

Product Range

Machines, accessories and services for
pharmaceuticals, chemicals, cosmetics,
food and packaging





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MAPAG Maschinen AG

Compelling quality of products and services

With over 50 years of experience in the pharmaceutical, chemical, food and cosmetics industries, we focus on stable business partnerships by providing the in-depth expertise you need. Our team-based organisation allows us to serve as your competent partner for all of your process-engineering as well as administrative needs.

We aim to provide comprehensive consulting on process selection and optimisation and find economical solutions to your complex problems based on your user requirement specification (URS). In this manner, you can enjoy even greater success in today's dynamic market environment. When it comes to planning complete production facilities, we can provide comprehensive engineering expertise in cooperation with our suppliers.

We attach great importance to personal contact since it allows us to build mutually profitable and trusting relationships with our customers as well as our suppliers.

Your MAPAG Maschinen AG

«Your satisfaction is
what motivates us.»

System partner for Roller Compactors and Granulators

Alexanderwerk

Compaction in the pharmaceutical industry

Due to its carterlever bearing design the rollers can be easily cleaned or replaced. Careful selection of the best materials has resulted in broad acceptance of Alexanderwerk systems in the area of GMP. Sophisticated and proven systems in conjunction with the latest technology to guarantee ease of use.



BT 120 Pharma
Compact table top compacting machine which should not be missing in any laboratory. Throughput up to 8 kg/h Max. pressing force: 20 kN/cm



WP 120 Pharma
Impressive simplicity and mobility throughput up to 40 kg/h
Max. pressing force: 20 kN/cm
Option: compatible with CFR 21 Part 11



WP 200 Pharma
Throughput up to 400 kg/h
Max. pressing force: 20 kN/cm roller
Option: compatible with CFR 21 Part 11

Compaction in the chemical and fine chemical industries

The double sided bearing of the rollers provide high product throughput performance. This is particularly useful for single products in chemical and fine chemicals industries.

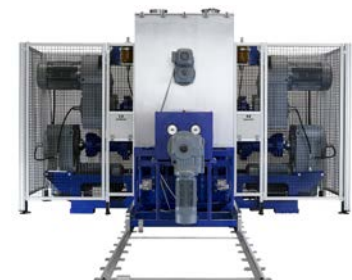
The newly modernized design provides high functionality and short procedure times.



PP 150 C
Throughput up to 400 kg/h
As standard with the patented Combi-Vent-Feeder®
Option: single or double stage rotor fine granulation in Diagonal Design®
Option: Cooled rollers



PP 175
Throughput up to 500 kg/h
Variable number of screws: 1, 2 or 4
As standard with the patented Combi-Vent-Feeder®
Option: Cooled rollers



PP 500
Throughput up to 10,000 kg/h per screw
Variable number of screws: 1, 2 or 4
As standard with the patented Combi-Vent-Feeder®
Option: Cooled rollers

Alexanderwerk

Grater

In order to meet the demand of the processing and manufacturing industry for materials and uniform particle size and shape, Alexanderwerk offers the grater shredder machines for a variety of applications. The continuous process of the grater shredder is suitable for dry and moist as well as solid output products.



In contrast to conventional constructions, where at least 50 % of the reduction is only achieved within the work surface in the 3rd quadrant, the effective working surface of the granulation in Diagonal-Design® is considerably enlarged. As a result, the rotor fine granulator achieves a performance increase of up to 100 percent as well as a gentler size reduction with less fine grains.

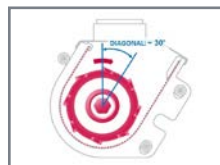
This leads to a minimization of investment costs and an increase in the quality of the end product.

Furthermore, the modular design guarantees fast changing and cleaning of all working tools and thus fulfils the requirements for flexible working.

Alexanderwerk's patented design provides up to 100% increased throughput compared to conventional designs.

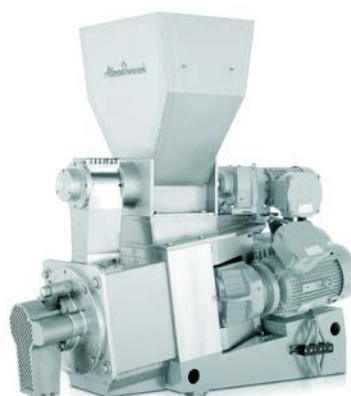
Diagonal Design® fine rotor granulation

A significant part of Alexanderwerk machines is its variety of crushing technologies, including granulation, friction, grating, shredding.



