

Excellence in Packaging

OPTIMA

OPTIMA –

it is Latin and means “the best”

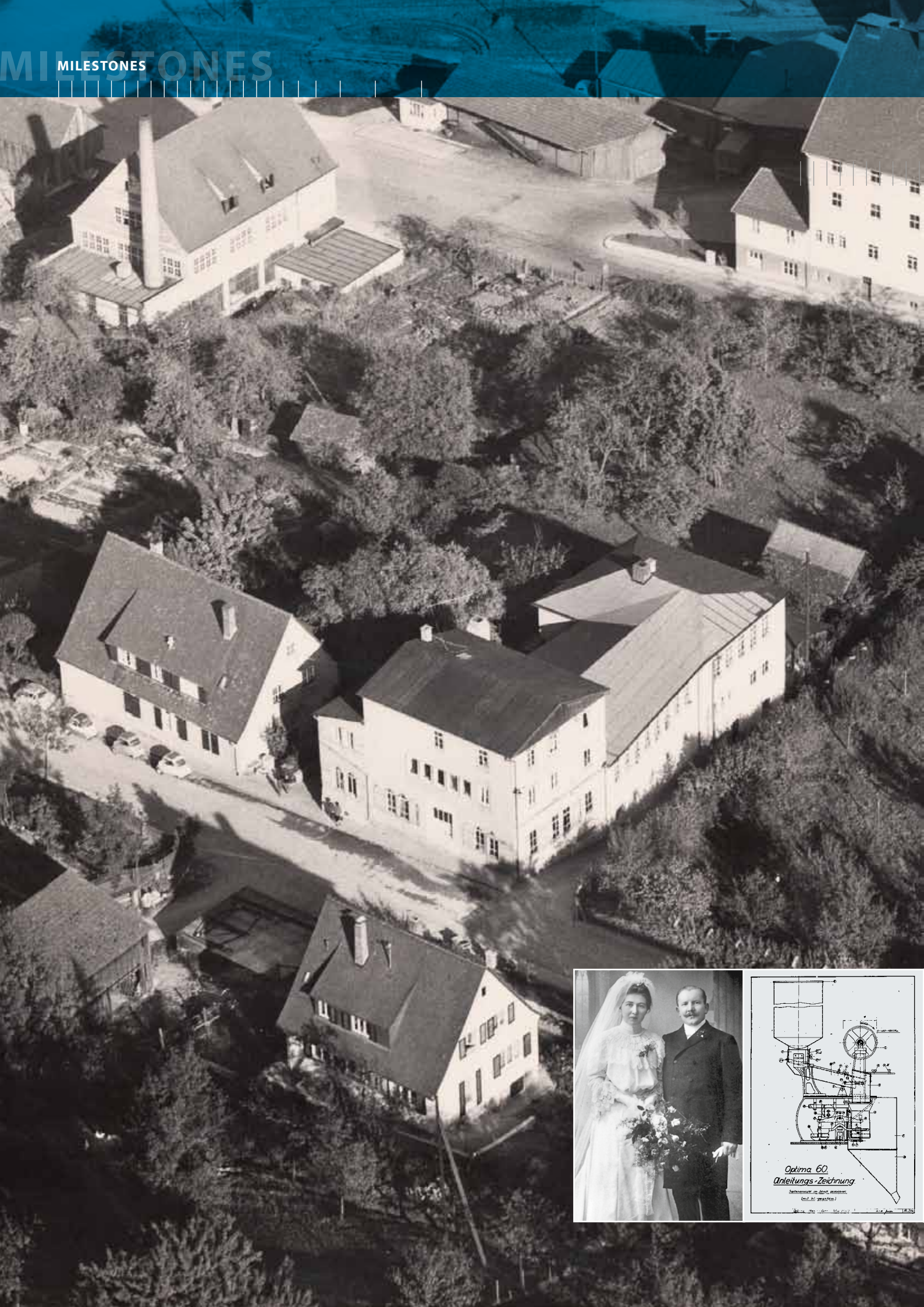
Our goal:
We strive to be the best...
in all respects.



