

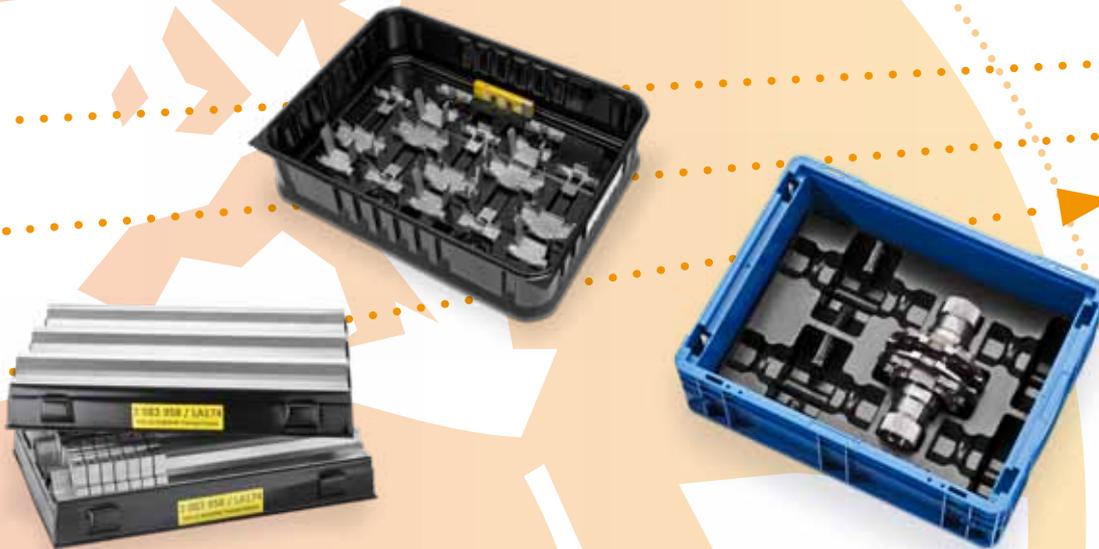
unique packpaper

Assistec Special Edition

# uppp

Plastics  
Packaging  
Technology  
Assembling  
Decoration  
Trends  
Lifestyle

the magazine for professionals

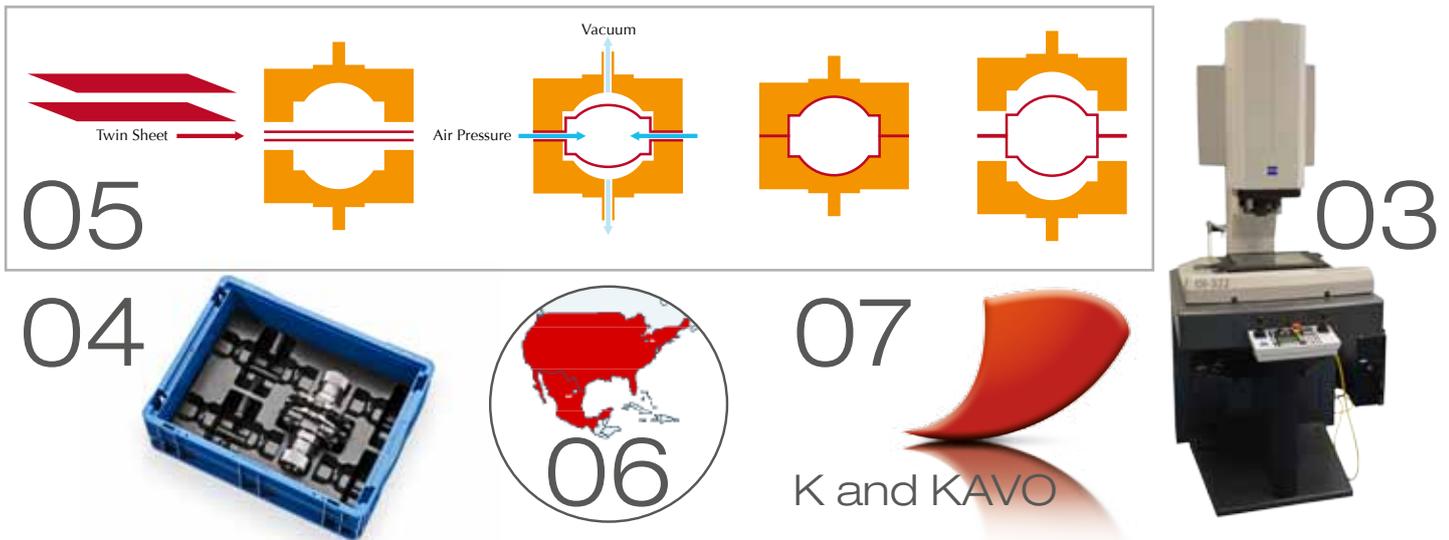


## Expert for transport boxes & reusable packaging

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## Editorial

Dear Readers,



René Berger

Managing Director  
Greiner Assistec  
in St. Gallen,  
Styria

**Today's requirements for efficient, modern transport boxes and reusable packaging are very complex.** They need to, highest rigidity guaranteed, offer best possible protection from damage for the component while it is on its way from point A to point B. At the same time they need to allow for automatic loading and unloading which makes the handling simple and easy. These kinds of challenges demand a wide range of solutions. And solutions like this are what customers of Greiner Assistec have come to expect, along with an international network, years of know-how, and a wide range of technology.

This is precisely what makes the Greiner Packaging Division Assistec a competent partner for transport boxes and reusable packaging. And for quite some time now. Read all about it in

this Assistec special edition of unique packpaper. Please keep reading to learn more about current solutions and news from Greiner Assistec!

Enjoy!

René Berger  
Managing Director, Greiner Assistec  
in St. Gallen, Styria

**And by the way:** Trade fairs are a great reflection of the current marketplace and give an excellent overview of companies and their services. **Experience Greiner Assistec live from October 14 - 18 at the Fakuma in Friedrichshafen – visit us at Booth B2-2115-5!**

# Attractive water temperature display

An eye-catching solution for DZ Dražice

