



• Packaging Machines

• Products and Applications

Let's package it together...

Today, packaging - like the products packaged in it - must reflect current trends in consumer behavior.

For you as a manufacturer of packaging machines, there is great potential in the constantly-increasing variety of packaging and the high degree of innovation. But naturally customers' demands grow too. Your customers want precision combined with high packaging speed. They want long-lived solutions that are constructed in modular fashion so that they can be adapted quickly to new packaging methods.

WAGO is the world market leader in spring clamp technology and it is also among the leading suppliers of connection and automation technology.

With the 750 series, WAGO played an important role in designing the first "granular" I/O system and it has thus provided the prerequisites for decentralized automation concepts. Today, the WAGO-I/O-SYSTEM includes couplers and controllers for all common fieldbus and Ethernet protocols. The programming is done throughout with the IEC 61131 Standard CoDeSys.

Approximately 300 different input/output and function modules integrate the sub-buses, communication interfaces, drive technology, and safety functions.

In the last few years, WAGO connection and automation technology has also proven itself increasingly in the area of modern packaging machines. The selected applications of well-known manufacturers described in this brochure make this clear.

With our system consultants and application engineers, we will also gladly advise you on the conception of your individual automation solution.

Please contact us and make an appointment with your WAGO automation specialist.

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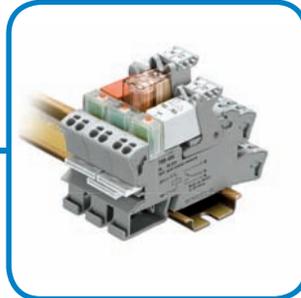
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WAGO in Packaging Machinery



