

W+D BB820

When higher net outputs and
performance integrity matter

W+D Winkler +
Dünnebier

Winkler + Dünnebier GmbH
- Marketing Kommunikation -
Schlier Weg 65
56564 Neuwied
Germany

W+D

Fully servo driven inserting system for highest productivity and integrity

Efficient. Intelligent. Secure. The high-performance insertion system **W+D BB820** reliably inserts up to 20,000 products/hr with even the most challenging inserts into a wide range of outer envelopes including US formats #7 (3 3/4" x 6 3/4"), #9's, #10's up to a 6 1/2" x 11 1/2" as well as European sizes from DL to C5.

The patented Auto Mismatch Recovery means one can process multiple personalized inserts with minimal manual interventions and therefore achieve the highest net output and security for the most demanding jobs. The **W+D BB820** boasts full modularity to ensure quick and easy interchangeability of different feeder types within and between the existing W+D multi-format platform W+D BB700 S2 (16K) with flats capability and the all new **W+D BB820** (20K) series.



Reasons for the W+D BB820

- / Processing of up to 20,000 envelopes per hour throughout the size range of the W+D BB820
- / Patented Auto Mismatch Recovery for "hands free" synchronized inserting of personalized inserts
- / Automated match of the personalized outer envelopes to personalized documents in the track using a newly developed divert gate in the gathering section/track
- / Stuck seal flaps on badly made outer envelopes will automatically divert up to 3 times before stopping the machine
- / In the event of a divert the outer envelope is not sealed thus easy to remove and inspect contents
- / One-man operation with on edge conveyor and optional with autoloaders
- / Modular design lets one build on initial 6 station or 8 station base
- / 3rd party cameras and printers integrated into the new BSC 4.0 operating system
- / FBI (File Based Inserting) and CLIP (Closed Loop Integrated Processing) provides highest degree of security, tracking and reporting for sensitive applications like health insurance compliances (HIPPA) and Vote-by-Mail or Absentee Ballot Voting
- / Option for elevated track to print personalized reply envelopes (including unique IMb), etc.
- / Tightest industry side to side tolerance down to 1/4" in total clearance
- / Capable of running new shape-cut / TED-C envelopes (USPS approved) with a welded side seam and subsequently reduced clearance
- / Various post insertion modules such as turnover belt, mail table, Read & Divert Unit, stamp or label affixer, postage meter, etc
- / Feeders are exchangeable within the machine and amongst machines of the W+D BB700 S2 series
- / Tool-free settings for fast changeovers



Inserting section

Standard components

- / Inserting module with a 6 or 8 station track
- / High-performance software package (selective or team feeding, etc.)
- / BSC 4.0 control panel
- / Network interface incl. job report to the network
- / Batch feed function
- / Patented Auto Mismatch Recovery
- / Outer envelope autoloader
- / Inserting module with stuck flap divert
- / Vacuum sealing section with preparation for output reading and integrated eject gate
- / Comprehensive product tracking
- / Vertical delivery on edge conveyor (OC4)
- / Advanced user administration, password protected
- / Selectable integrity/productivity modes
- / Router for Remote Support (Expert Online)

W+D control panel with the BSC4.0 operating system – everything at a glance

The W+D BB820's completely new 22" touchscreen allows intuitive and simple machine operation. All key production data can be seen at a glance on the modern 22-inch touchscreen display. Work progress and the remaining time for the current job are clearly displayed both numerically and graphically,



W+D BSC 4.0 with a touch screen as the central operating element



Camera reading for Code on the envelope

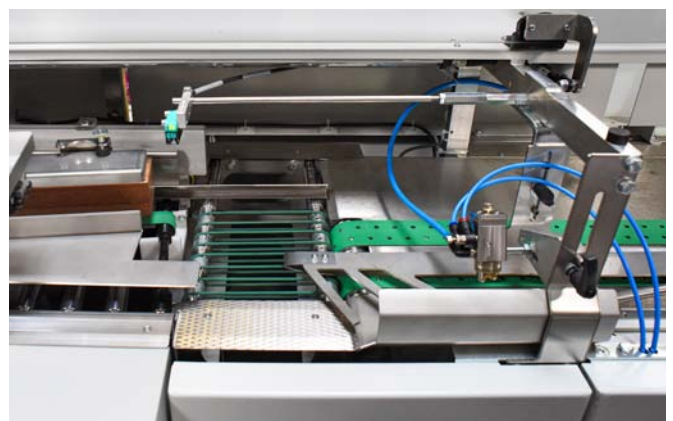
along with the „good“ pieces and ejected items. The cameras for code reading are configured easily and centrally on the control panel.