By fully identifying with your goals, Optima cultivates a strong sense of commitment towards you – the customer. This puts us in a position to design and manufacture production, filling and packaging machinery that is absolutely tuned to your specific needs and requirements.

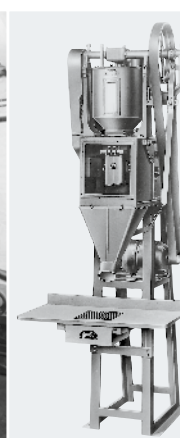
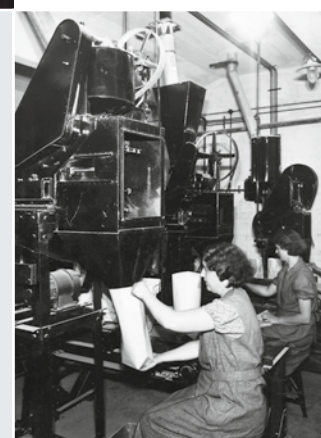
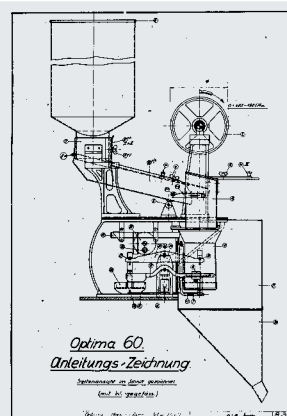
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Milestones

- 1922** Optima Maschinenfabrik is founded by Otto Bühler
 - 1945** Large portions of the company building are destroyed in the last few months of World War II. Dr. Max Bühler, son of Otto Bühler, rebuilds the company immediately after the War.
 - 1950** For the first time, Optima develops and markets packaging machines for food and pharmaceutical products
 - 1974** First fully automated bag filling machine for diapers
 - 1980** Hans Bühler joins the company
 - 1984** Exports exceed 80 %
 - 1992** Acquisition of Inova Pac-Systeme lays the foundation for setting up the pharma sector
 - 1998** Acquisition of Kugler filling and closing machines (pharmaceuticals and cosmetics)
 - 1999** Acquisition of Amotek (Italy, packaging machines for paper hygiene products)
 - 2000** New company structure - Optima Packaging Group
 - 2001** Medicon, manufacturing and packaging machines for medical care products, is founded
 - 2003** PPS founded (cartoners for the cosmetics industry)
 - 2004** Acquisition of Sierem (France, stacking and buffer systems) and Auto.con (today Optima's premium partner Seidenader Automation)
 - 2005** Acquisition of Klee (pharmaceutical lyophilization, loading and unloading systems)
 - 2006** Introduction of the brand concepts, and the sectors of Pharma, Consumer and Nonwovens
 - 2010** Acquisition of Stern, Germany
 - 2011** Participation of METALL + PLASTIC GmbH
 - 2012** Consolidation of S.F.Vision, Kugler, PPS, Stern and a business area of OPTIMA to OPTIMA consumer GmbH, Change of name from OPTIMA GROUP pharma GmbH to OPTIMA pharma GmbH, Change of name from medicon GmbH to OPTIMA life science GmbH
 - 2013** Change of name from OPTIMA filling and packaging machines GmbH to OPTIMA nonwovens GmbH
- 1984–2012** Formation of international subsidiaries in the United States, Brazil, Mexico, Korea, Japan, China, India, Malaysia, Great Britain, France and Italy.





Globally active, yet close to the customer

A distinguishing trait of the family enterprise, presently in hands of the third generation, is a stable and robust growth. Still, Optima maintains its flexibility and customer proximity as core characteristics. The company employs a staff of over 1,700 at numerous locations all over the world.

Optima technologies are in worldwide demand: The outstanding export share of more than 80 % also reflects the massive innovative degree of our production, filling, and packaging machinery.

Each sector of the company is an independent and flexible expert of its own domain. Our professional and experienced project management provides implementation of comprehensive turnkey projects – anywhere in the world. In addition to competent engineering, we offer our clients efficient training and impeccable customer service.



Global service

Service means security, as even the best machines and lines are subject to wear. Regular maintenance by experts in the global service network reduces the risk of machine downtimes to a minimum.

