



PAVILION INFORMATION

INTERPACK 2011 May 12-18, Düsseldorf/Germany

In <u>HALL 16, STAND A23-B24</u>, groninger will unveil their newest innovations and developments! Our two-storied stand, encompassing 405 square meters, will showcase our newest line concepts and machines designed to meet the pharmaceutical and cosmetic industries dynamic environment and reduce your time to market. Come experience how groninger is delivering the next generation solutions to you!

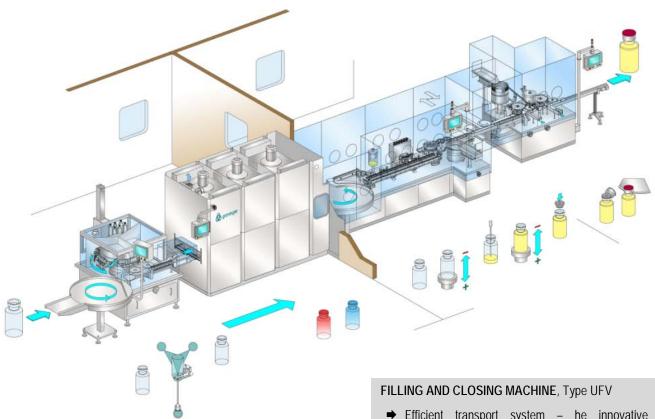




EXHIBITS PHARMA

VIAL PROCESSING – highly flexible, reduced utility usage and attention to rapid change over characterizes this fully automatic production line for vials.

PERFORMANCE: FORMAT: FILLING SYSTEM: 200 vials/min 10 ml vial rotary piston pump, 100%-IPC



WASHING MACHINE, Type ASVK U

→ Time- and cost-saving – the elegant design with few size-dependent components reduces format change-over and minimize downtime.

STERILIZING TUNNEL, Type STH

→ High flexibility – depending on your requirements, the efficient modular system can be expanded as needed by adding further heating and/or cooling units.

- ➡ Efficient transport system he innovative segment transport system reduces size parts and reduces changeover time.
- ➡ High flexibility the functional design of the single segments enable the transport of different bottle sizes either by the neck or base, depending on your in-process-control requirements.

SEALING MACHINE, Type KVK B

→ Product safety – by using an innovative turret design for sealing, the KVK B minimizes particulate generation and can meet all Annex 1 requirements.





SYRINGE PROCESSING – sterility assurance with efficient and gentle handling of nested syringes characterizes this production line.

Unit for bag unpacking, Type ZWU

Optimum production safety – clear separation of processing zoning with minimal particulate generation.

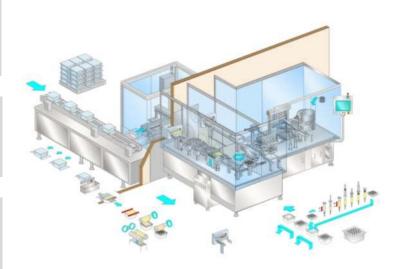
Unit for removing lid foil & tyvek, Type MWF

➡ Efficient process – Again, with minimal particulate generation we ensure the entire lid and liner are removed from nest.

Filling and closing machine, Type DFVN

- → High flexibility innovative design allows for the processing of all standard nest configurations.
- ➡ High filling accuracy to minimize product loss, an In-Process-Control (IPC) from 1% to 100% is available with a variety of filling systems to choose from.

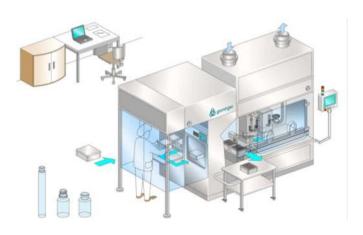
PERFORMANCE: 300 syringes/min
FORMAT: 1 ml short, with Tip-Cap
FILLING SYSTEM: rotary piston pump, IPC



PRODUCTION SYSTEM FOR DEVELOPMENT AND CLINICAL STUDIES – for syringes, vials, eye drops, cartridges and related types of containers. This system is ideal for container and filling studies as well as small -batch production.

DEVELOPMENT & PRODUCTION SYSTEM, Type DPS

- → High flexibility the required processing stations are easy to change and to position due to the modular design.
- ➡ Simple Scale-Up all technology on the DPS can be integrated into your commercial lines as your development progresses.





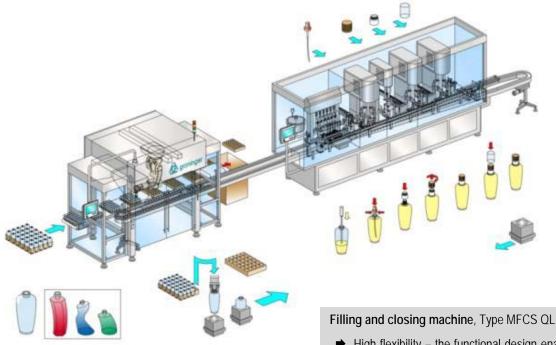


EXHIBITS COSMETICS

PROCESSING OF PLASTIC BOTTLES - flexible production line for processing bottles, powerful and efficient

PERFORMANCE: FORMAT: FILLING SYSTEM:

60 bottles/min 150 ml plastic bottle rotary piston pump



Sorting and feeding unit, Type ROB

→ High efficiency – processes different containers with minimal downtime. Reduced size parts and a user-friendly design enable a rapid changeover in only a few minutes.

- High flexibility the functional design enables the use of different filling systems and closing units in the same line. With the modular design, introduction of new formats are easily handled.
- Stable product handling- the use of the pucktransport system ensures containers are always secure throughout the process, giving you additional production safety.

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We look forward to meeting you!

