Pharma packaging

Always adapting to your requirements

Monomaterial packaging machines by Dividella Solutions



Protect your assets

Adaptable toploading and sideloading packaging and machine solutions

Modular packaging systems are in demand

Increasing market and product segmentation, not to mention the way modern medicines work, means that the wide variety of secondary packaging is constantly growing. As a result, flexibility and the overall efficiency of the packaging process are becoming more important. Körber accomodates this trend with the Dividella NeoTOP and NeoTRAY systems, a family of modular, semi- and fully automated packaging machines handling lots which vary in size from 1 to millions.

Greater availability in the packaging cycle

Available production time is increased thanks to shorter times for format changes, shorter start-up, line clearance time and shorter line cleaning times > 50%. NeoTOP systems are designed for a nominal output corresponding to their purpose of 10 - 270 packs per minute.

A broad range of applications

Dividella NeoTOP and

NeoTRAY handle lots which vary in size from

one to millions.

The packaging systems combine the well-known advantages of NeoTOP and NeoTRAY monomaterial packs (cartons) and a state of the art machine in regards to GMP design and mechatronics. With their almost infinite configurations, our systems are particularly suitable for packing:

- parenteral forms of administration (vials, syringes, auto injectors, pens, ampoules, cartridges)
- blisters, tablet blisters
- pouches, trans dermal systems, tubes inhalers, nasal sprays and other applicators, combination kits or diagnostics devices

Up to 55% volume reduction

Benefits to end-users:

The inserts and products are completely visible to the person performing the dosing of the drugs allowing instant recognition of the contents. Moreover, NeoTOP style cartons typically achieve up to 50% volume reductions, using 100% cardboard material. Therefore refrigerated supply-chains, pharmacies and clinics benefit, by being able to deliver and store more product, more efficiently – and within existing capacity.

NeoTOP designs integrate Human Factors findings for higher adherence, covering nearly all frequency and risk use cases. Ergonomic cartons ensure easy opening and closing. Product usage is made easier with presentation features especially for patients with dexterity limitations

Marketing loves the additional billboard space on the lid inside and the wide range of packaging presentations possible.

Environmental impact

The 100% paperboard carton is completely recycable, as such, the disposal costs are lower and the environmental footprint is much smaller. Due to the smaller carton size less volume needs to be transported which results in energy and finally cost savings of 55%.

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Adapt your machine to the lifecycle of your products

Semi to fully automated packaging lines ...

A typical biotech product starts in a vial, later goes into a syringe and finally into an injector. A Dividella machine, due to its modularity, can be adapted to these changing needs.

Three Levels of Integration

1. Stand alone machine project

In this case, Körber manages the packaging machine and related services. Fully integrated 3rd party equipment can be included such as camera systems, printers, labelers, serialization systems, etc.

2. Line integration

Körber manages the integration of the entire packaging line. The customer purchases all 3rd party equipment and delivers it to Körber for the line integration – testing and FAT.

3. General contracting

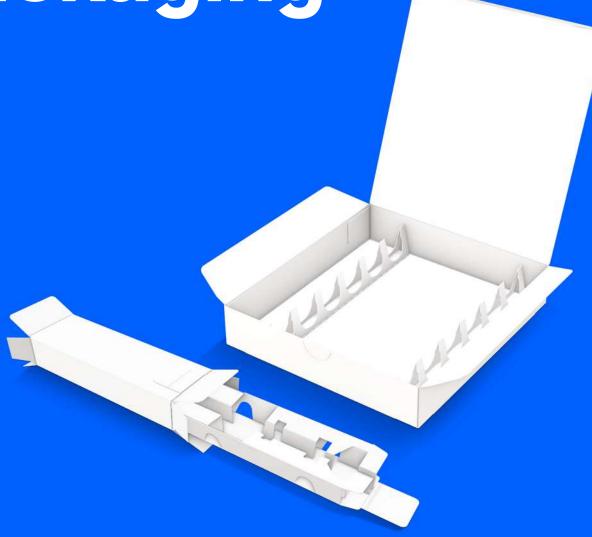
Körber is responsible for the specification, purchase and integration of the entire packaging line. The line could include equipment both up- stream and downstream of the cartoner from Dividella Solutions. The consulting, integration and 3rd party upcharge costs are shown in a separate and transparent manner.