Tablet

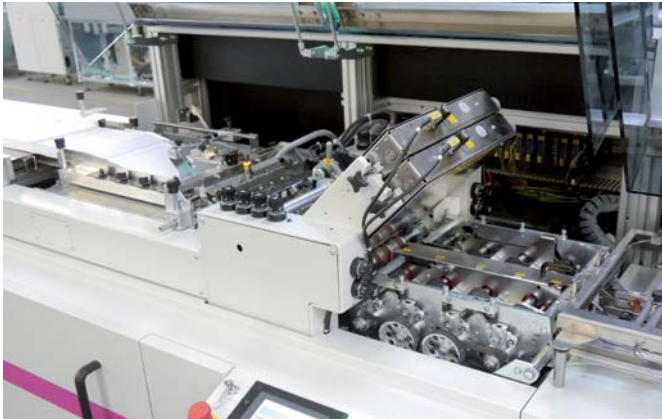
The user interface can be optionally supplemented by a mobile control panel (tablet) that supports remote machine operation and local camera settings.

Optional components

- / Wide range of feeders (rotary right, rotary left, rotary 90 degree, friction, shuttle, Italian disc, pick & place, etc.)
- / Intelligent cut sheet or continuous roll input channels
- / SL2 autoloader for all common feeder models
- / Shingle conveyor (DC4) with or without kicker
- / Postal tray loading and palletizer (PT4)
- / Various camera and reading options for different feeder types, read and print applications, etc.
- / Various printing options (incl. four color overprint or UV)
- / Various post insertion modules
- / Interfaces for third-party systems like cameras, printers, etc.
- / Database-controlled processing (FBI) through to closed-loop integrated processing (CLIP) with optional generation of a transmission file with mail piece status, time stamp and reprint file.



Large reading area for IMB-codes in the closing area



High-performance cut sheet input channel

Powerful input channels

The high modularity and flexibility of the W+D BB820 includes a wide variety of input channels. Choose from cut-sheet and continuous roll processing. Designed for reading, collecting, and folding personalized documents, the channels are compact and easy to use. A camera in the channel not only reads all common codes (2D, etc.) to ensure the correct set of documents to be folded in the channel but also supplies the downstream information for selective insertion or batch feed insertion and mail piece tracking.

Autoloader W+D SL2

The W+D SL2 autoloader is the perfect addition to your W+D insertion system. It reduces the loading frequency and thus supports the one-man operation resp. optimizes the output per operator. The SL2 provides consistent feed height for all common W+D feeder types. A consistent fill level in the feeder ensures trouble-free operation and increases efficiency and net output. Positioned 90° to the running direction, multiple autoloaders can be used on a single system.

Vertical delivery W+D OC4

At high speeds in particular, the „on edge“ delivery of the W+D OC4 is a popular option as compared to the standard shingle



High-performance 2-up continuous input channel

conveyor. The OC4 allows 4 to 10 times more products on the working table, reducing clearing frequency and number of operator steps, thereby optimizing system and operator productivity. A kicker for a physical offset on a ZIP or tray break is a standard component of the OC4.

Postal tray palletizer W+D PT4

As a perfect extension to the W+D OC4 on edge conveyor, the W+D PT4 makes postal tray palletizing easy. With just a few simple steps, the inserted envelopes can be positioned over the postal tray and then securely dropped into it for easy palletization via conveyor.

Feeders

The W+D BB820 utilizes the latest fully servo driven technology for all of its feeders. Movement in position and between different feeder types is simple and fast (commonly under 15 minutes).