Last year, **DZ Dražice, the Czech water boiler specialist, began developing a new water temperature display.** Greiner Assistec contributed several exciting ideas, resulting in a new business relationship. Greiner Assistec has brought some of its key strengths to this cooperation: know-how in the areas of design, plastics processing, printing technology, as well as assembly and procurement of metallic assembly and functional components.

## Unique and fully in line with today's market

Aside from its shape, what distinguishes this unique water temperature display is its sophisticated production engineering. Whereas the previous model incorporated a cardboard insert, printing is now done directly on the surface. And this digital printing is not just restricted to flat surfaces. By reason of its

unique design made by designer Ing. Pavol Mikulas ArtD, the new water temperature display differentiates DZ Dražice from its competitors and meets an important demand in today's market: visual esthetics in home appliances and HVACs.

### Tech Facts

- ▶ Material: ABS
- ▶ Technology: injection molding
- ▶ Print: digital print
- ▶ Assembly: includes externally procured metal components
- ▶ Finish: application of self-adhesive protective foil



# Investment in precision

Two new state-of-the-art measuring machines from ZEISS for the Březová site (Czech Republic)

**These newly acquired machines (DuraMax and O-INSPECT 322) combine tactile scanning and optical measurement.** They feature built-in optical and tactile sensors, and 3D-CAD based measuring software that pulls the measurement data together. All this enables real 3D measurements that provide usable information on design and shape. Greiner Assistec uses these measuring machines to produce precision parts. Process stability is monitored through random sampling.

significantly faster than before. This means that more random sampling can be done at any given time. For the other, the new measuring machines record more measuring points, thereby improving the quality of the production process. The result is a big win for all of our customers who require manufacture of precision parts.