Features and benefits of our packaging lines

- reliability in the packaging process
- proven flexible, modular platform that can be configured for an almost infinite variety of cartoning applications
- generous carton size range allows single and multi-count
- a variety of different pack designs can be packaged on the same machine
- highest performance lowest cost of ownership
- high degree of availability thanks to short conversion times
- world leading machine reliabilty, efficiency, GMP design and ease-of-use
- simple, safe machine operation
- · low-cost maintenance
- no waste on start-up after machine stop
- first pack = good pack

NeoTOP Concept 3

Monomaterial packaging



100% Compliance



Regulatory

- · Tamper evident closing
- Security options
- Track & Trace
- No glass on glass



Patient

- Clear product overview thanks to top opening
- Patient guidance
- Products and leaflets are easily accessible
- Easily re-closable

1. Active carton forming

- Carton and partition blanks
- Pre-glued trays

Packaging process

2. Product insertion

- Fully automated
- · Semi automated
- Manual
- Collaborative robot

4. Carton closing

- Tamper evidence on product or carton
- Infinite closing features,
 e. g. lidover, 1 to 3 spot glueing,
 re-closable lid, tuckin etc.

3. Inline functions

- Product presence control
- Direct infeeding systems connecting to upstream processes
- Application of variable data
- Product and carton labelling and Track & Trace



Marketing

- Flat cardboard blanks printable on both sides
- Brand recognition
- Sustainability (no plastic)



Logistics

- Flat mono-material (cardboard) blanks (inbound)
- · Compact dimensions (outbound)
- Product protection
- · Late stage customization



Production

- Lower total cost of package TCP
- Safe process
 (100% verification after loading)
- Flexible platform
- Quick format change over
- First pack = good pack

Covering all your packaging requirements

one to 40 million

| Packaging service | NeoTOP Tool | NeoSMART | NeoTOP x | NeoTOP 804 | NeoTOP 1604 | NeoTOP 804 triple mode | NeoTRAY |
|-------------------|---------------|----------------------|---------------------------|---------------|----------------|---------------------------|----------------|
| manual | semi | semi and fully | semi to fully | fully | fully | fully | fully |
| packaging | automated | automated | automated | automated | automated | automated | automated |
| smalles lots | smalles lots | lot size 1 and up | small to mid size lots | mid size to | large lots | large lots | large lots |
| up to | up to | up to | up to | up to | up to | up to | up to |
| 10 packs/min. | 10 packs/min. | 20 packs/min. | 45 packs/min. | 90 packs/min. | 160 packs/min. | 270 packs/min. | 400 packs/min. |
| | | | | | | | |
| -100'000 | -100'000 | -5 mio. | -8 mio. | -16 mio. | -24 mio. | -24 mio. | ca. 40 mio. |