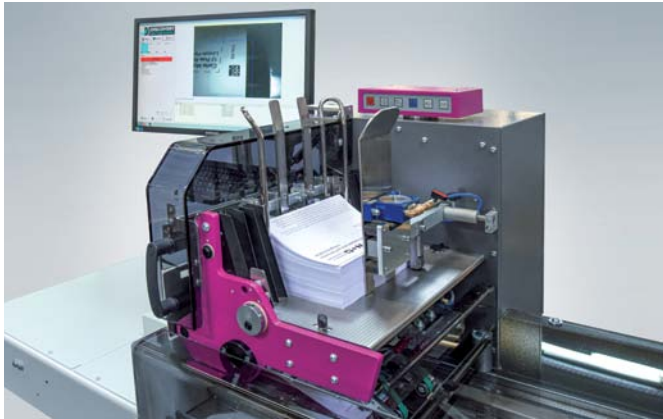
The rotary feeder W+D RF3 and the friction feeder W+D HF2 are most popular for full speeds up to 20K but the W+D BB820 offers a wide range of feeders to tackle the most complex and highest value-add jobs, too.



Autoloader SL2



Automated end filling with W+D OC4 and W+D PT4



Rotary feeder RF3

Rotary feeder W+D RF3

The W+D RF3 was developed specially for use at high speeds of up to 20K. The enlarged feeder drum, the use of vibrators, blown air in the oscillator and additional venturi valves ensure that the documents are reliably separated and that documents from the magazine are carefully transferred to the track. The W+D rotary feeder provides the best camera read rates as the insert remains in control while on the rotary drum.

Friction feeder W+D HF2

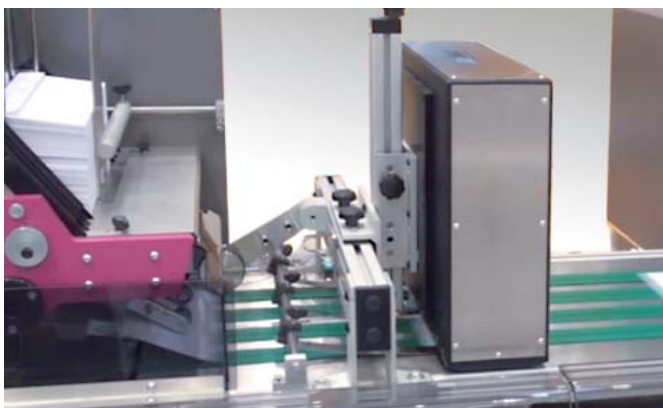
The W+D HF2 is suitable for inserts such as Z-folds and single sheets as well as other products with an open edge in the running direction. Thicker brochures and rigid products that cannot be processed with an RF feeder are also well suited for the W+D HF2.

Vacuum transport on the gathering section/elevated track

The modular vacuum conveyor belt on the gathering section allows inline personalization / printing or the affixing of cards, coins etc. at high running speeds and precision, with the possibility of camera verification on the unit.

Pick and place feeder

The perfect feeder for the accurate placement of credit or loyalty cards, luggage tags, membership cards or coins, etc. using a hot melt glue system either in the track or on an elevated track for even better control and throughput.



Elevated vacuum transport on track



Divert on the track

Turnover belt on the gathering section

A turnover belt on the gathering section is also available where inline affixing or printing applications require a change in product orientation.

Insertion section

On the new insertion module, the pusher assembly now provides three pairs of fingers to ensure harmonized insertion of the documents into the envelope. The document insertion itself occurs at reduced linear speeds for fewer jams. An innovative vacuum supply further supports the opening of the envelope and reliable insertion at speeds of up to 20K.

Small Format Kit

Special parts for envelope stop, insert module side guides and cross over section to support smaller envelope sizes down to 95 mm (3 ¾") height and 165 mm (6 ½") width.