Wet granulation machines

Wet granulation is a continuous process for the processing of wet and pasty raw materials into granules. Granules can be processed significantly easier than raw materials due to its defined particle size.



Modular system for drums



You can configure your desired drum from our modular system. The useable volume ranges from 0.5 to 400 litres. The materials, based on chrome-nickel alloy, are rust-free, light-resistant, non-diffusing and have no effect on odour or taste. They are also 100% recyclable. The reusable lid with clamping ring and insertable round cord seal ensures airtight sealing. The sealant materials silicon, EPDM, Viton and FEP coatings are FDA approved. The bottom and lid are deep-drawn, the shell and bottom are butt-welded. The seams are milled flat as well as ground smooth inside and out. The standard wall thickness of the welded versions is 1.25 mm.

Drum funnels

Safe, dust-free, metered and problem-free emptying of drums.

Symmetrical and asymmetrical funnels make filling and transferring of drums dust- and loss-free.

Conical and asymmetrical funnels are available for all BOLZ INTEC drums, either brushed, ground or with an electropolished surface. The material thickness is 1.5 mm. Conical drum funnels have a standard inclination of 60° and 90°.

We are also happy to manufacture other funnel angles on request.



Pressure Vessels and special executions

The pharmaceutical industry stores and transports its substances sterile and safe in Bolz pressure containers. 3 container sizes are available as standard with the diameters 234 mm, 395 mm, 560 mm and with a useful volume of 5 – 200 liters.

All other components can be combined modularly. The triclamp socket according to DIN 32676 is standard. Special designs according to specific customer requests are possible at any time.

Transfer systems

The different systems allow you to transport solids and suspensions emission free within your plant. Together the EPTS and CSTS are not only an unbeatable transport system but also a smart reactor unit. The EPTS is placed on top of the CSTS and, thanks to the integrated mixer, the Bolz-CSTS becomes a reactor which mixes its liquids with the solids from the EPTS.

EPTS (emission-free powder transfer system)
CSTS (contained suspension transfer system)



Mixer-Granulator for the pharmaceutical industry



Mixer-Granulator from DIOSNA for highest quality. Nowhere is precise work more important than in the pharmaceutical industry. You need the right granulating system in order to achieve high-quality products.



P 1-6
for laboratory
sizes of 0,25 to 6 l



PVAC-10
for laboratory sizes
of 0,25 to 10 l



PVAC 10-60
for pilot plant scale
from 10 to 60 l



P 100 und P 150
for the production scale
from 100 to 150 l



PVAC 10-80 RC
quick bowl change
between 10 and 80 l



V 250 - 1600 usable capacity 210 to 1400 l



P 300 - 1800
for the production scale
from 300 to 1800 l



V 10-200
usable capacity
11,5 to 180 l

Universal mixer for all operating sizes

Easy cleaning, compact design and simple operation - regardless of their size, our universal mixers are convincing by their extraordinary practicality. They are not only suitable for various industries such as the cosmetics, chemical or food industry, but are also ideally adapted to the size of your business.



VAC 150 – 2000 usable capacity 150 to 2'000 l

Mixing, granulating and vacuum drying

The single pot processor has a cylindrical mixing vessel with two heating zones and insulation. Mixing and drying of components is made a thorough and uncomplicated affair by two features: firstly, the mixing tool with wall scraper for drying and secondly, the automatically operated hinged lid which can be heated to prevent condensation.

Cleaning is carried out using a CIP/WIP process and is characterized by a high degree of cleanliness and quality.

Modular laboratory systems from DIOSNA

In order to offer you the possibility to switch between different technologies in your production processes, we have developed our laboratory plants with a modular design. These are designed to make the change of components quick and easy and to adapt the batch size optimally to the process - for example, the production of granulates or the filming of tablets.