packs/year/shift

Our family of cartoners cover all packaging requirements

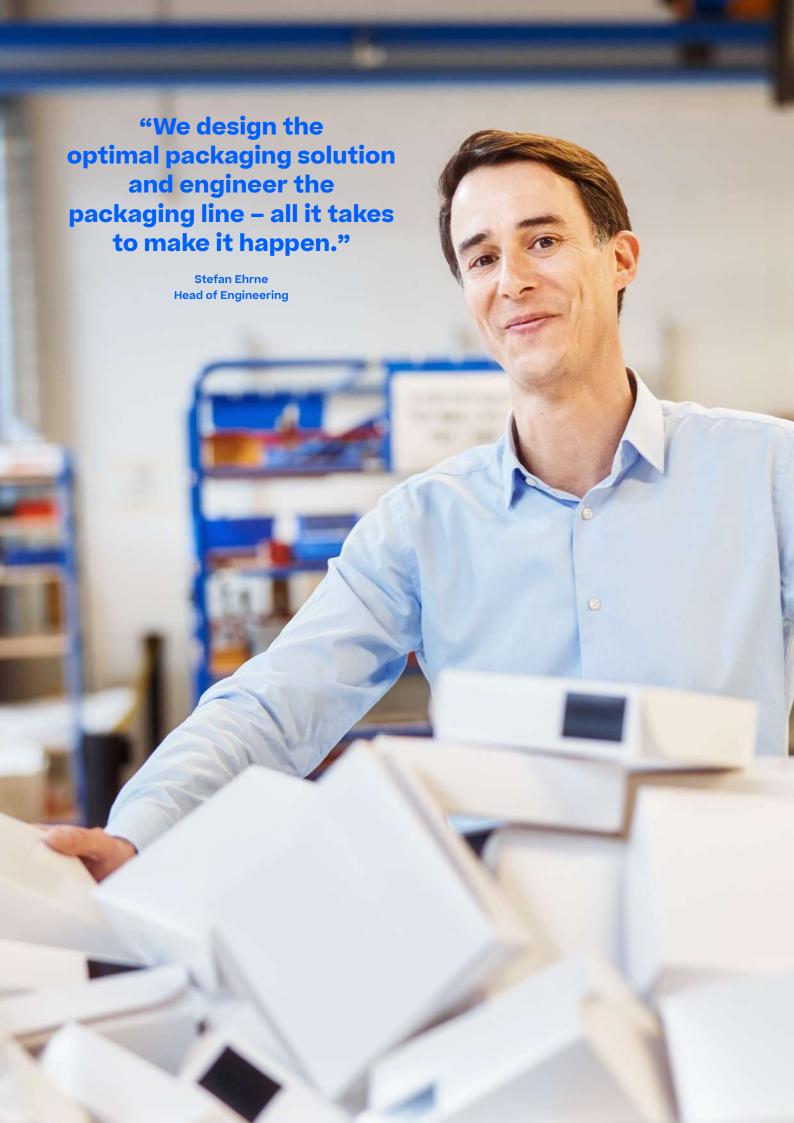
The Dividella Solutions machine family consists of a wide range of machines and configurations for different production volumes. The same package can run on all machines.

Modularity means maximum flexibility to pack ampoules, vials, syringes, injectors, blisters, and almost all other biologic and pharmaceutical products.

The machines are designed for very fast and easy change overs. With the Lion.Execute. software - which supports operators with guided workflows - we offer guided line clearance and format changes using the latest technology.

Finding the ideal packaging solution for our customers is one of our core competences, pioneering in monomaterial packaging for over 40 years.

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Providing flexibility for the future

Körber feeding technology

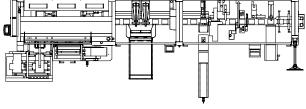
One of the most difficult tasks in automated manufacturing involves the development of gentle and flexible feeding systems. Through the years, Körber has used its wealth of experience – over 40 years – in this field to develop a wide variety of customized feeding systems. The systems have been put into operation in many different situations and have become a field tested and reliable part of the eco-system.

Up to 450 objects per feeding unit per minute can be packaged; before the products are inserted they can also be aligned, spaced and individually checked.

Apart from the actual pharmaceutical products, placing inserts can present major challenges. The handling of inserts is a critical area. Körber has developed a wide range of scalable feeding systems for this purpose. Consequently, very large, thick inserts can be fed in at full speed, using minimum labour.