JUMPFLEX transducers and relay modules, Series 857



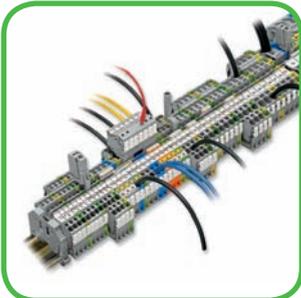
Relay modules



TO-PASS® - telecontrol technology



WAGO-I/O Industrial PC



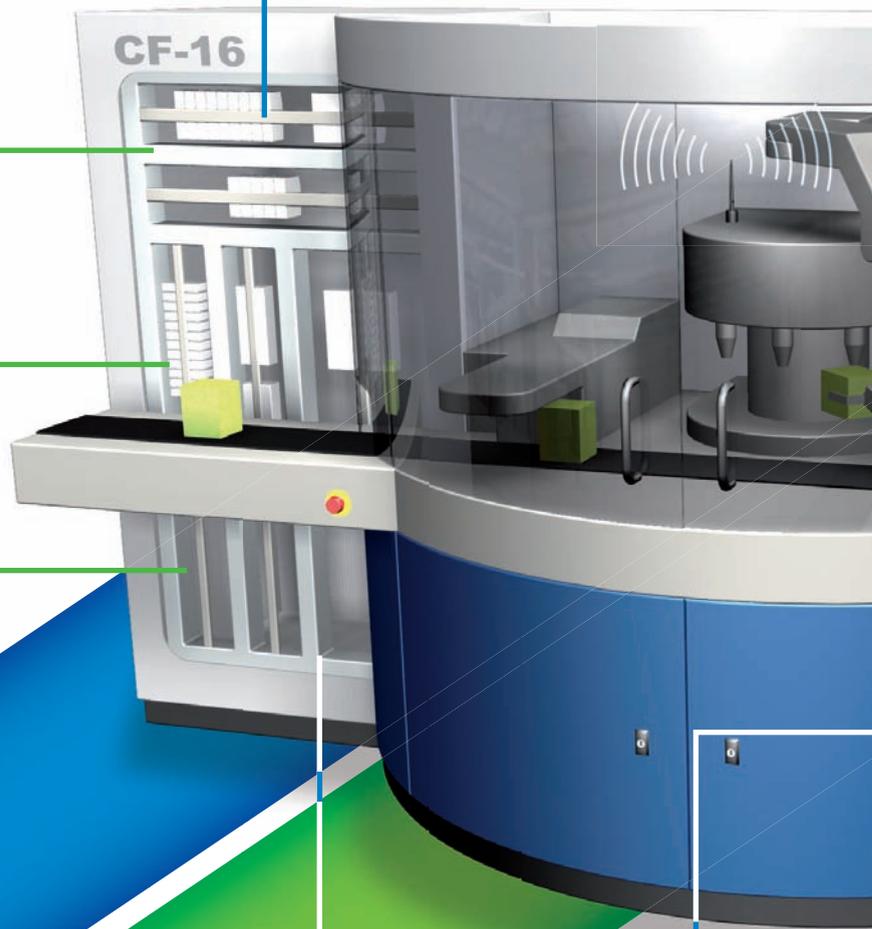
TOPJOB® S rail-mounted terminal blocks



X-COM®.SYSTEM, pluggable rail-mounted terminal blocks



POWER CLAMP high current terminal blocks up to 95mm²



Power supplies



RFID, barcode

CANopen

PROFINET
INDUSTRIAL ETHERNET

PROFIBUS
PROCESS FIELD BUS

ETHERNET
POWERLINK

EtherNet/IP

DeviceNet

HART
COMMUNICATION FOUNDATION

SERCOS
interface

ASI
INTERFACE

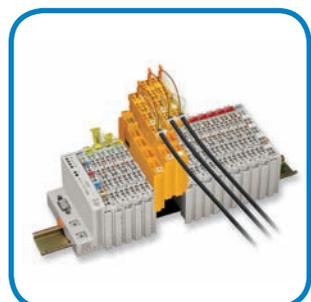
MODBUS/TCP



WAGO-I/O-SYSTEM 750/753



Sensor/actuator boxes
IP67



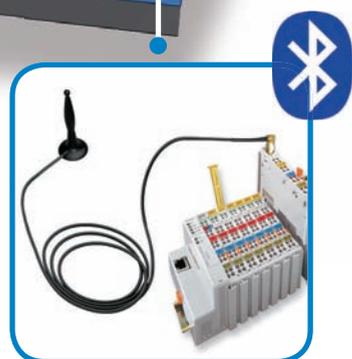
WAGO-I/O-SYSTEM with
PROFIsafe modules



SPEEDWAY
I/O-SYSTEM IP67



WAGO-I/O-SYSTEM
stepper controller



WAGO-I/O-SYSTEM with
Bluetooth I/O module



WAGO-I/O-SYSTEM
with Exi modules

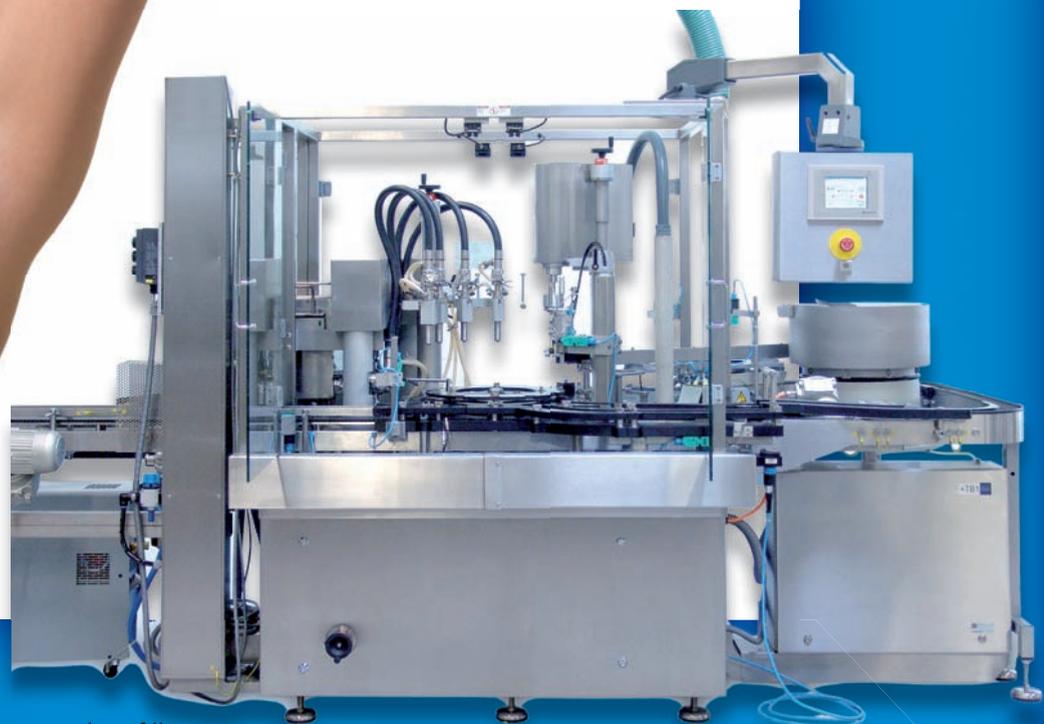
OPTIMA GROUP

For a lasting good feeling

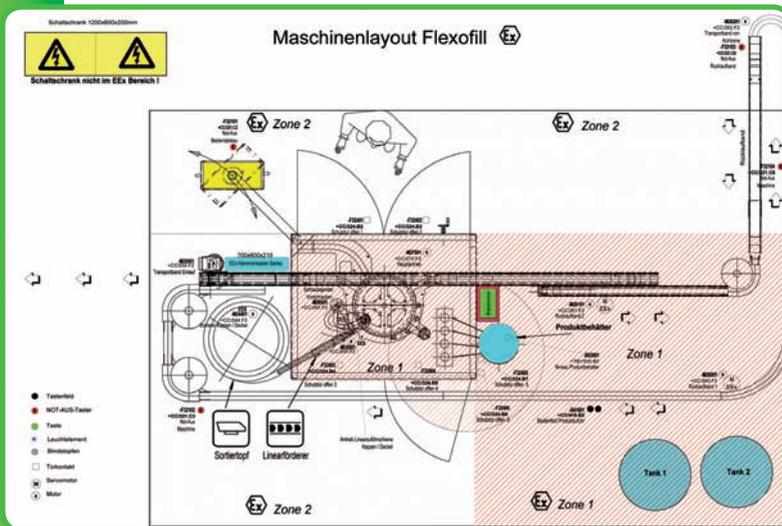
The Optima Group is a recognized, innovative manufacturer of filling and packaging systems for the pharmaceutical, hygiene, food, and cosmetics industries. Today, its portfolio also includes manufacturing systems for medical-pharmaceutical products and automation software. Leading companies worldwide trust the systems and line concepts of this medium-sized company from Schwäbisch Hall.