Midilab RC
laboratory processor
for batches from
1 to 10 kg



Minilab RC
Minilab RC bench top unit for batches from 0,2 to 3,2 kg



Fluid Bed Processors – powerful and versatile

The multifunctional fluid bed processors from DIOSNA are the ideal solutions for laboratory, pilot plant and production scale. With drying, agglomeration and coating, they combine several processes in one system, which has a positive effect on your operation in many ways. Increased profitability combined with reduced space requirements, easy handling and a range of individual options are among the most important advantages of our solutions.



CAP 10 – 80 RC
Quick container size change for
batches from 5 to 40 kg



CAP 150 – 1800
Fluid bed processor in production
scale for batches from 30 to 880 kg



The CCS granulation line offers optimal coordination of all interfaces

This adaptability with regard to your requirements also applies to the CCS granulation system, with which moist granulation is performed efficiently. This process, which is carried out with subsequent drying, is a reliable and efficient method of producing granules. The advantage of this procedure is its enormous versatility, as this form of granulation can be used for most common recipes. The product flow can be realized either vertically or horizontally. In some cases, however, spray granulation in a fluidized bed may be necessary, for example if certain formulations or requirements regarding the structure of the end product exist.



CCS/CGS 150 - 1300
on a production scale for
batches from 25 to 600 kg

CCS 10 - 80 RC
Container size
change for batches
from 5 to 40 kg



Tablet coater for variable batch sizes

If you are looking for the most economical and efficient coating technology possible, the tablet machine of the HDC 50 - 600 series is an excellent choice. Used as a sugar or film coater, the HDC achieves precise results with aqueous or organic solvents. Its name stands for «Horizontal Drum Coater» and refers to its mode of operation as a drum coater. The convenient swing-out of the spray arm and the integrated front door allow easy access to all functionally relevant parts. In addition, the drum can be exchanged for the HDC 50 - 200 models. A decisive feature of the system is the impressive batch size range from five to 500 kg, which offers maximum flexibility. Optional equipment includes a containment version, different drum sizes up to HDC 200 and WIP cleaning.



HDC 50 - 600
Horizontal drum coater for
batches from 5 to 500 kg

All machines are also available in a containment solution for your company.

Product portfolio

EnviroFALK PharmaWaterSystems is the corporate merger of LETZNER Pharmawasseraufbereitung GmbH and Wilhelm Werner Reinstwassertechnik GmbH. They provide safe water treatment solutions with advanced technologies for all applications in pharmaceuticals, biotechnology, life sciences, microelectronics and many other high-end applications.

They plan individual and turnkey plants for pharmaceutical water and ultra-pure steam in compliance with the strictest regulations in the highest quality. Completely manufactured, delivered and qualified.

Proprietary hygienic design in 316L

- | | |
|--------------------------------------|--|
| > Water softening plants | 100 – 50'000 l/h |
| > Reverse osmosis plants PW | 50 – 40'000 l/h |
| > Distillation plants WFI | 100 – 8'000 l/h |
| > WFI generation by membrane process | 100 – freie Konfiguration |
| > Pure steam generator PS | 50 – 4'000 kg/h |
| > CIP systems | free configuration |
| > Storage and distribution systems | 200 – 40'000 l |
| > LetzTOC measuring instrument | 2-channel NDIR online measuring instrument |
| > LetzANALYSE – CIP | free configuration |

Water softening & pre-treatment

- > Made entirely of 316L stainless steel
- > 2-column softening with single regeneration
- > Pre-filtration and UV reactor
- > Hot water sanitizable (as single unit)
- > Fully automatic control
- > Dosing systems: hardness stabilization, bisulphite etc.
- > Connection standard: DIN 32676 or DIN 11864
- > Piping standard: DIN 11866, RA < 0.8 µm
- > Sanitization: fully automatic > 80° C



Reverse Osmosis Units PW

- > 2-stage reverse osmosis with membrane degassing/UF
- > 1-stage reverse osmosis with membrane degassing and EDI/UF
- > Sampling panel with all test stations
- > Control via touch panel with Siematic S7 (audit trail and data recorder)
- > Connection standard: DIN 32676 or DIN 11864
- > Piping standard: DIN 11866, RA < 0.8 µm
- > Sanitization: fully automatic > 80° C