The service management for customers of Optima is available 24/7 either face-to-face, via teleservice, or even online.

Service starts with machine commissioning. Customized training concepts result in the safe handling of Optima's user-friendly technology. Buying new machinery is not always necessary – innovative machine upgrades and customized modification packages from Optima make used machinery state-of-the-art.

Worldwide Presence.



● Subsidiaries

Germany	
	OPTIMA packaging group GmbH, Schwaebisch Hall
	OPTIMA nonwovens GmbH, Schwaebisch Hall
	OPTIMA consumer GmbH, Schwaebisch Hall
	OPTIMA life science GmbH, Schwaebisch Hall
	OPTIMA pharma GmbH, Schwaebisch Hall
	OPTIMA pharma GmbH, Gladenbach–Mornshausen
	METALL + PLASTIC GmbH, Radolfzell–Stahringen
USA	OPTIMA Machinery Corporation, Green Bay, Wisconsin
Mexico	OPTIMA packaging machines S.A. de C.V., Mexico City
Brazil	OPTIMA do Brasil Máquinas de Embalagem Ltda., São Paulo
	GEVAS do Brasil Ltda., Joinville
UK	OPTIMA Packaging Machinery PLC, Winchester
France	Sierem SARL, Comines Cédex
	OPTIMA packaging France S.A.R.L., Comines Cédex
Italy	AMOTEK S.r.l., Zola Predosa - Bologna
China	OPTIMA Packaging Machines Co. Ltd., Shanghai
South Korea	OPTIMA Korea Ltd., Seoul
Japan	OPTIMA Japan Co. Ltd., Kyoto
India	OPTIMA India packaging machines Pvt. Ltd., Karnataka
Malaysia	OPTIMA PACKAGING MACHINES (M) SDN. BHD., Petaling Jaya



Compact hygiene

Since 1970, Optima Nonwovens has been one of the industry's trendsetters, indisputably exerting a powerful impact on the improvement of automation processes.

This tradition lives on in each and every new packaging project. Optima lines are designed to serve highly specific requirements. Optimized implementation of specific features such as output, machine reliability, degree of automation and marketing at the point of sale are self-evident, and manufacturers directly profit from the benefits of these innovative, yet technically mature machines.



Perfect packaging systems: Paper hygiene articles

There are countless different paper hygiene products for home use. Consequently, the sector needs highly flexible machine solutions. Packaging lines from Optima Nonwovens cover all standard formats – very often from small to large-size packages with one machine type, allowing our customers to fully benefit from the cost savings and leading design of this modular approach to machine engineering. The machine program of Optima Nonwovens is also suited for the startup of fully automated packaging.

- **Tissue products** (Paper towels, industrial wipes)
- **Roll products** (Toilet paper rolls, kitchen paper towels ...)
- **Cotton pads**
- **Wet wipes**
- **Bed pads**

More than just compact: Safe and rapid foil packaging

For packaging diapers, high performance and reduced package dimensions are in demand. Adapted to these requirements, only the best machinery offers maximum flexibility and ideal product protection.

Semi and fully automated machinery by Optima Nonwovens packages diapers with the utmost precision, and if required, at such speeds that the human eye is no longer able to follow the machine's movements.

- **Diapers**

Indispensable: Efficiency for sanitary products

Innovative strength of an experienced company: Its active involvement in a series of research groups ensures that the mechatronics competence of Optima Nonwovens is always current. The perfect interaction of software, electronics and mechanics are a crucial factor for successful machine engineering.

Additional aspect: Packages of sanitary products are considered sales packages. Machine engineering by Optima Nonwovens takes this aspect into account - especially in the personal care segment.

- **Incontinence products**
- **Feminine hygiene products**
(Panty liners, sanitary napkins, ...)

A step ahead: Systematically checked and ready for shipment

The end-of-line automation range receives the primary packages of the paper hygiene products and transfers them to further processing from the secondary sales package to final packaging.

Certified quality for customers – by fully controlled manufacturing and packaging processes. End-of-line automation systems are delivered as turnkey solutions from a one-stop provider, resulting in significant commercial rewards to users.



