

HAYER & BOECKER



DIE MASCHINENFABRIK

THE INTEGRA® ISF

REDEFINING AN ICON



HAYER & BOECKER



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INSPIRATION

*“Our products are not an end in themselves,
but a means by which our customers can
accomplish something useful and profitable.”*

Washington Samuel Tyler

While HAVER & BOECKER was founded in 1887, our subsidiary W.S. TYLER is even older and was established in 1872. Washington Samuel Tyler captured in words the philosophy that has been the driving factor to every product we have ever designed. The foundation for the development of our INTEGRA® ISF, which stands for Integrated Packaging System for the filling of tubular film (*Schlauchfolie* in German) using **F**ree-fall technology, is the realization, that it is not an end in itself, but a tool for its owner to create something useful and profitable.



WASHINGTON SAMUEL TYLER

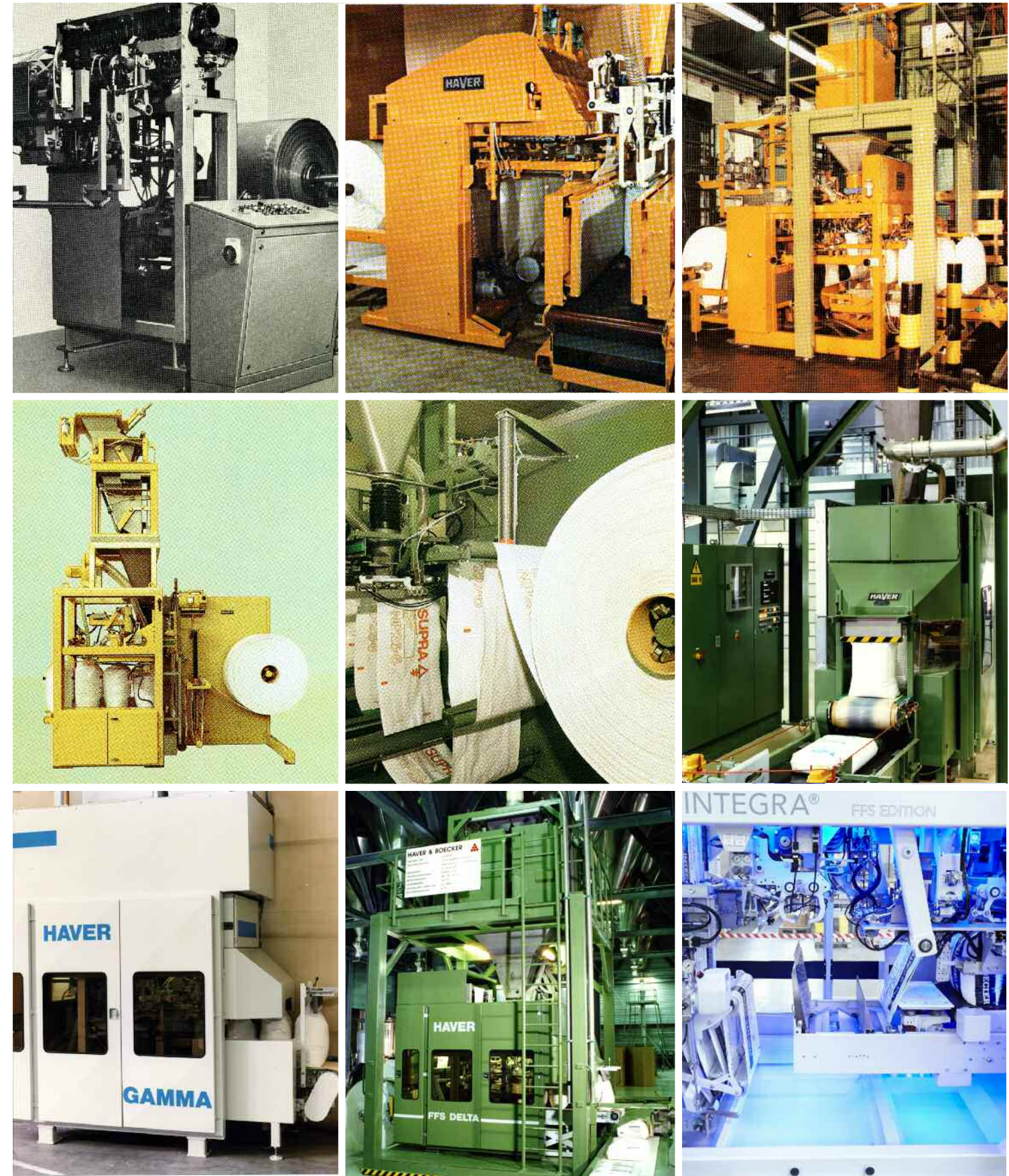
* 1835 in Ohio City, † unknown
At 37 years of age, Washington S. Tyler started a wire weaving mill in Cleveland in 1872 and began operations with eleven workers.