Distillation plants WFI

- > Energy saving systems made of 316L stainless steel
- > Antirouging concept
- > Thermal degassing
- > 3-8 Column systems
- > WFI Pure Steam Combined Systems
- > Control via touch panel with Siematic S7
- > Configurable operating states for standby modes
- > Material 1.4435 and e-polished interior surfaces
- > TÜV certificate
- > Connection standard: DIN 32676 or DIN 11864
- > Piping standard: DIN 11866, RA < 0.8 µm

Cold WFI generation by membrane process

- > Systems made of 316L and aseptic connections (hygienic design)
- > Continuous microbial and quality-relevant monitoring
- > High flow rate
- > Ozonisable ceramic ultrafiltration up to the pre-treatment of the generating plant (patent)
- > Fully automated sanitization concepts and Integrity test
- > Technical implementation according to EMA (European Medicine Agency) Guidelines



Pure Steam Generator PS

- > Energy saving systems made of 316L stainless steel
- > Antirouging concept
- > Thermal degassing
- > Control via touch panel with Siematic S7
- > Material 1.4435 and e-polished interior surfaces
- > Programmable operating states for stand-by
- > TÜV certificate
- > Connection standard: DIN 32676 or DIN 11864
- > Piping standard: DIN 11866, RA < 0.8 µm

CIP Systems

- > Fully automatic system control
- > Various dosing options
- > Completely drainable
- > 316L stainless steel plant design
- > Free program configuration
- > Connection standard: DIN 11864 - KEST
- > Piping standard: DIN 11866, RA < 0.8 µm, e-pol



Ziel helps you to achieve your goals



LAF Systems

Laminar Flow Systems

Laminar Air Flow Systems for different requirements for personal protection, product protection or a combination of personal and product protection as standard or special versions..

LAF systems provide product protection for various sized work areas, such as sampling, general process engineering and sterile filling of pharmaceutical and related applications. The product protection is achieved by a targeted air flow. A clean and low-turbulence air flow (Laminar Air Flow) flows vertically into the working area of the booth and escapes near the floor into the surrounding space - airborne particles are collected and removed in a controlled manner.



LAF workbench OEB4

LAF Transport trolley

Vertical or horizontal laminar flow principle with battery operation. Application: Transport of filled glass bottles (vials) with LYO plug from the filling machine to the freeze dryer.



LAF Transport trolley

LAF Workbench

LAF workbenches provide product protection for small to medium sized laboratory scale work processes. The product protection is achieved by a targeted air flow. A pure and low-turbulence air flow (Laminar Air Flow) flows vertically or horizontally into the work area of the workbench and escapes at table height into the surrounding room - airborne substances are collected in a controlled manner.

LAF Air Recirculation Cabin

LAF air recirculation booths offer product and personal protection when weighing or sampling powdery substances. These conditions are achieved by a targeted air circulation. A pure and low-turbulence air stream (Laminar Air Flow) flows vertically into the working area of the recirculation booth and is extracted near the floor - airborne substances are collected in a controlled manner. The integrated exhaust air system, which generates a slight negative pressure in the working area of the air-recycling cabin, permanently protects the surrounding area from contamination. It is not necessary to connect the circulating air booth to a supply or exhaust air system provided by the customer.



LAF air recirculation cabin with weighing and sampling



LAF air recirculation cabin with safe change filter



Personal protection

Isolator/Rabs

Barrier systems for different requirements for personal protection, product protection or a combination of personal and product protection as standard or special designs.

PPI type isolators provide personal protection when handling toxic substances. Personal protection is achieved by a barrier (isolator housing with glove openings) between the operator and the toxic substance. In addition, a HEPA supply and exhaust air filter system generates a defined negative pressure in the isolator's working area, thus increasing the safety for the operator. The filter elements can be changed without contamination.

Isolators for product protection

Isolators with product protection as enclosures for aseptic processes, e.g. filling, loading and unloading of freeze dryers. Product protection is achieved by a barrier (isolator housing with glove openings) between the operator and the product. Product safety is achieved by the Laminar Air Flow System including a controlled overpressure regulation.