Particular demands? We welcome the challenge!

Every day, staggering amounts of food, cosmetic, and chemical products are dosed, filled, and packaged...

...many of them with machinery manufactured by Optima Consumer, and for good reasons: Core benefits include machine flexibility, high output, product protection, and process safety. Optima Consumer offers technologies to make dosing, filling, and packaging still easier and more safe and efficient. Providing everything from starter models to complete lines – plus handling and assembly functions.



Packaging technologies to taste

Optima Consumer is your reliable partner for dosing, filling, and packaging of all food products - from dry to liquid.

We are aware of the industry's extremely diversified requirements. Our modular systems stand for investment safety: Handling and assembly functions can be optionally added later, once the need emerges. Proven and experienced engineering expertise tailors all systems exactly to the customer needs, and comprehensive machine projects are delivered as turnkeys.

Powerful dosing and packaging technologies for chemicals

Dry and liquid chemicals require specific dosing equipment. The systems of Optima Consumer satisfy the most diversified requirements: product protection, high output, and filling precision – guaranteeing an ideal solution that weighs and combines all aspects.

From semi-automated machines to comprehensive fully automatic lines: All portioning and dosing systems are compatible with the flexible assembly, closing and packaging machinery from Optima Consumer. Their open architecture further allows combination with other systems, including complete lines and customer-specific special solutions.

Trendsetter in the cosmetic sector

The law of the cosmetics market dictates that constantly emerging trends dominate the scene – with futuristic, aesthetical container shapes. Consequently, filling and packaging of these products follows its own set of rules.

Cosmetic manufacturers insist on maximum flexibility of their investments. Optima Consumer offers innovative technological solutions not only for the filling and packaging process design, but also for technologies supporting automated format changeover or serial function modules.

Specialist for filtration products

Competence in safety: The production of air, water and dialysis filter products demands integration of several interactive automated work processes, including handling and assembly functions, high-precision filling of filter material into containers, closing (sealing), coding, sterilization technologies and control functions.

The result: Optima lines are perfectly tuned to customer requirements.



Experience safety

Optima Pharma has over 25 years experience in sterile filling and capping systems and in the challenging field of lyophilization, isolation, and containment technology. Our comprehensive range of machines offer focused solutions to manufacturers of human, veterinary, and therapeutic medicines, as well as for products and applications in biotechnology, life sciences, and clinical diagnostics.

The highly flexible line concepts integrate fill technologies for liquids and powders with closing technologies for nearly every imaginable application. Isolators and E-beam tunnels as well as lyophilization systems, including loading and unloading systems tailored to our customers' requirements, can be fully integrated into the process stream, while upstream and downstream processing machinery complete our comprehensive product portfolio.

Focused on the safety required of pharmaceutical procedures and processes, Optima Pharma breaks new ground in certifying innovative process efficiency technologies to operative maturity.

Optima Pharma with its brands Inova, Kugler, Klee and Metall+Plastic is your ideal partner when it comes to complex turn key projects. Your project is our commitment.



Sterile filling to the highest standards

Optima Pharma filling lines meet all your output requirements – from laboratory or clinical trial batches to long run, high speed campaigning. Sterility guaranteed.

Standard modular machines offer solutions for the most diversified requirements and, together with outstanding engineering competence and experience, provide the basis for customized solutions wherever needed. Customized lines are precisely tailored to customers' specific requirements and satisfy the same exacting standards: all for the benefit of our customers' products.

- Pre-sterilized nested disposable syringes
- Bulk glass and plastic syringes
- Vials
- Bottles
- Cartridges

Isolator technology – for maximum protection of product and operator

Isolators can be integrated with all types of pharmaceutical processing equipment including aseptic liquid/powder filling machines, E-beam tunnels, depyrogenation tunnels and lyophilization systems.

