B × L		550 × 600 mm	850 × 600 mm	1.150 × 600 mm
min. B × L		75 × 55 mm	75 × 55 mm	75 × 55 mm
min. B × L (with miniature carton attachment)		45 × 55 mm	45 × 55 mm	45 × 55 mm
Lockbottom carton				
max. B × L		550 × 800 mm	800 × 600 mm	1.150 × 600 mm
min. B × L		146 × 80 mm Version A ²	146 × 80 mm ²	146 × 80 mm ²
		190 × 80 mm Version B and higher with miniature Lockbottom attachment		
4-corner collapsible carton				
max. B × L			850 × 680 mm	880 × 680 mm
min. B × L			120 × 110 mm	120 × 110 mm
6-corner collapsible carton				
max. B × L			850 × 630 mm	1.150 ¹ × 630 mm
min. B × L			250 × 130 mm	250 × 130 mm

¹ Compression section with transversal adjustment required

² See technical information



For value retention and maximum performance:

Service Agreements.

- Service agreements offer security and peace of mind, while at the same time providing you with the benefits of full cost control and simple administration
- Servicing by highly trained technicians
- Exclusive use of original service parts
- Protection of your machine investment
- Retention of a high resale value

→ heidelberg.com/service-agreements

Sales and Service Partner:
Heidelberger Druckmaschinen AG
Kurfuersten-Anlage 52 – 60
69115 Heidelberg
Germany
Phone +49 6221 92-00
Fax +49 6221 92-6999
heidelberg.com



For details on the emissions of the Diana Eye, please visit us at heidelberg.com/emissiondetails

Liability for contents

The contents of this brochure have been prepared with great care. No warranty or liability is accepted for the correctness, completeness, or accuracy of the information. There is no guarantee that the customer will be able to achieve the values and numbers (e. g. relating to the function and performance of the machine) specified in the brochure. The information provided is based on ideal conditions and proper use of the machine. Achieving these values and numbers depends on a variety of factors and circumstances that are outside the control of Heidelberg as distributor and MK Masterwork as manufacturer (e. g. machine settings, technical conditions, ambient conditions, raw materials and supplies used, consumables used, standard of care and maintenance of the machine, expertise of the operator, etc.). They therefore constitute neither characteristics of the machine nor a guarantee. This brochure does not constitute a contractual offer and is solely for the purpose of providing (non-binding) information.



长荣股份
MASTERWORK