MOTIVATION

“The FFS machines available in the market today almost all look, feel and perform alike. In redesigning the INTEGRA® ISF, we need to do something different. We need to set us apart from the competition. We need to break barriers when it comes to performance, intelligence, profitability and cleanliness.”

Heinz-Peter Felling, ISF Project Manager

FFS Technology has been around since the 1970's. At the time FFS was a technological revolution. However, almost all the FFS machines sold in the market today, while a bit faster and more reliable, are in general still the same machines we have come to know forty years ago. At HAVER & BOECKER we believe that needs to change. We therefore wanted to set a new technological footprint. That is why we designed the INTEGRA® ISF as the next generation FFS to reach new heights when it comes to intuitive operation, performance, availability and cleanliness.



MODULAR



“Whatever we do, we must design a machine that can be adapted to any performance requirement our customers may have. The machine must be configurable in every way that is important to the client. He should not pay for anything that he does not need, but at the same time have the option to upgrade the machine to everything he wants.”

Bernhard Pagenkemper, Chief Sales Officer

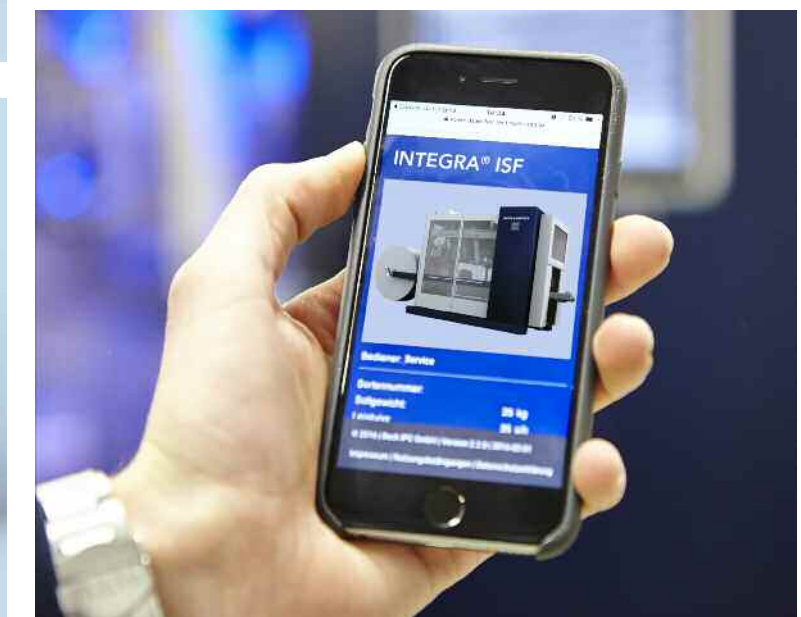
The ISF version of the INTEGRA® is designed to fulfill any and every performance requirement you may have. Similarly to an automobile you can configure your ISF in any way you want. Even if you are not sure about your performance requirements for the future, you can choose to configure your ISF in a manner that it can be upgraded at a later point in time. The INTEGRA® ISF offers various high-tech features never before seen in a FFS machine. There are no limits to the configuration of your machine. You tell us what you need and we will help you to configure you the ISF in way that is perfect for you.