- Isolators for liquid, powder filling lines, loading/unloading systems
- E-beam tunnels for syringe tub sterilization
- Sterility test isolators
- H₂O₂ rapid gassing transfer chambers
- Dispensing/weighing isolators
- Glove tester

Non-sterile products: Assured diversity

Whether compact monoblock machine or an entire packaging line, Optima Pharma masters the diversity in packaging materials. From glass and plastic bottles to custom containers driven by the creativity of our customers' marketing, we rise to the challenge. Our standard and custom purpose built equipment impresses with outstanding technological prowess and unmatched flexibility in a myriad of tasks: cleaning, filling, coating, closing, sealing, assembly and handling. Whether monoblock or traditional in-line design, handling the manifold exigencies of primary packing materials in over the counter medicines, in-vivo or in-vitro diagnostics is our expertise.

- OTC: Bottles, vials and closures
- Diagnostics: Microvials, multiwell cartridges/cuvettes, microtitre plates

Safety all the way – the benefits of lyophilization

An increasing share of sensitive pharmaceutical liquids need preservation by lyophilization. Thanks to its long-standing and proven expertise, Optima Pharma is able to offer a unique product portfolio for the pharmaceutical lyophilization sector, including loading and unloading: Unique, because the filling, packaging and lyophilization processes of Optima Pharma are coordinated from the very start. A highly competent and experienced project management assuming overall responsibility for the turnkey projects is what makes our all-inclusive solutions so remarkable. All lines comply with the highest clean room standards and the strictest American and European safety regulations.

- Vials / Bottles / Ampoules / Blisters

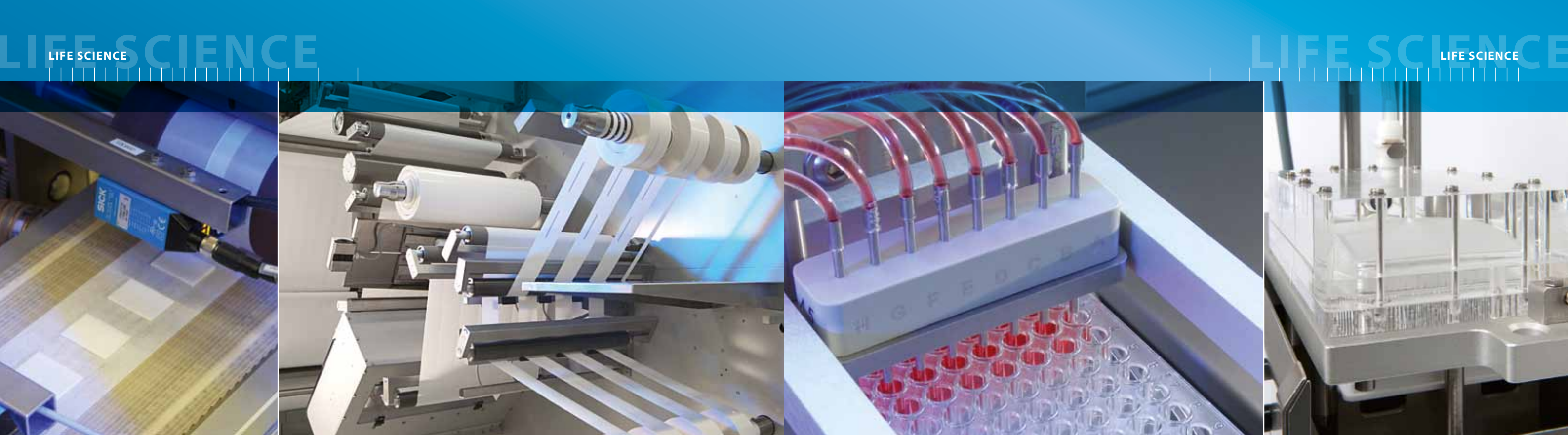


The fine art of processing

Manufacturing and packaging lines for applications in the medical, diagnostic, and pharmaceutical industries.

Optima Life Science, with its brands Medicon and Doyen, is an expert in processing technologies that are used for manufacturing the most up-to-date wound dressings or diagnostic strips. With its ImmuCoat®-System, the brand Medicon offers a unique, modular, scalable, and modifiable solution for diagnostic media.

Open communication and flexible organizational structures are Optima's watermark. The resulting synergies round off the extensive know-how of Optima Life Science– and secure the customers' head start in the market.