Adaptable machines = asset protection

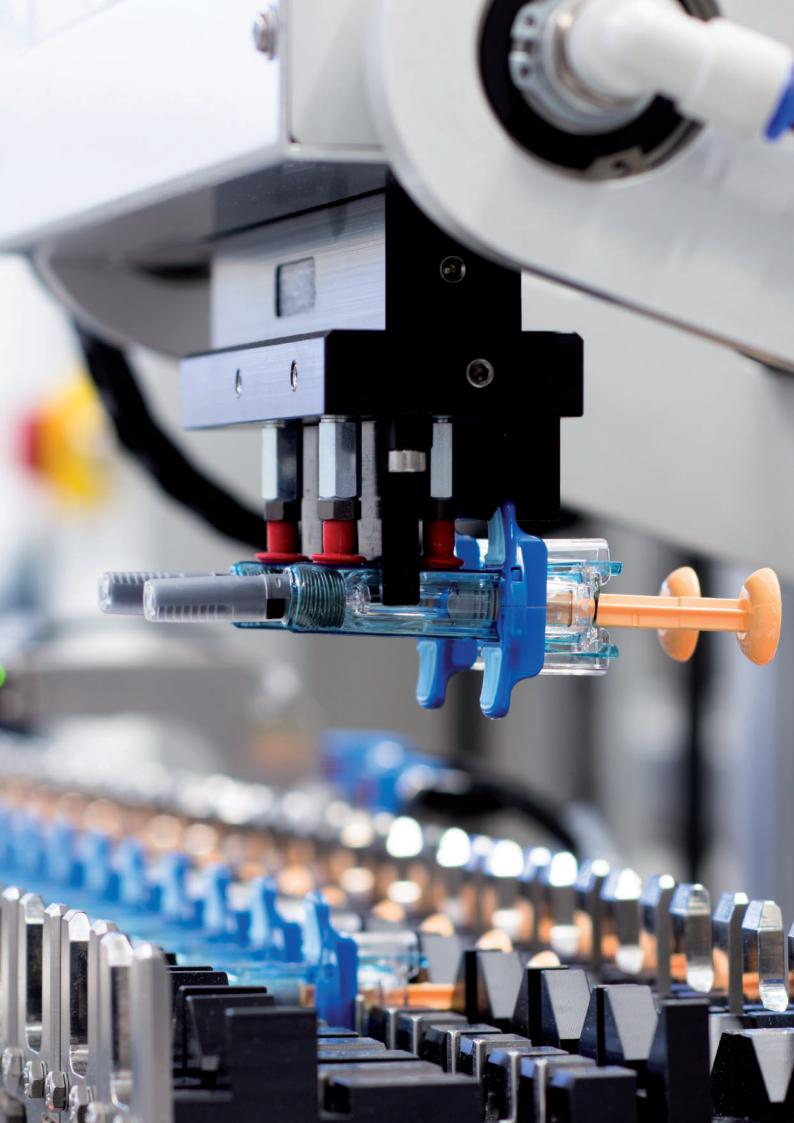
Due to the highly modular design machines from Dividella Solutions follow the life cycle of your product, no matter what container (vials, syringe, injector) you are using. Additional functionalities can easly be retrofitted in the field.



Line expansion brings greater flexibility and efficiency:

Machine layout for vial application and after expansion (vial and/or syringe application) and an additonal bookletfeeder

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A lot more than just machines

Pharma 4.0

- Guided Works, e.g.
 Guided format change,
 Guided Line clearance
- Line managment systems
- Vertical Integration
- Data analytics
- · Cobotics/robotics
- Condition monitoring / predictive maintenance

Customer support

- Ticket system (JIRA)
- Emergency hotline
- Remote access
- · Worldwide service
- Remote service with Körber Xpert View

Academy

- Operational training
- Maintenance training
- Electrical & software training
- Production support

Consulting

- · Validation & qualification
- Engineering/ feasibility studies
- · Packaging engineering
- OEE analysis
- Maintenance and stock consulting
- · Obsolescence consulting

Field service

- Troubleshooting/ corrective maintenance
- · Preventive maintenance
- On-site support
- · Embedded engineering

Retrofit and upgrades

- Ergonomic upgrades
- increase of productivity
- Software and HMI upgrades
- Obsolescence
- Expansion of functionality (e.g. additional feeding units)

Spare parts

- Original spare parts
- Refurbished parts
- Repair parts
- 3D spare parts catalogue

Miscellaneous

- Format tooling
- Obsolescence
- Service agreements
- Relocation services
- Machine repurchasing & overhaul