INTELLIGENCE

“Build me a machine that makes it easy for us to operate. It has to be simple. It has to talk to us. It has to let us know what we should do.” – YOU

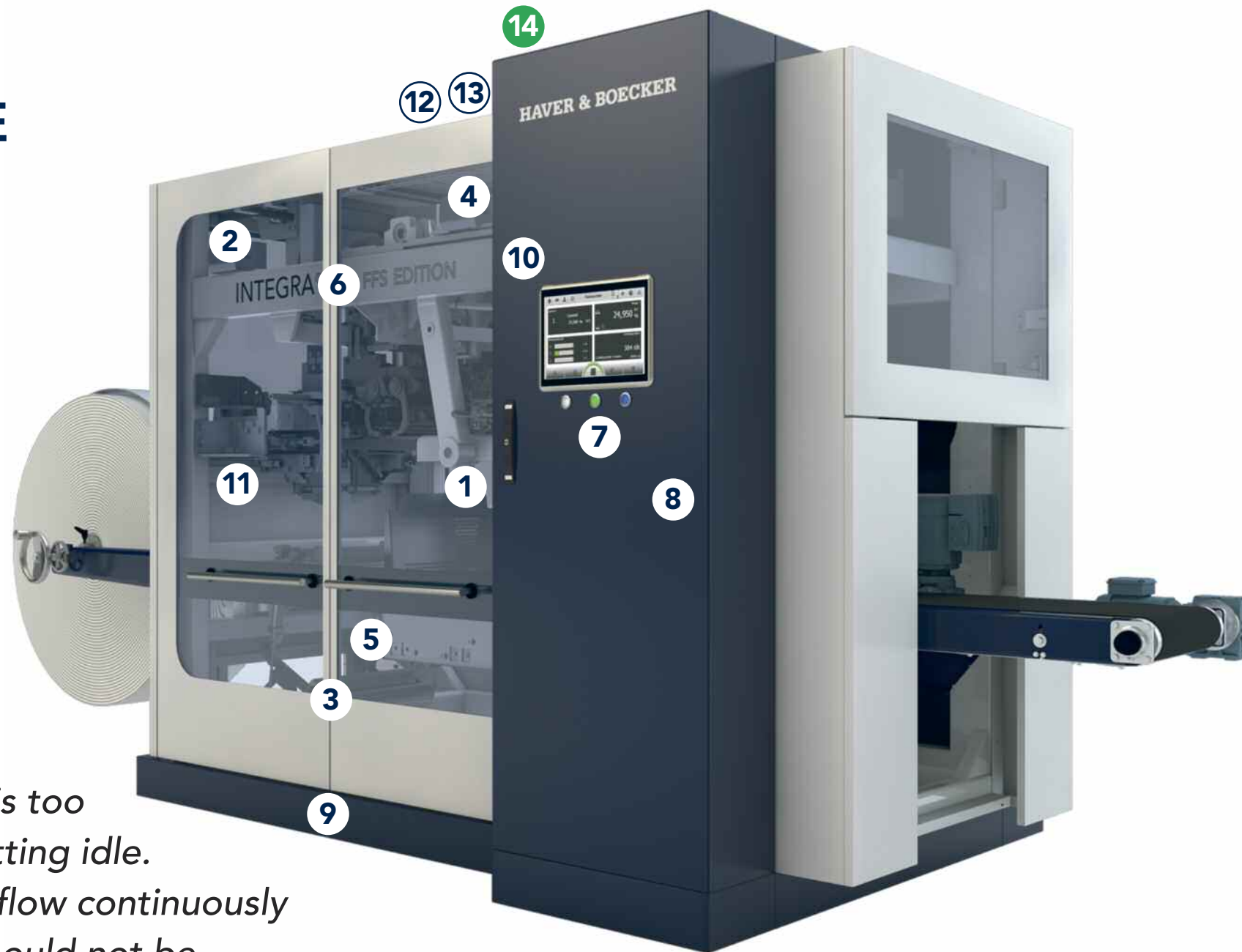
Prior to developing the INTEGRA® ISF we spoke to many of you. Your message to us was clear. You wanted a packing system, which made it easy for you and your team to operate it. You told us that the experience of your team is becoming a more and more important issue. With less time for training and a much increased rate of job rotation and added process complexity, you require a packaging system that can be operated intuitively. It should be easy to understand, quick to learn and most importantly, it must communicate with you. The ISF accomplishes the goals you gave us. Using LED mood lighting the INTEGRA® ISF talks to you. A blue light indicates it is running fine. The red light tells you it has a problem and a white light helps you in maintenance mode. The large touch-Screen panel offers you all features at a click of a button. You can not only detect faults in the system, but also watch movies on how to repair them. The system can be set to different user interfaces such as operator, maintenance or service technician. The HAVER & BOECKER technology allows you document and to adapt the ISF's operational settings according to your team's desires. It also enables you to monitor the machines conditions remotely.