### Current application examples

- ▶ Flanges
- ▶ Sound-absorbing elements



## Faster, more precise

This investment yields two marked advantages. For one thing, it makes measurement

# Competent partners for logistic concepts

Customers profit from integrated packaging expertise and years of experience

**Greiner Assistec develops customized transport boxes and reusable packaging for its customers tailored to their particular needs.** For different areas of application, across a wide range of industries. The solutions range from thermo-formed inserts in standard small load carriers to twin-wall sheets to product-specific injection molding containers or thermoformed cups with metal housing. Even in the area of integration into production and logistics, customers can rely on Greiner Assistec's solution-oriented support. Packaging tests and transport trials are performed with prototypes – until everything is ready for production.

## Greiner Assistec adds value for its customers

- ▶ Integrated packaging competence – from concept to a production-ready solution
- ▶ Personal on-site support
- ▶ Reliable quality management
- ▶ Market and industry knowledge
- ▶ International network
- ▶ Unbiased, customer-oriented consulting
- ▶ All technologies from a single source

## Packaging Facts

- ▶ Capacity: 400 x 600mm (quarter pallet)
- ▶ Height: 45mm
- ▶ Material: PET
- ▶ Technology: Thermoforming



## Injection molding small load carriers for oil pumps

- ▶ Size: 400 x 600mm
- ▶ Material: PP with insert parts made of NIRO to minimize wear and extend service life
- ▶ Technology: Injection molding with insert parts
- ▶ Surface treatment: Pad printing for permanent labeling



## Thermoformed insert for small load carriers for gearbox components

- ▶ Size: 300 x 400mm
- ▶ Material: ABS
- ▶ Technology: Plate thermoforming



## Thermoformed container with interchangeable work piece holder for transporting crank shafts

- ▶ Size: 600 x 800 mm
- ▶ Material  
Container: ABS regranulate  
Work piece carrier: ABS regranulate + NIRO and TPU parts to minimize wear
- ▶ Technology: Plate thermoforming, CNC trimming on 5-axis milling machine, injection molding, wide range of assembly
- ▶ Surface treatment: Pad printing for permanent labeling



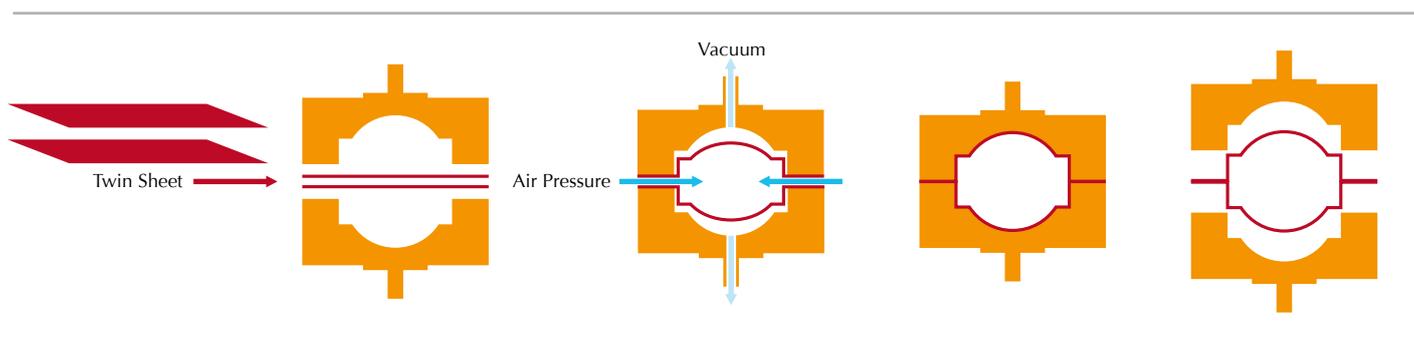
## Work piece carrier for bearing shells

- ▶ Size: 400 x 600mm
- ▶ Material  
Container: ABS regranulate  
Component fixing equipment: NIRO to minimize wear and extend service life
- ▶ Technology: Plate thermoforming, CNC trimming on 5-axis milling machine, assembly
- ▶ Surface treatment: labeling by means of a sticker



# Solid and precise: Twin sheet

The twin-sheet thermoforming process opens up new design opportunities in the manufacture of double-shell components



*1. Inserting two plates in the machine and heating both plates.*

*2. Compressing the two tool halves – the soft plastic is shaped by means of vacuum and pressure, resulting in a hollow body.*

*3. The hollow body cools in the tool.*

*4. Removing from the mold: The tool halves separate and the raw part can be removed for further processing.*

## The twin-sheet procedure is ideal for the production of reusable transport boxes.

The technology involves holding two plastic plates in a common tensioning frame and heating them on each side to a thermoelastic state. Afterwards, they are simultaneously formed in the upper and lower tool and welded together. The two plates can be of differing thickness and different colors.