Lane-processing systems

With its brands Medicon and Doyen, Optima Life Science offers manufacturing and packaging lines for medical and pharmaceutical products. The performance range of this machine program encompasses everything from small capacities to high throughput. A wide scope of functionalities can be added to meet specific customer demands.

Manufacturing and packaging lines

- for innovative wound dressing**
- ▶ Antimicrobial wound dressings
 - ▶ Foam pads
 - ▶ Hydrocolloid pads
 - ▶ Foil products

- for rapid tests**
- ▶ Lateral flow test strips
 - ▶ Lab on a chip

- for pharmaceutical products**
- ▶ Transdermal pads
 - ▶ Oral foil strips

Coating lines for ELISA plates

ImmuCoat® is a scalable machine platform in modular design for coating and processing micro titer plates. The user is free to incorporate, modify, or combine process stations with the most diversified functions as needed.

Coating lines for microtiter plates for the following applications

- ▶ ELISA
- ▶ Cell cultures
- ▶ Molecular biology
- ▶ Research

Microtiter plates contain 96 wells (cavities), which are isolated from one another, in rows and columns. Due to the high number of wells and the usage of identical types, microtiter plates are perfect for cultivation and testing.



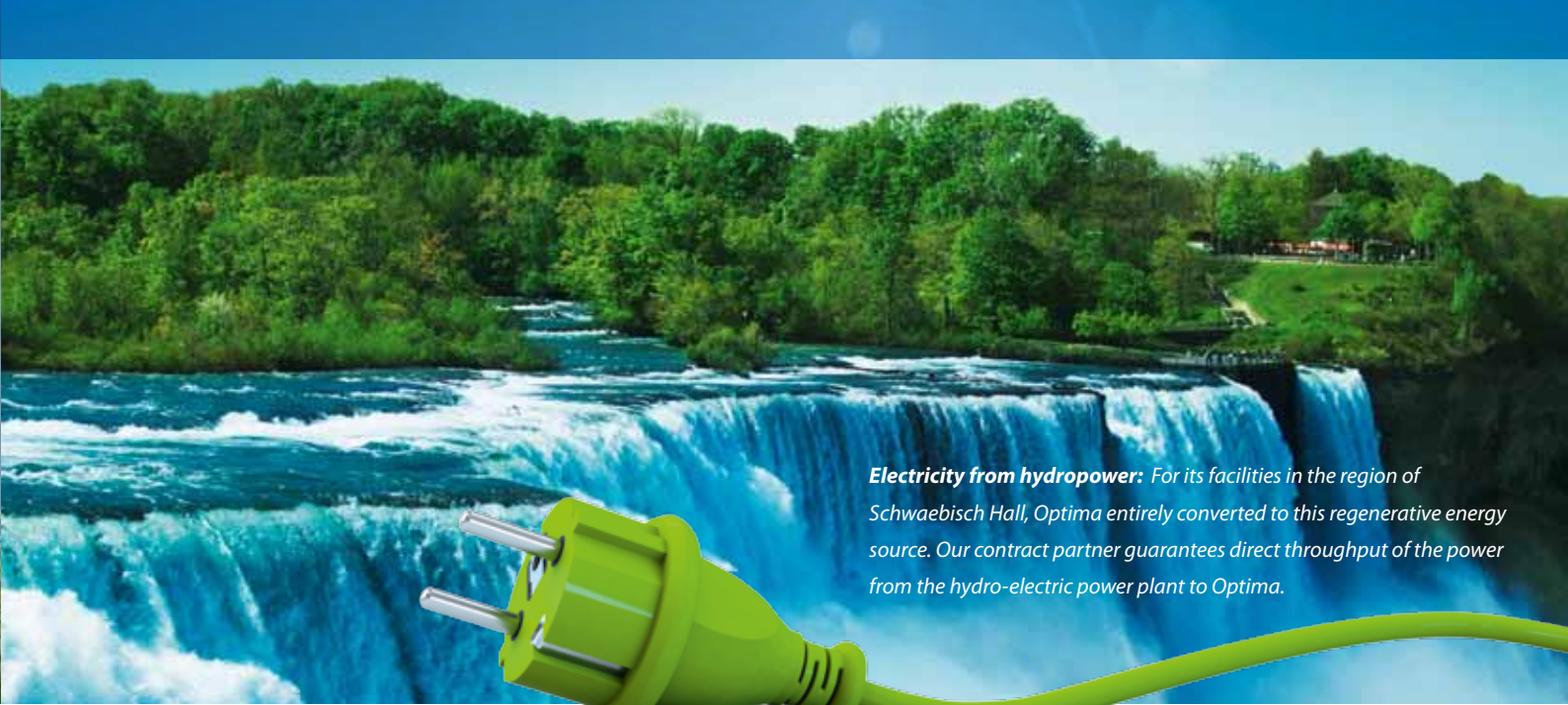
Ecological responsibility – a systematic approach