Product protection



Sterile Test Isolator

Sterile Test Isolator

Sterile test isolators with product protection for sterile testing under aseptic and optionally aseptic / toxic conditions. Optionally the connection of a Rapid Decon Hatch (RDH) is possible. The product protection is achieved by a barrier (isolator housing with glove openings) between the operator and the product. Product safety is achieved by the Laminar Air Flow System including a controlled overpressure regulation.

Glove testing system

The FZ-GTS 4.0 with the latest software technology, offers an extremely flexible and fully integrated solution for glove testing as part of glove management.

Features:

- > Server-Client solution
- > Active Directory
- > OPC UA/ SCADA
- > Multiple testing of gloves (WLAN)
- > Audit Trail
- > GAMP 5
- > CFR21 Part 11 compliant
- > Batch reports



Glove testing system
(FZ-GTS 4.0/W-LAN)

Innovative hybrid tablet press



Futorque® X-1

The innovative hybrid tablet press for R&D and production

The Futorque® X-1 is the solution for ever increasing demands for flexibility in tablet development and production. Its software concept is based on the gesture control of a smartphone, making tableting easier than ever before. The Futorque® X-1 has an impressive production capacity and thus offers the best choice for R&D and small batch production.

The system is also available in containment design.

RoTab T 3.0

The compact and mobile tablet press

The specially designed mobile tablet press for R&D and small series production requires little space in the development laboratories and can also be easily moved to other locations. Batch sizes from 50 g to 50 kg



RoTab Bilayer

The flexible tablet press for two-layer tablets

In the pharmaceutical industry, the RoTab Bilayer has been successfully used for years in the galenic development of single and double-layer tablets in R&D and small batch production.

	Futorque® X-1	RoTab T 2.0	RoTab Bilayer
	Single layer tablets	Single layer tablets	Single and double layer tablets
Batch sizes	10 to 100 kg	50 g to 20 kg	50 g to 20 kg
Number of tablets /h	max. 129'600	max. 48'000	max. 48'000
Punch formats	EU-D 14 EU-B 18	EU-D 8 EU-B 10	EU-D 16 EU-B 20
Max. filling depth	20 mm	20 mm	1-st layer 12 mm 2-nd layer 10 mm
Max. pre-compression force	20 kN	2 (10) kN	10 kN
Max. main compression force	80 kN	60 kN	60 kN
User interface	18,5" BECKHOFF Multi-Touch Display	15" Touchscreen	15" Touchscreen

Tabletting Tools

Choice of materials

Only the best steel qualities are used for the tools to be manufactured. The material is not released for production until it has passed the incoming inspection. This ensures that only punches and dies of the highest quality are delivered.

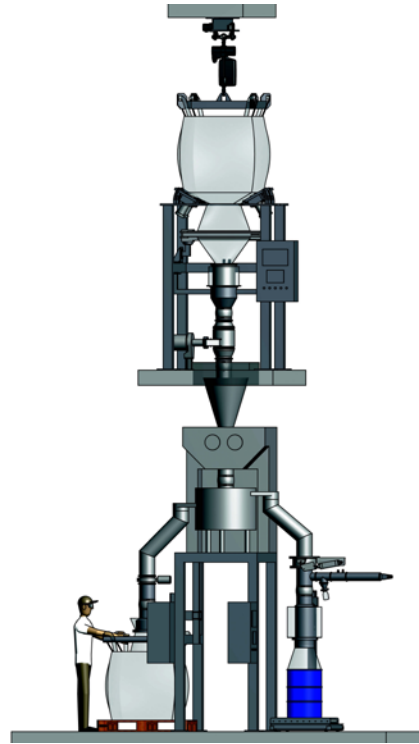


Integrated solutions

Novindustria assumes the entire project, from functional definition, the purchasing of the system, the commissioning and the handover to production. Upon request, we integrate upstream and downstream production steps from the dryer runs to automatic palletizing to a complete production process. After handover to production, we offer multiple services to take full advantage of the system during its entire lifecycle.

Integrated production process:

Big-bag emptying with containment film, homogenizing, compacting, control screening, Vibro-Dos®, sampling, continuous film and big-bag filling, weighing technology, integrated system and process.