Flexofill and the WAGO-I/O-SYSTEM: flexible meets flexible

When the concern was to develop a machine for filling deodorant sticks that could also handle a quick format change to other products, OPTIMA turned to the WAGO-I/O-SYSTEM. In addition to its great flexibility, the system's fieldbus independence was a convincing argument. The result of the developments is the Flexofill. It can handle nearly all common seals on the market and is thus used for filling different products.



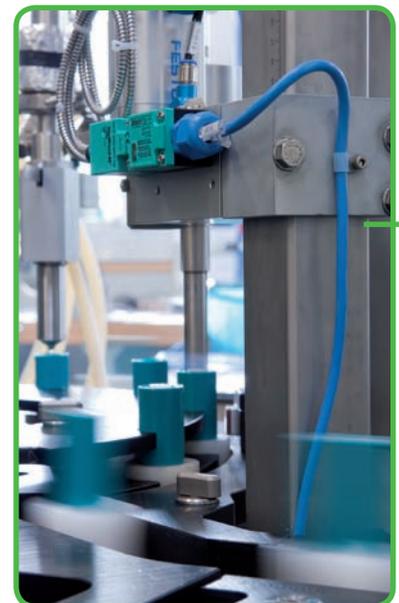
Flexofill



Why WAGO-I/O-SYSTEM?

When filling deodorant sticks, explosive gases are set free due to the volatile alcohol. For controlling, this requires the use of intrinsically-safe products for explosive areas. For such applications, the WAGO-I/O-SYSTEM offers ATEX-approved modules that can be used directly in the ex zones 1 and 0.

However, since the Flexofill is not intended solely for deodorant sticks, another important criterion was the ability to changeover quickly. The WAGO-I/O-SYSTEM best demonstrates its flexibility when it comes to special applications. The quick format change of the Flexofill is thus related directly to the advantages of the WAGO-I/O-SYSTEM.



From power supply in the

switchgear cabinet

to

distribution,

OPTIMA trusts WAGO's perfect connection technology.



In use at OPTIMA:

- WAGO-I/O-SYSTEM
- Rail-mounted terminal blocks of the 870 series with CAGE CLAMP® connection
- X-COM®-SYSTEM