Divert on the track

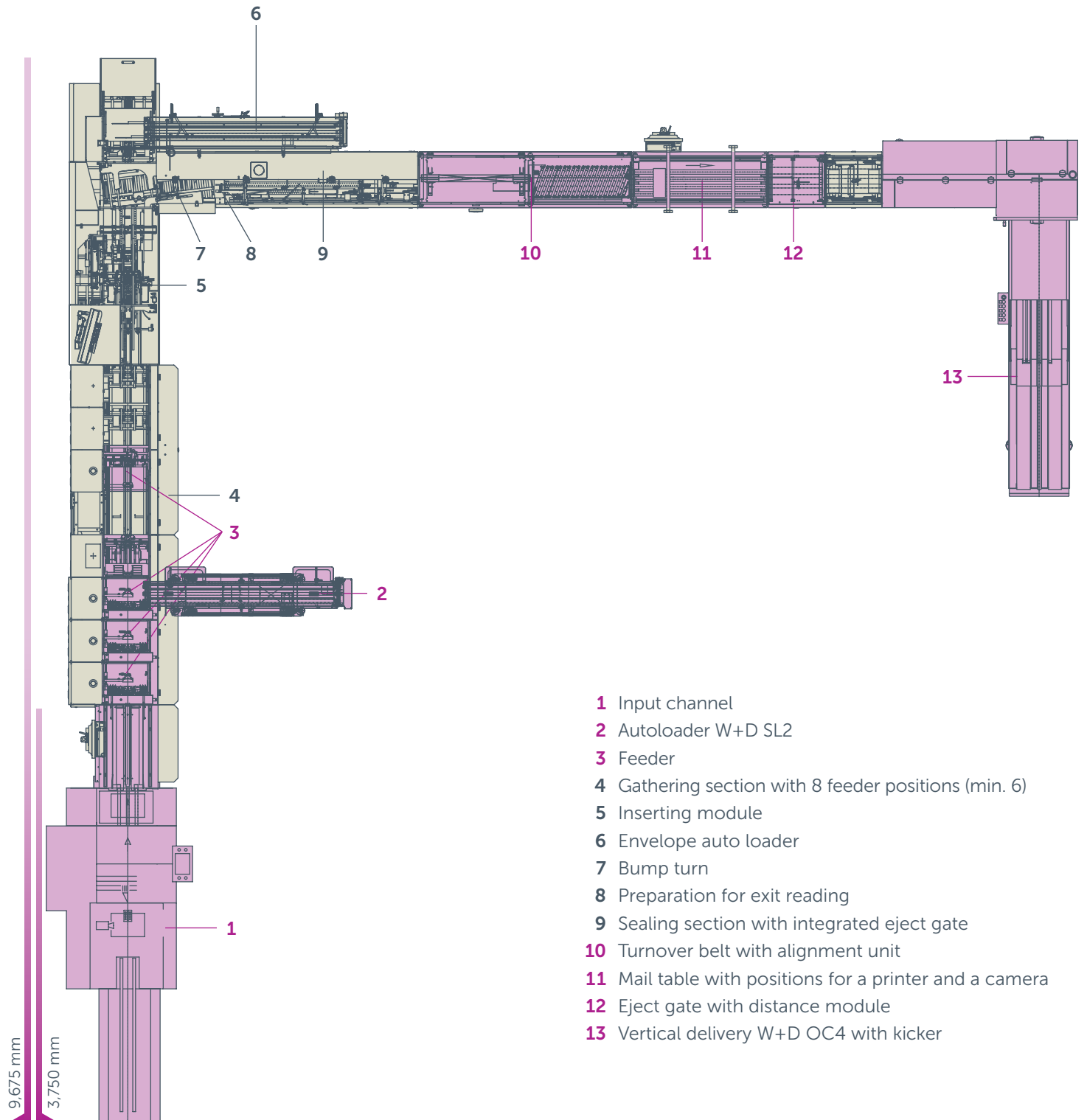
Automatic sequence recovery also when processing pre-personalized outer envelopes – utilizing the envelope divert in the insert station in combination with envelope reading in the envelope track and the new divert on the track for excess docs pre insertion, i.e. when missing the corresponding envelope.



