



BUHRS 4000 series

The most flexible wrapping and inserting platform

Buhrs developed a series of Inserting and Poly & Paper Wrapping Systems, the Buhrs 4000-series. The Buhrs 4000-series offers a perfect combination of a low gathering section with mobile feeders, a servo-driven wrapping module and a new Buhrs System Controller.

Features

With the Buhrs 4000-series it is not necessary to stop the system between two different jobs, which increases productivity enormously! Three main features make this possible. The feeders are being synchronised automatically (AFS) with the gathering chain of the system and will be engaged auto-

matically based on information from the database (BSC). By measuring the length of the product just before the wrapping section, the function AWS enables the wrapping unit to set itself automatically and adjust the seal position automatically on the fly when necessary. Of course, this is all possible in combination with BuhrsWrap, which guarantees tightly wrapped products without any overlap.

The Buhrs 4000-series (optional) features include:

- Automatic Feeder Synchronisation (AFS)
- Automatic Wrap Set-up (AWS)
- Buhrs System Controller (BSC) with a database link
- New mobile Buhrs RF5 Rotary Feeder

Automatic Feeder Synchronisation (AFS)

- The size of the documents is detected automatically by sensors mounted in the product guides
- The feeder is synchronised for correct positioning of the document in the gathering chain
- AFS is embedded in the feeder control and operates autonomously without the enclosure dimension information from the customer database.

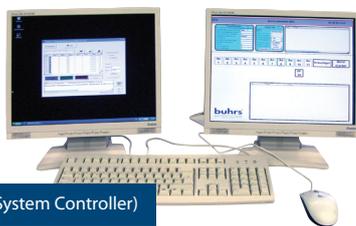
Automatic Wrap Set-up (AWS)

The AWS function automatically sets several machine adjustments and parameters “on the fly” such as:

- The Product Positioning Unit
- Wrapping length
- Seal stroke and separation position

Buhrs System Controller (BSC)

- The Buhrs System Controller is an integrated database controller developed specially for the Buhrs 4000-series and is fully integrated with the Siemens Simotion Controller
- Two 17” flat screen TFT monitors (Dashboard and Real Time View)
- The production database from the customer is processed and all production and machine related information during the production is collected and stored
- Modem
- Microsoft .NET technology is used in the Management Information System (MIS) domain
- The software platform runs under Microsoft-Windows XP
- Inkjet and camera are available as an option



BSC (Buhrs System Controller)

The Buhrs System Controller can operate the following inkjet and camera systems:

Inkjet Systems	Camera Systems
Scitex	Asentics
Domino	Balsfulland
Videojet	Axode

Buhrs RF5 Rotary Feeder

The RF5 mobile Buhrs feeders are designed according to the best ergonomic principles. The RF5 mobile rotary feeder can be easily placed in several positions such as left, in-line and right in the gathering section. The feeder position can be changed within one minute. The systems of the Buhrs 4000-series can be equipped with a dedicated operator panel for each feeder (located above each feeder). On the operator panel information is displayed concerning the actual enclosure and the next enclosure with the location of the pallet containing the enclosure in the warehouse.



Product loading from 3-sides

Well-known features

The systems in the Buhrs 4000-series are standard equipped with the following well-known features:

- Mobile servo-driven feeders
- Lowered gathering section for easier loading and improved ergonomics
- Safety lug (spring loaded)
- Standard BuhrsWrap
- Touch screen operator panel with information and storable job settings
- On-line diagnostics
- On-line software upgrading

Lowered gathering section

Safe and ergonomic systems enable you to improve the confidence of operators, without limiting your system's net output. With the lowered gathering section it is much easier to load the feeders.



Lowered gathering section to reduce body stress

Safety lug (spring loaded)



BuhrsWrap

BuhrsWrap is made possible by our stretch control principle. In combination with the use of servo-motors, this enables you to control and monitor the unwinding and stretching process of the poly such that the products can be very tightly wrapped without limiting the net output of the system. After the poly has been stretched over the magazine, it resumes its old shape. Cost savings are realised

because no additional energy is required and less quantity of poly is used.