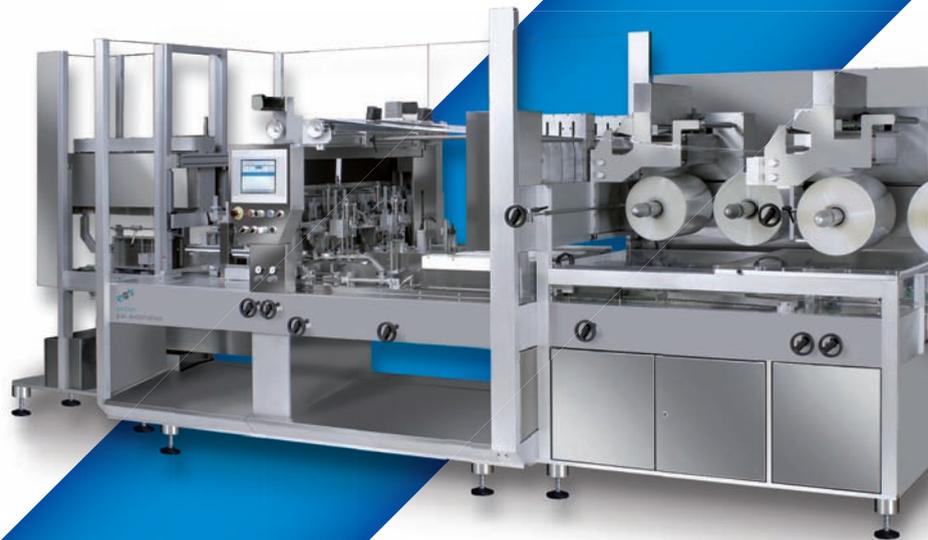
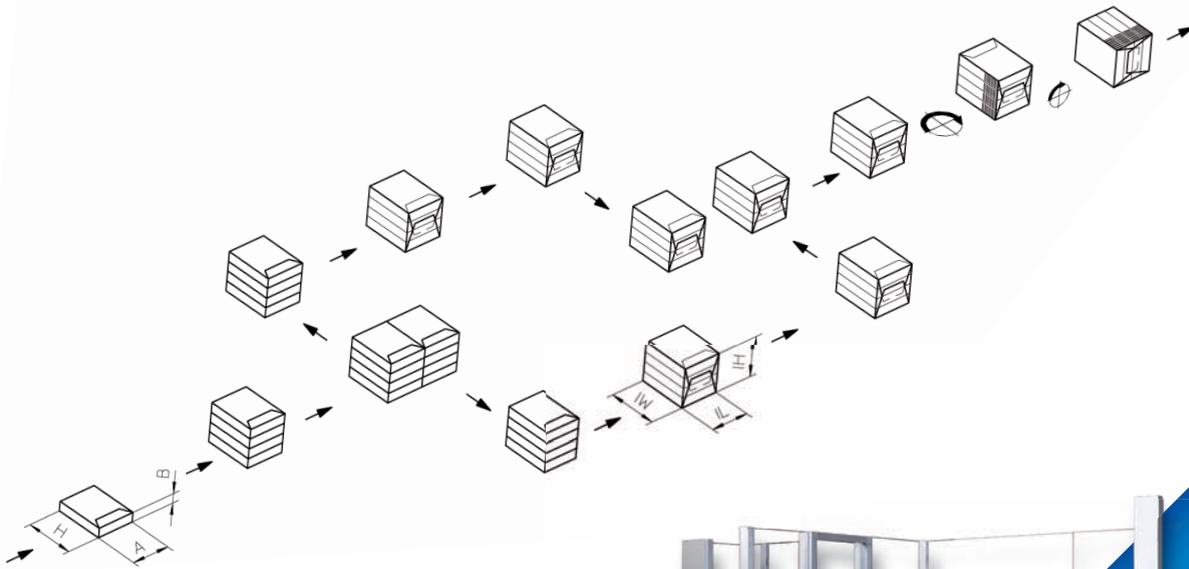
pester pac automation

Efficient packaging solutions



pester pac automation is one of the world's leading system suppliers for "end-of-line" automation; it specializes in the integration of high-technology packaging lines. Its product portfolio includes all variants of end packaging, from film packaging to carton packaging on through to palletizing.

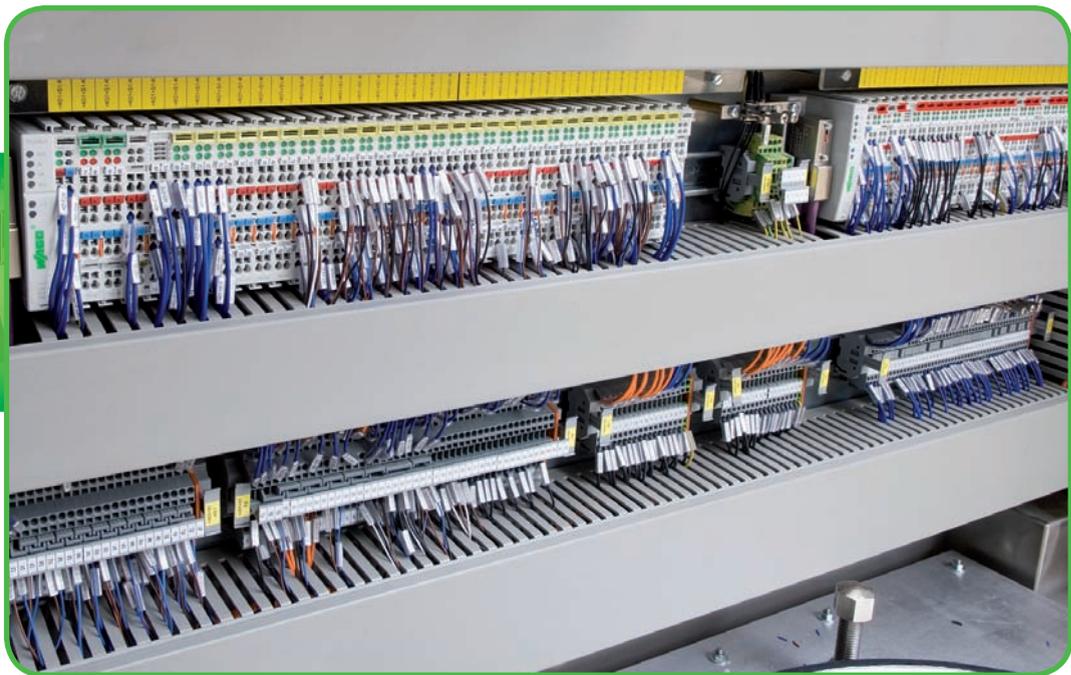
Its customers include well-known multinational corporate groups in the pharmaceutical, cosmetics, and consumer goods industries. The packaging systems in the modern Pester Design are used around the world as individual machines or in lines. They win customers over with their intelligent technology, high quality, and capability.