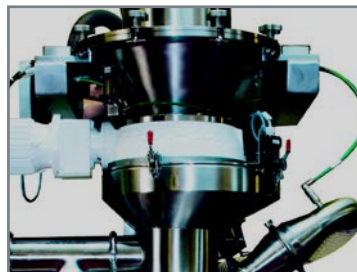


Dosing and dispensing devices

Hard-to-handle products require proper functionality for dosing and discharging. In choosing the optimal dosing and discharging equipment, the highest precision, repeatability, maximum product protection, easy disassembly, easy cleaning and maximum hygiene are the decisive criteria. The Novi-Dos® and the Vibro-Dos® from Novindustria are two proven and versatile dosing and discharge devices.

Novi-Dos®

- > Fluidisator sword for gentle product mobilization
- > Especially suitable for difficult-to-flow and blunt products
- > Best dosing precision thanks to short reaction times of pivoting arm



Vibro-Dos®

- > Compact and space-saving installation
- > Few product-impacting parts
- > Integrated turbine vibrators for gentle product mobilization
- > Especially suitable for difficult-to-flow products
- > Best dosing precision thanks to short reaction times of butterfly valve



Filling

Safe, precise and clean filling of simple and difficult-to-dose powders places the highest demands on each individual system component. The smooth interplay of process, function and technology combined with our many years of experience in powder filling and dosing systems is the basis for our success.

Handling are decisive criteria for maximum reliability, quality and system availability.

We offer fixed, mobile and combined filling equipment for:

- > Big-Bags, drums, boxes with/without in-liners
- > Single bags made of different material (PE, PA, PP, paper, laminates, etc.)
- > Endless- as well as containment-foil
- > Container
- > Other types of packaging



Single bag filling with Novi-Dos®



Mobile endless-foil filling station with Vibro-Dos®



Big-Bag filling with conveyor and product compression

Emptying

A wide variety of product properties requires the use of the latest technologies as well as proven, safe and clean emptying of small packaging, Big-Bags and containers. We offer field-proven know-how, profound experience in emptying dusty, aggressive and harmful products with different flow characteristics.

We offer fixed, mobile and combined emptying equipment for:

- > Big-Bags, drums, boxes with/without in-liners
- > Containment-foil solutions
- > Single bags made of different material (PE, PA, PP, paper, laminates, etc.)
- > Container
- > Other types of packaging



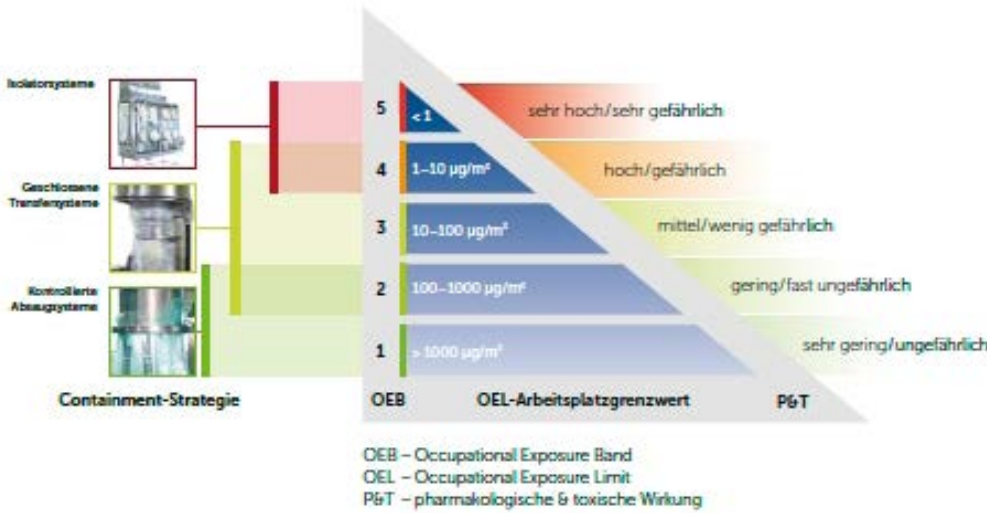
Big-Bag emptying with endless-foil system in a glove box



Big-Bag emptying on weighing cells with docking systems and rotary valve

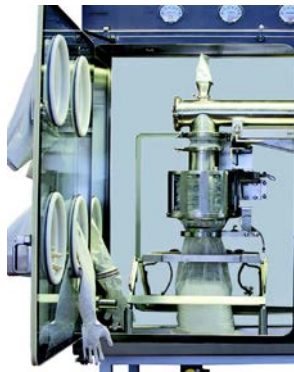


Single bag emptying with pressure sluice, glove box, bag-out system, lump breakers and pneumatic conveying



Containment

Novindustria offers containment solutions from simple, low-dust powder handling equipment (OEB 1 & 2) to innovative endless-foil systems (OEB 3 & 4) to sterilized filling and dosing in the isolator for highly toxic products (OEB 5 & up). The highest standards for personal and product protection are crucial.