Mail table

Machine layout

for continuous roll in-feed channel with read & print



Technical Specifications

Type		BB820
Mechanical performance		max. 20,000 p/h in the entire format range ❶
Envelope		
Size	min.	Standard: 98 mm x 184 mm ($\sim 3 \frac{7}{8}" \times 7 \frac{1}{4}"$) – includes US $7 \frac{3}{4}"$ with $3 \frac{7}{8}" \times 7 \frac{1}{2}"$ With Small Format Kit: 95 mm x 165 mm ($3 \frac{3}{4}" \times 6 \frac{1}{2}"$) – includes the US #7 with $3 \frac{3}{4}" \times 6 \frac{3}{4}"$
	max.	
Seal flap (Height)	min.	up to 165 x 292 mm ($6 \frac{1}{2}" \times 11 \frac{1}{2}"$)
	max.	20 mm ($\sim \frac{3}{4}"$)
Paper weight	min.	40 mm ($\sim 1 \frac{1}{2}"$)
	max.	75 g/m ² (20 lbs)
Thickness	min.	150 g/m ² (40 lbs) ❷
	max.	6 – 8 mm ($\frac{1}{4}" - \frac{1}{3}"$)
Insert		
Paper weight	min.	70 g/m ² (19 lbs)
	max.	250 g/m ² (64 lbs)
Max. Product thickness	RF3, RF2 ❸	RF3 = 1 mm ($\frac{1}{25}"$) – RF2 = 3 mm ($\frac{1}{8}"$)
	HF2	8 mm ($\frac{5}{16}"$) ❹
	SF2 ❺	8 mm ($\frac{5}{16}"$) ❹
Min. Product thickness	RF2	Single sheet 70 g/m ² (19 lbs)
	HF2	Single sheet folded 70 g/m ² (19 lbs) resp. 110 g/m ² (29 lbs) unfolded Single sheet unfolded < 110 g/m ² (29 lbs) on request
	SF2	1 mm ($1 \frac{1}{25}"$) 160 g/m ² (43 lbs) – optional with additional ejector
Loading capacity of the feeders	RF3, RF2 ❸	max. 300 mm (12")
	HF2	max. 250 mm (10")
	SF2	max. 250 mm (10")
Clearance Insert - Envelope		min. 3 mm ($+\frac{1}{8}"$) both sides, > 5 mm ($\frac{1}{4}"$) total respectively depending on filling thickness
Machine		
Length	Basic 6 Feeders	5,110 mm (16.8 ft)
	Extension per 2 feeders	770 mm extra (2.6 ft)
Number of Feeder	min.	6 Stations
	max.	8 Stations – extension on request
Compressed air requirement with RF2 feeder	6 feeders 7 bar	630 NL/min
	each 2 feeders 6 bar	110 NL/min
Power requirements		3 ~ 230/400V, 50 Hz. PE (other executions on request)
Distance of guides in the gathering section		148 mm ($5 \frac{3}{4}"$) in versions without system channel 210 mm ($8 \frac{1}{4}"$) in versions with system channel
Modularity		6 or 8 station basis, 4 station extension module

❶ reduced to 10,000 p/h with filling thickness >8 mm ($\frac{5}{16}"$)

❷ Heavier materials and solid cardboard envelopes on request

❸ RF2 from the BB700 S2 line of feeders up to max. 16,000 p/h

❹ Feeder capacity 15 mm ($\frac{19}{32}"$), limited by the envelope in the case of the BB820

❺ Speed limit 12,000 p/h

All performance data published refers to the production of a defined reference product under certain circumstances reflecting a possible practice of use. The performances achieved in practice depend on a multitude of parameters which are beyond our control. This includes, amongst other factors, the condition of the raw materials to be processed, the shapes of the products, the air humidity and the ambient temperature. W+D reserves the right to make design changes and changes to the performance values.



W+D Locations

Winkler+Dünnebier GmbH

Sohler Weg 65
56564 Neuwied · Germany
t. +49 2631 840 · f. +49 2631 84577
info@w-d.de

Winkler+Dünnebier GmbH

Location Bad Oeynhausen
Valdorfer Straße 3
32545 Bad Oeynhausen · Germany
t. +49 5731 7440 · f. +49 5731 744199
info.ins@w-d.de

W+D North America Inc.

11300 West 80th Street
Lenexa, KS 66214 · USA
t. +1 913 4929880 · f. +1 913 4920691
info@wdnorthamerica.com

W+D Asia Pacific Sdn. Bhd

(Co No: 762144A)
No: 860, 8th Floor, Block A2
Leisure Commerce Square
No: 9, Jalan PJS 8/9, 46150 Petaling Jaya
Selangor · Malaysia
t. +60 3 78654883 · f. +60 3 78654882
info@w-d.com.my

POEM PreOwnedEnvelopeMachines GmbH

Sohler Weg 70
56564 Neuwied · Germany
t. +49 2631 345386 · f. +49 2631 946103
info.poem@w-d.de · w-d-poem.de

BICMA Hygiene Technologie GmbH

Basaltweg 3
56727 Mayen · Germany
t. +49 2651 942940 · f. +49 2651 9429494
mail@bicma.com · bicma.com