Unique:
Dual-line overwrapper

Packaging faster with WAGO

Since the introduction of the CAGE CLAMP® technology in the 1970s, pester pac has trusted WAGO rail-mounted terminal blocks. The flexibility of the WAGO-I/O-SYSTEM is also persuasive, for it makes a significant contribution to the machines' capability. For example, Pester developed a dual-line overwrapper that is unique on the world market. Thanks to its GMP-compliant construction, this high-performance system is suitable for all industries. The machine can process up to 120 containers a minute and offers the greatest flexibility and short changeover times. With a format range from 60 x 20 x 60 mm up to 200 x 140 x 350 mm, many types of individual products and large multi-layer containers can be packaged precisely. With its fully-automatic film splicer and the clear product flow on one level, this machine achieves the greatest line efficiency.



Professional controller - professional components

Like many other packaging machine manufacturers, when it comes to machine control - including the servo motors - pester pac automation uses proven components from ELAU. Programming is done with the EPAS-4 software, which is based on CoDeSys. Since the WAGO-I/O-SYSTEM controllers also support the IEC 61131 Standard CoDeSys, the systems can be programmed universally and program parts can be reused without additional effort.

Used at pester pac automation:

- WAGO-I/O-SYSTEM with Profibus
- WAGO rail-mounted terminal blocks with CAGE CLAMP® connection

Buhmann Systeme GmbH

Enjoy trouble-free



Buhmann is a medium-sized family company at the foot of the Alps in the Allgäu. In a region with numerous manufacturers of food specialties known well beyond the region, Buhmann specializes in the development of machines for filling cups, end packaging in cartons, and the complete automation of these products in the food industry.

In addition to regional specialty manufacturers, our customers include food companies that are active internationally. Buhmann has relied on WAGO connection technology since 1998. The WAGO-I/O-SYSTEM has been in use since 2000.