Ecological aspects have been a central characteristic for the general practice of Optima long before “Sustainability” became a fashion.

Leaving nothing to chance, Optima established an environmental management system for its 6 subsidiaries in 2007, certified by an independent organization according to ISO 14001.

The Optima environmental protection system achieves verifiable energy savings by recycling-oriented waste management (recyclable resources) and reduced water consumption. All of Optima’s building activities are implemented along the principles of the most recent ecological proficiency. These principles are also applied to renovations on existing buildings that undergo upgrading of their energy technology and ecological design.

The tasks of the environmental management system include ensuring compliance with the most current environmental laws and provisions that bind the company. Employee training measures are implemented with the goal to generate and cultivate ecological awareness. Conformity of the system with international standards is confirmed through annual audits by an independent certification organization.



***Electricity from hydropower:** For its facilities in the region of Schwaebisch Hall, Optima entirely converted to this regenerative energy source. Our contract partner guarantees direct throughput of the power from the hydro-electric power plant to Optima.*

Environmental protection – a primary goal

A main aspect of environmental protection is to safeguard natural resources - a global and demanding task for each one of us!

Our actions speak for themselves: Most of our energy needs are already covered by regenerative sources. Highly innovative building technologies guarantee the economic use of resources. The designs and concepts of our machines are aimed at minimizing energy consumption – without compromising quality.

With this commitment we pursue, as always, a long-term goal. We thus assure you that we will continuously expand this commitment. We care for people and society, and are engaged in numerous projects for societal progress. Among them, ‘Doctors without Borders’, the ‘Citizens Action Committee of Schwaebisch Hall’ and a number of institutions of higher education.



Demographic development – a proactive approach to the future

The reversing age pyramid is one of the greatest challenges of today's industrial societies. Optima is counteracting this effect by proactively marketing personnel. This will enable our company to continue sustainable recruitment and integration of highly qualified employees and leaders in the future.

In co-operation with other companies, Optima has paved the way for the Campus Schwaebisch Hall, a university currently offering three areas of study. Optima further collaborates with the Dual University System that integrates theoretical knowledge of academic standards with practical training within the company. University fairs, practical training terms and support, and diploma thesis, allow us to find talents at an early stage and secure their employment with the company. Apprenticeship at Optima has an excellent reputation. The number of applications exceed capacities by far – despite the large number of training positions.

Safe jobs and an outstanding sense of responsibility are additional factors enhancing our name. Short decision paths, profit sharing, comprehensive opportunities for further training, social benefits, and flexible hours, characterize the employment at Optima. All of these facets add to an excellent employer profile and constantly generate new contacts.

Sustainable business practice – our obligation towards society

Its economic success is a company's future. Optima is an owner-managed company and has been creating secure jobs of high standing through comprehensive re-investment for decades.

Employee satisfaction and social focus are the company's practiced philosophy: A voluntary employee survey confirmed the company's positive working climate. As an entrepreneurial member of society, Optima also fulfills tasks beyond its mere scope of business.

Contributions to children and youth projects include the support of the Schwaebisch Hall community foundation. Sponsorship of clubs, student groups, cultural and sports events as well as generous donations to "Doctors without Borders" round off Optima's comprehensive societal and social commitment.

Optima is a founding member of the Packaging Valley Germany e. V. The association wants to promote the packaging company cluster within the region.

Contacts Worldwide

The Safety of a Strong Partner

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