PROFITABLE

“The key to making money in this business is time. It cannot be wasted. The process to make my product is too expensive to be sitting idle. The product must flow continuously and the process should not be interrupted.” – YOU

We understood. In reaction to your determination to generate constant flow, the INTEGRA® ISF is designed with your highest operation and maintenance comfort in mind. The machine body is protected by glass to give you a transparent insight into all aspects of the machine during operation. All components are easily accessible once you have opened the extra-large doors. Critical parts are exchangeable using snap in place solutions. For the utmost convenience you can also equip your ISF with specially designed tool boxes, which contain critical spare parts and tools directly in the machine. In order to minimize set-up times, you also have the option to an automatic reel-changer.



- 1 The secure BAG GRIPPER**
 - New low-maintenance bag gripper assures secure bag handling.
 - Especially robust with lasting grip strength.
- 2 The intelligent DIAGNOSTIC ILLUMINATION**
 - Diagnostic illumination allows recognition of the machine status from afar and reaction without delay:
 - → BLUE = the machine is in operation
 - → WHITE = inspection mode with open doors
 - → RED = indicates fault mode
- 3 The optimum ACCESSIBILITY**
 - Through large side, rear and front doors.
 - Visual process monitoring through large windows.

- 4 The automatic PERFORMANCE OPTIMIZATION**
 - Self-adaptive, the machine decides “by itself”.
 - Sensors in the material flow determine continuously and precisely the flow characteristic and thus constantly assure efficient results.
 - Using these data, the machine automatically and optimally adjusts to reach the highest possible performance.
 - No manual adjustment necessary.
- 5 The simple MAINTENANCE and CLEANING**
 - Maintenance-targeted accessibility to the different assemblies.
 - Maintenance-friendly through a collection tray.
- 6 The reliable SAFETY SWITCH**
 - Considerably enhanced machine operator safety via mechanical latching and unlatching (opening of doors during operation is no longer possible).
 - Less dust.
- 7 The interactive TOUCHPANEL**
 - Parameters in 3D images for various operating messages (use of images, text and button descriptions).
 - 15-inch display available as an option.
- 8 The personalized RFID LOG-IN**
RFID = radio frequency identification
 - Personalized log-in via a chip or stick with immediate display of the operator’s authorization level.
 - Entering or remembering a password no longer necessary.
 - Feel of responsibility and haptic experience by the operator.
- 9 The ingenious TOOLBOX**
 - For tools and spare parts.
- 10 The preventive MAINTENANCE**
 - Continuous recording of “operating data” and automatic maintenance advisory.
- 11 The modular EXPANDABILITY**
 - Modular expandability from 600 bags/hr., to 1,200 bags/hr., and up to 2,600 bags/hr.
- 12 The continuous DATA TRANSMISSION**
 - Machine with DSL connection and UMTS access as standard equipment:
 - Technical remote maintenance.
 - Recording of production data.
- 13 The reduced NOISE LEVEL**
 - Significant reduction of the noise level by an intelligent diversion of exhaust air from the cylinders
- 14 eco-line equipped to be energy-efficient**
 - Electrical energy savings from:
 - Energy-efficient motors.
 - Utilization of brake energy.
 - Reducing compressed air consumption by:
 - Using water cooling instead of compressed air cooling at the welded seams
 - Using an electric linear drive instead of a pneumatic cylinder for the cutting unit.
 - More economical on-site installation of the entire energy supply.