buhmann
pac solutions

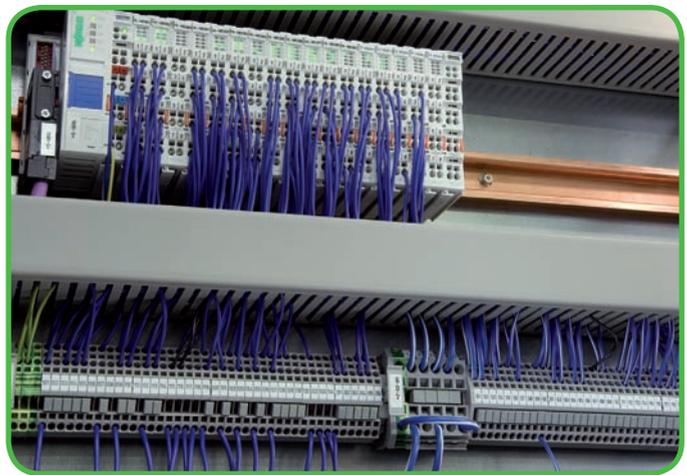
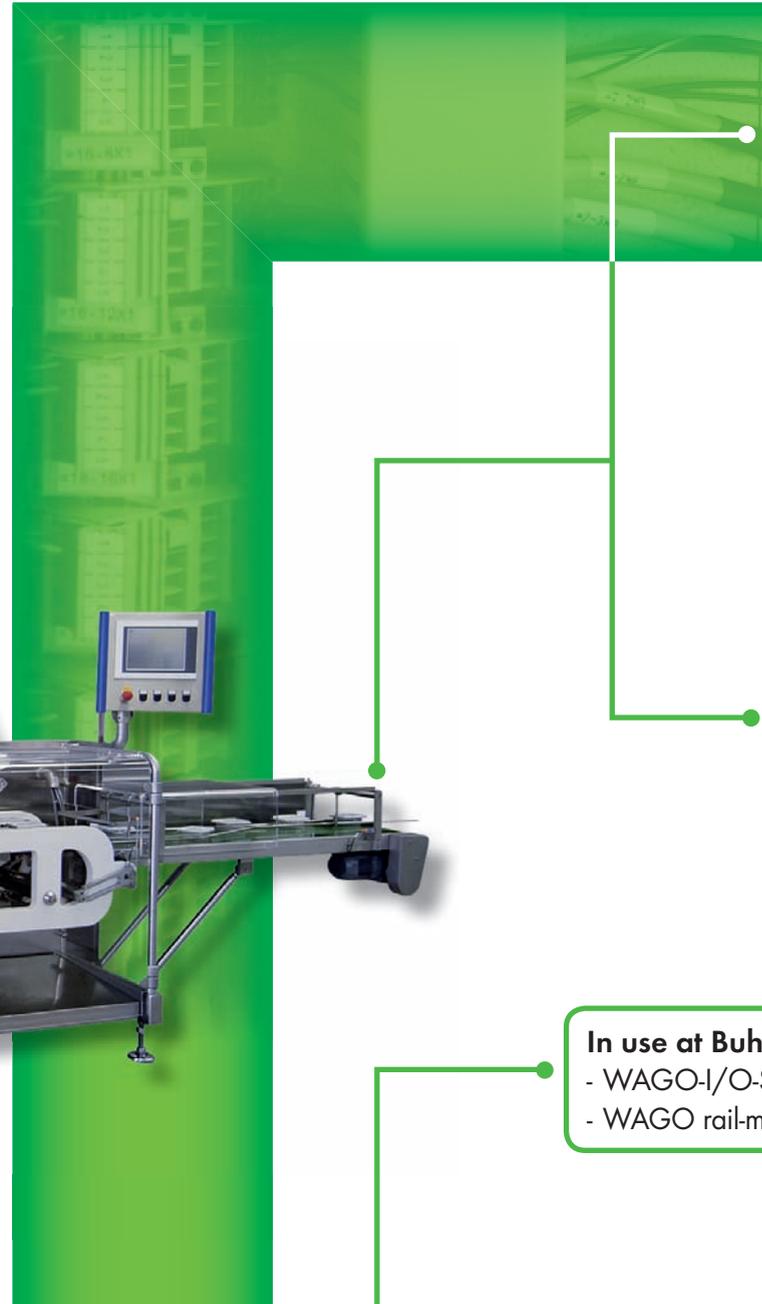
Do you want variations? The WAGO-I/O-SYSTEM can do this.

The Servofill is an example of a WAGO product in use at Buhmann. Pre-manufactured cups with seals and/or slip caps are filled and sealed with this machine series. High-performance models with up to 8 lines are possible, as are special applications with oversized cups and special application tasks. A versatile toolbox system can make almost any customer wish come true.

The modularity of the WAGO-I/O-SYSTEM guarantees Buhmann the necessary flexibility for reacting to customers' desires. Basic functions can be standardized and implemented in machines with other functions. The PROFIBUS protocol handles the communication here.

Unshakable: the WAGO-CAGE CLAMP®.

Since the Servofill is designed in table form, the switchgear cabinet is connected to the machine in nearly all systems, which means that it is impossible to prevent the transmission of vibrations. For Buhmann, therefore, the screwless CAGE CLAMP® technology has been the perfect and most secure solution for many years. Only it can ensure constant and shock-proof contact quality.



In use at Buhmann:
- WAGO-I/O-SYSTEM with Profibus
- WAGO rail-mounted terminal blocks with CAGE CLAMP® connection

Bosch Packaging Technology

The discovery of variety

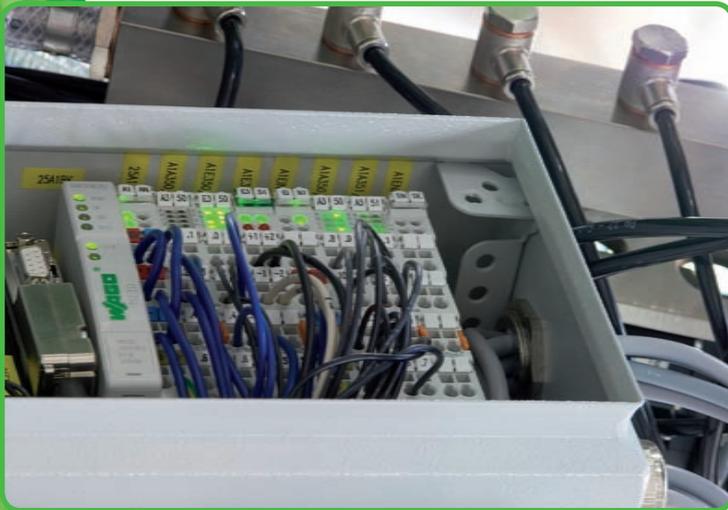


BOSCH
Technik fürs Leben



Bosch Packaging Technology, headquartered in Waiblingen, is a leading supplier of complete solutions for packaging and processing technology. Developed in 13 countries worldwide, the Packaging Technology division produces and sells technology modules and systems for the pharmaceutical, confectionery, cosmetics, food, and non-food industries. Packaging technology for foods has a long tradition at Bosch. Bosch offers precisely the right machine and packaging system for all of its customers' production and service needs.