Dosing and dispensing system with endless film and separating welding equipment in the isolator



Endless foil filling system with Vibro Dos®, pneumatic clipper, scales and roller conveyor



SMART Containment – peelable film exclusively from Novindustria

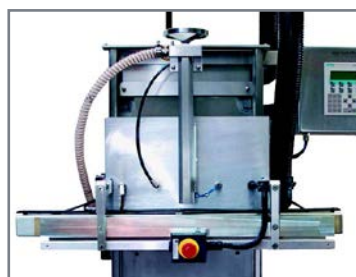
Closure systems

For a package with the highest standards for quality, safety and tightness, the precise interaction of production process, powder characteristics, packaging material, closing technology and resulting Occupational Exposure Limit – is crucial. With thermal and

mechanical closing systems «Made by Novindustria» flexible packages can be closed manually as well as automatically.



Cutting-welding unit



Mobile welding machine



Pneumatic clipper



Containment closure



SENSUM
SHAPING  QUALITY

Automatic visual inspection systems

Sensum is a leading and most innovative manufacturer of automatic visual inspection machines in pharmaceutical and nutraceutical industries.

SPINE

Automatic Visual Inspection and Sorting of Tablets, Capsules and Softgels

All-in-one inspection machine for tablets, capsules and softgels with inspection capacity up to 630.000 products/hour.

- > High speed inspection of up to 630.000 products/hour
- > Extensive range of product sizes from 4 mm up to 28 mm
- > 3D surface inspection and high colour sensitivity
- > Reliable active sorting with verification
- > No defects needed for machine training
- > Intuitive user-friendly graphical interface
- > Ergonomic design and simple changeover
- > Local and global support



SPINE HYPO

Automatic Visual Inspection and Sorting of Highly Potent Tablets & Capsules

- > Minimization of contaminated parts
- > Contained feeding and discharging systems
- > Glove ports and RTP for safe access
- > Dry cleaning with aspiration
- > Wet cleaning for powder binding and wash down
- > Ergonomic and tool-free design with IP54 housing
- > Same inspection performance as standard Sensum SPINE machine

SPINE FIBO

Automatic Visual Inspection, Counting and Bottle Filling of Tablets & Capsules & Softgels

SPINE FIBO combines the inspection performance of Sensum SPINE machine with high speed counting and bottle filling, that can be easily integrated into any new or existing bottle packaging line.

- > Exceptional 100% visual inspection of tablets, capsules & softgels
- > Product sorting before final counting and filling
- > Easy adjustment for bottles of different size and type
- > Filling bottles with count from 30 to 1000, and higher
- > Capacity up to 165/100/10 bottles per minute at 30/100/1000 count
- > Intuitive user-friendly graphical interface
- > Ergonomic, compact design for simple cleaning and maintenance





SENSUM
SHAPING QUALITY



STREAM CORE

Automatic Quality Inspection and Sorting of Capsules

STREAM Core offers innovative solutions which represent another step for automatic inspection technology with best value for money ratio in rapidly changing pharmaceutical production.

- > High speed inspection of up to 120.000 capsules/hour
- > All capsules sizes from 5 to 000
- > 3D surface inspection and high colour sensitivity
- > Reliable active sorting with verification
- > No defects needed for machine training
- > Intuitive user-friendly graphical interface with 10-minute product training
- > Ergonomic design
- > On-line and on-site support

HELIX CORE

Lifting, Dedusting and Polishing of Tablets, Capsules and Softgels

Machine for vertical lifting, dedusting and polishing of tablets, capsules and softgels of various shapes and sizes. The products are conveyed in gentle manner to different heights at adjustable speed, controlled via user friendly graphical interface. Compact, mobile and modular design makes HELIX CORE ready to use in a wide variety of production and packaging processes (e.g. tablet pressing or coating, capsule filling or weighting, metal checking, blistering, bottle filling) with simple cleaning and low maintenance.