CLEAN

"The health and safety of our staff is our top priority. Therefore, any machine designed for today's requirements must ensure a clean working environment by minimizing product spillage." – YOU

In order to allow you to clean the INTEGRA® ISF as quickly and as thoroughly as possible, all of the main assemblies are bolted to a one piece top-plate, which can easily be removed from the machine if ever required. This means the components are not in contact with the machine floor, allowing you to sweep or wipe the machine quickly and effectively whenever you feel the need to do so. The machine floor is made up of a large drawer, which is supported by wheels. This allows you to simply remove the complete floor within seconds, giving you full access to its every corner or even allowing you to have it pressure washed, should the need arise.

To a certain degree noise is also a form of pollution. In order to protect your staff, the ISF features a specially designed air exhaust system, including mufflers. This results in the quietest FFS machine of all time.

PROSPEROUS

“My process is vital. The quality of my process determines my costs, my bottom line, my image and my overall success. Help me create a process, which is as efficient as possible.” – YOU

We understand how important your process is to you. Having a reliable, effective and efficient process radiates your image to your market, customers, competitors and even your own employees. In response to your demand we have created the **eco-line**.

Available in every new and upgradable to every existing INTEGRA® ISF, the eco-line system allows you to maximize energy efficiency. This cuts your operational expenses and sends a message to your team, customers and partners of how important the optimal management of resources is to you, while at the same time making your personal contribution to the environment. The electrical power savings stem from the use of energy-efficient motors in combination with a kinetic energy recuperation concept, similar to what you know as hybrid technology in your automobile. Pneumatic cylinders are replaced with electric linear drives. Finally, by using a water-cooled system to reduce temperatures quickly on all welds seams of your bags rather than investing into traditional compressed air, you add further savings to your energy bills.

The resulting additional profit to your operation far outweighs the extra expense of installing the eco-line system.



HAYER & BOECKER TECHNOLOGY

Since the inception of business as we know it, the measurement of success for a company has always been the profit it generates. The dictionary defines profit as "the ratio of pecuniary gain compared to the amount of capital invested." At HAYER & BOECKER we believe that the key to maximizing this ratio for any company lies in perfecting the quality of its flow in terms of product and process. We are convinced that a single perfect flow applicable to any and every product or process does not exist. Instead we are driven to identify the ideal flow for each product, customer and operation. In essence, at HAYER & BOECKER we are a family of flow designers and engineers focused on finding your perfect flow. The foundation for our endeavors is our range of premium technologies, which can be combined to form complete systems of flow. From processing and materials handling over mixing, packaging and filling to palletizing, loading and automating, HAYER & BOECKER can partner with you in all aspects of your business. With W.S. TYLER, IBAU HAMBURG, SOMMER, Feige FILLING, BEHN + BATES, NEWTEC BAG PALLETIZING and of course HAYER & BOECKER itself, we have assembled over time nothing but the best and strongest brands in our industry to ensure that we will not make any compromises when designing the perfect flow for you. Maximize your success by allowing our family of flow specialists and professionals to be a part of yours.

PROCESSING STORAGE MIXING FILLING PACKING PALLETIZING LOADING AUTOMATION



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