Regardless of what's in the bag...

Packaging with added value: "convenience" and "easy opening" – the focus is on easy opening for everybody with the PME packaging system. The possibility of varying packaging at will in terms of shape, size, and design – and this at a reasonable price – is the requirement for all components.

The granularity of the WAGO-I/O-SYSTEM fits right in with the Bosch philosophy of strictly modular system design in order to cope with the variety of products to be packaged and packaging methods. This also applies for the PME: as soon as packaging requirements change, an expansion with new modules makes the existing PME system fit for smooth filling. The Profibus protocol ensures perfect communication even under the new conditions.

In use at Bosch:

- WAGO-I/O-SYSTEM with Profibus

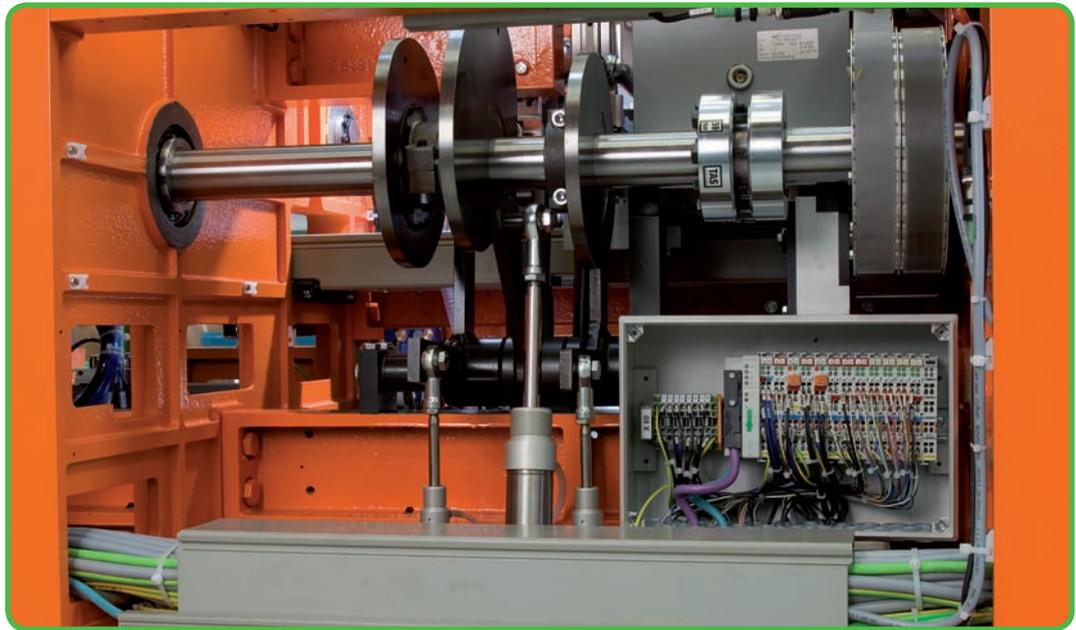
Heino Ilsemann GmbH

Resonant silence

Heino Ilsemann GmbH of Bremen offers packaging machines for products in the pharmaceutical, tissue, and multimedia industry that are used in more than 60 countries worldwide. Heino Ilsemann GmbH has developed the most modern solutions for the packaging of DVDs – robust machines that are driven by mechanical curves and monitored by a PLC. In order to package these products quickly, precisely, and fully automatically, the developers at Ilsemann use the latest automation technology. In order to design these systems optimally, compact systems that can be controlled decentrally are required. Systems that just work - like the WAGO-I/O-SYSTEM 750.



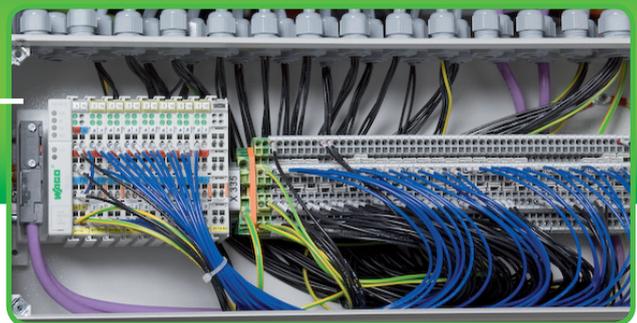
DVD Star



"WAGO runs completely silently"

The DVD Star is a high-speed packaging machine for DVD soft boxes. With minimal changeover time during operation, it can also assemble individual, double or triple soft boxes. The feeding and removal are handled at a user-friendly working height from one side.