BuhrsWrap and conventional wrap

Touch screen panels



Overview

The Buhrs 4000-series consists of the following dedicated solutions:

- Buhrs 4000 Poly & Paper Wrapping System for direct mail, magazines, catalogues etc.
 - Buhrs 4200 Wide-body Poly Wrapping System for newspapers
 - Buhrs 4500 Inserting System
 - Buhrs 4700 Poly Wrapping System for retail brochures and other (non-)addressed direct mail
- Many options are available on the Buhrs 4000-series such as Gimmick feeders, Friction feeders, Buhrs HF4 feeders, autoloaders, stackers and side-streets.

Buhrs 4000-series features	Your benefits
AFS	Automatic synchronisation of feeders with the gathering chain of the system. Setting up and engaging feeders while running • Reduced set-up times • Possibly less feeders required
AWS *	The wrapping unit sets and adjusts itself automatically • Less rejects • Less 'sausages' • Higher net outputs
Servo-driven seal mechanism *	Low noise level (normally 75dB, max. 82 dB) BuhrsWrap quality Lower maintenance costs because of less parts
Motorized adjustments and automatic settings	Short make ready times because of reproducibility
Operator-friendly touch screen panels	Short make ready times Short learning curve because of menu control and pictograms Storable job settings (up to 100 jobs)
Pneumatic shafts *	Fast changeover of poly reels (less than 60 sec.) Better positioning of reel because of absolute adjustments
BuhrsWrap *	Tightly wrapped products without any overlap (certain restrictions apply)
Buhrs RF5	Flexible feeder positioning Change of feeder position within one minute Ergonomically designed, loading from 3 sides Each feeder has an individual operator panel where information is displayed concerning the actual enclosure and the next enclosure incl. the location in the warehouse of the pallet containing the particular enclosure
On-line diagnostics	Remote monitoring, diagnostics, trouble/shooting and software upgrades minimising the system's down time and reducing service and maintenance costs to an absolute minimum
Electrical diagrams	Are available in the operator panel for maintenance support

* Not applicable to Buhrs 4500

Technical Specifications Buhrs 4000-series

	Buhrs 4000	Buhrs 4200	Buhrs 4500	Buhrs 4700	
Product dimensions (l x w)					
	Max.	420 x 300 mm	420 x 380 mm	420 x 300 mm	320 x 370 mm
	Min.	160 x 100 mm	180 x 200 mm	160 x 100 mm	180 x 200 mm
Product thickness					
	Max.	35 mm	80 mm	35 mm	35 mm
	Min.	Single sheet (60 - 80 gr/m ²)	Single sheet (60 - 80 gr/m ²)	Single sheet (60 - 80 gr/m ²)	Single sheet (60 - 80 gr/m ²)
Product thickness variation					
	Poly	4 mm 20 mm optional	4 mm 20 mm optional	20 mm	4 mm 20 mm optional
	Paper	1 mm	1 mm	1 mm	1 mm
Mechanical speed (max.)	18,000 c/h	15,000 c/h	21,000 c/h	16,500 c/h	
Approved standards	CE, EMC UL approved	CE, EMC UL approved	CE, EMC UL approved	CE, EMC UL approved	
Wrapping materials					
	Poly	15 - 80 µm (PE, PP, others tested on request)	15 - 80 µm (PE, PP, others tested on request)	Not applicable	15 - 80 µm (PE, PP, others tested on request)
	Paper	45 - 120 gr/m ²	Not applicable	Not applicable	Not applicable
		With or without window, coated and recycled			
Power requirements					
		Supply: 400V +/- 5%, 50/60 Hz, 3ph + 0 + ground	Supply: 400V +/- 5%, 50/60 Hz, 3ph + 0 + ground	Supply: 400V +/- 5%, 50/60 Hz, 3ph + 0 + ground	Supply: 400V +/- 5%, 50/60 Hz, 3ph + 0 + ground
		Compressed air: 6 bar	Compressed air: 6 bar	Compressed air: 6 bar	Compressed air: 6 bar
	Consumption is depending on the system configuration				

Specifications are subject to change without notice, requirements exceeding above mentioned specifications on request

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