- > Multi-function: lifting, dedusting & polishing
- > Product independent: tablets, capsules & softgels
- > Gentle product manipulation
- > Compact and mobile
- > Removable input container of variable size
- > Modular construction
- > Simple cleaning and lifting to the desired height
- > Stand alone or integrated with the SPINE inspection machine.



PATVIS APA

Process Analytical Technology Visual Inspection System for Automated Particle Analysis

PATVIS APA is designed for real-time visualization, monitoring and diagnostics of process development, scale-up, transfer and production. There are three levels of PATVIS APA operation (visualize, measure, control) and you choose the level of leveraging the acquired visual information of the process, delivering the benefits of quality by design.

- > Monitoring batch-to-batch reproducibility
- > Size and shape information in real-time
- > In-line, at-line or off-line mode
- > Non-invasive and contactless
- > Portable, ergonomic and tool-free
- > Intuitive graphical user interface
- > Telecentric optical system
- > ATEX compliant



SERVOLIFT

Handling and Process Technology modular – economical – reliable

Key facts about SERVOLIFT:

- > Process oriented engineering
- > GMP conform design
- > Easy to clean
- > Ergonomic handling
- > Economical
- > Validable process
- > No compromises in terms of safety
- > Limitation of cross contamination

An universal system reduces the complexity of the interfaces: that saves time and increases reliability.



Handling systems

Batch containers, drums, big bags, special bins – whatever needs to be moved in your production, we have the solution.

Imagine that powders and granules in bins with capacities of several hundred liters need to be moved in your production as easily as possible and absolutely safely from A to B, then lifted to a height of 6.50 meters and tipped precisely into the hopper of a machine. We can do that perfectly.



Systems for sieving and weighing

Handling, sieving, weighing and dosing technologies are considered to be difficult to combine. All the more reason why we want to show you the potential for efficiency that we achieve here: complete, modular SERVOLIFT solutions.

Starting from handling technology for all kinds of bins and containers, it's a logical consequence to not only prepare the next typical production steps perfectly but to take them ourselves instead.



Blending systems

From a laboratory blender up to a drum, container or special blender:

The blending and production process gets moving, thanks to integrated handling technology.

In the same way as with sieving and weighing, blending is also a task which is solved perfectly with the modular SERVOLIFT system



SERVOLIFT



Cleaning and drying systems

Batch containers, drums, special bins etc. must be more than just «somehow clean». Absolute reliability and short process times are essential, as well as low direct and indirect costs: typical SERVOLIFT.

Fulfill all levels of the hygiene requirements up to automation level as an allrounder, single chamber or double chamber cleaning system.



Bins, containers, drums, additional components

Whether standard rectangular containers, drums, blending drums or bins with individual geometries, either as a single item or series production: at SERVOLIFT, you will find the right bin for every task: we make them for you.



Service & Consulting

Local service for pharmaceutical plants and plastics processing facilities

Our service personnel and field service are ready: Our suppliers have trained them to solve any technical problem on your plant competently and reliably. Should the exception confirm the rule, they will involve experts from the respective supplier. In this way, we ensure maximum economic efficiency for your plant at any capacity. From the first to the last day of the life cycle.

Maintenance, calibration and spare parts

Regular maintenance is particularly important for systems in clean rooms. But maintenance and timely replacement of wearing parts are also part of the 1 x 1 maintenance routine for all other systems. This reduces expensive downtimes. Based on calibration with certified measuring systems, we ensure transparency and document the condition of your plant. On this basis, you decide which work is to be carried out in which time windows. And if something unexpected happens, we organize the necessary spare parts as quickly as possible. Thanks to flexible logistics, we can deliver stock parts to you within 12 to 24 hours.

Training sessions

If your own employees know why a system works like this and not differently, it increases occupational safety. In addition, they can retool more efficiently and are more satisfied with their work. We train your employees on site or organise training days at the supplier plants. Because what's easy is fun and increases the output of your production.