As lively as the DVDs to be packaged may be, their packaging is nearly "silent", as people at Ilseemann are happy to report. This means: "relaxed" and "trouble-free." This is possible thanks to the universal WAGO I/O-SYSTEM. The largest DVD packaging machine houses three WAGO Profibus DP fieldbus couplers of the 750 series; these are used to process the analog signals. At Ilseemann, both the compact size of the WAGO I/O components and the modularity of the system are appreciated.



Besides the fieldbus couplers, space-saving 870 Series modules are also used.

In use at Ilseemann:

- WAGO I/O-SYSTEM with Profibus
- WAGO rail-mounted terminal blocks with CAGE CLAMP® connection

Kalfass Packaging Machines

A clear view of the important things



Kalfass
Verpackungsmaschinen



Das Ergebnis zählt.



For more than 40 years, Kalfass has been developing film packaging machines and selling them worldwide.

There are Kalfass shrink-wrap systems for manual, partially-automated, and fully-automated shrink wrapping. The most important characteristics of Kalfass systems: flexible use, short setup times, minimum film consumption, low cost of ownership, and maximum availability of the packaging system to ensure that productivity does not get short-changed at the end of the production line. Kalfass shrink-wrap packaging machines are used in many industries: the printing and paper industries, contract packaging and service companies (fulfillment), the food and beverage industry, wood and furniture products, and more.



Kallfass again and again – and WAGO again and again

More than 1000 machines of the Universa series are in use around the world, wrapping products in high-quality film, protective film, and even film that enhances the attractiveness of the products. Here, it doesn't really matter yet it is not wholly unimportant what products are being packaged. Magazines, software or shaving cream - adaptation to customer needs and demands is "in the blood" of the Universa series machines. And what could better complement this than WAGO rail-mounted terminal blocks that are designed with the same degree of flexibility and versatility?

And the best thing about this is that all products run perfectly and reliably for the long run, including the products at Kallfass. 1000 Universa machines represent the 1000 best examples of shock-proof and low-maintenance connection technology using WAGO rail-mounted terminal blocks. Large runs and high quality – this combination is feasible. With WAGO. Other machines - for example, the Servo Jet 660 – also rely on WAGO automation products. Relays, optocouplers, transformers, and the WAGO-I/O-SYSTEM are used here.



In use at Kallfass:

- WAGO-I/O-SYSTEM
- WAGO rail-mounted terminal blocks with CAGE CLAMP® connection
- WAGO interface modules

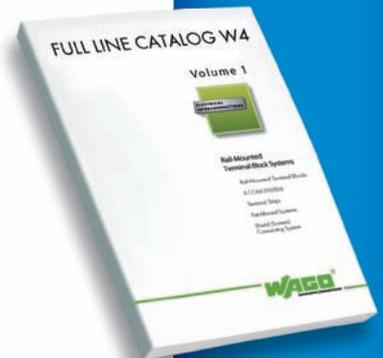
Universa

WAGO Product Information

All WAGO products shown in this brochure are available in the following WAGO catalogs:

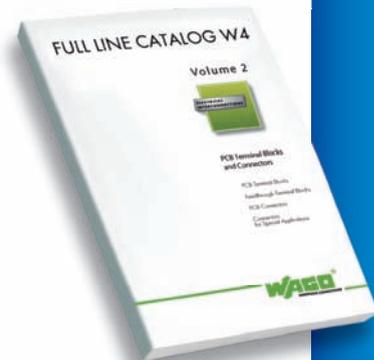
FULL LINE CATALOG W4, Volume 1 Rail-Mounted Terminal Block Systems

- Rail-Mounted Terminal Blocks
- X-COM®-SYSTEM
- Terminal Strips
- Patchboard Systems
- Shield (Screen) Connecting System



FULL LINE CATALOG W4, Volume 2 PCB Terminal Blocks and Connectors

- PCB Terminal Blocks
- Feedthrough Terminal Blocks
- PCB Connectors
- Connectors for Special Applications



FULL LINE CATALOG 2008/2009 I/O SYSTEM

- Modular I/O SYSTEM IP20/IP67
- Radio Technology
- AS-Interface I/O SYSTEM IP20/67
- Block I/O SYSTEM IP67
- Sensor/Actuator Boxes IP67
- Cables and Connectors IP67
- Power Supplies



FULL LINE CATALOG 2008/2009 Interface Modules

- Interface Modules
- Sensor/Actuator Boxes IP67
- Radio technology
- Overvoltage Protection
- Power Supplies
- Empty Housings and DIN-Rail Mounting Carriers



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