### Top quality and cost advantage

Precision is a decisive factor, particularly in automated production lines. Component loading and unloading must not be interrupted. Consistently high quality in the loading container is crucial. Customers of Greiner Assistec can rely on receiving that 100 percent. Its double-shell property makes the loading containers particularly stable. Moreover, the shape of the containers can be created differently on the top and lower

### Thermoformed container for transporting clamping strips

- ▶ Size: 600 x 800mm
- ▶ Material: ABP + TPU Toplayer to minimize wear
- ▶ Technology: Plate thermoforming + Twin-Sheet

shell, ensuring an optimal positioning of the component while making it stackable. Customers also profit from the fact that Greiner Assistec has the modular tools for the standard market dimensions (1/4 Euro – 400 x 600 mm or 1/2 Euro – 600 x 800 mm). This reduces customer investment to product-specific changeable mold inserts.

## IMPRESSUM

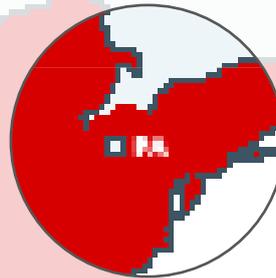
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**greiner**  
packaging

# Greiner Packaging goes to the USA

Site in Pittston, Pennsylvania, will start operations in the fourth quarter



## **The US market is currently of interest for various reasons.**

Many customers have already made the move toward the “land of opportunity”; Greiner Packaging is hard on their heels. A new site in Pittston, Pennsylvania, is opening the possibility of continuing established business relationships on another continent as close to the customer as possible. A 10,000 square meter area is available for the first development stage. Greiner Packaging will use it primarily to manufacture high-quality premium packaging (cardboard-plastic combinations as well as printed cups).

## **Excellent geographic positioning**

Production will be launched in the fourth quarter of this year. Most of the employees will come from the region, and will benefit from excellent work conditions and long-term future prospects. The new site is geographically favorable: highways are close by, and so is the New York metropolis. This ensures very good logistic accessibility for customers and the international corporate network of Greiner Packaging.

## **Greiner Assistec has been in Mexico since 2010**

Greiner Packaging has been active on the American continent since November 2010. The Division Assistec division opened its site at that time in Monterrey, Mexico. It is equipped with modern injection molding machinery as well as machinery for printing and for ultrasonic welding. With a wide range of machinery (50to - 900to) and reliable quality, Division Assistec was able to establish a good name in North America.



# Spreads packaging sets new standards

The first resealable barrier cup for meat and fish spreads in Southern Europe increases product protection and convenience

**Patelina meat and fish spreads are convenience products of the long-established Serbian brand, Neoplanta.** Its refined flavors primarily address the needs of the youth, particularly in urban areas. Spread variations were previously packed in aluminum containers. This packaging, however, has a major drawback: after opening, the contents must be consumed as quickly as possible.

## Elegant and functional

The elegant new packaging developed by Greiner Packaging Division K combines several advantages. It offers the possibility for resealing, preserving, and tasting at several stages. Furthermore, it protects the contents against oxidation and prevents the contents from drying out. These properties are achieved through the use of modern plastic-material combinations and sophisticated production technologies.



## Packaging facts

- ▶ Capacity: 90g
- ▶ Material:  
Cup: PP/EVOH/PP  
Lid: PP
- ▶ Technology  
Cup: Thermoforming  
Lid: Injection molding
- ▶ Decoration: Labeling

# Esthetically pleasing, ergonomic, and transparent

Three-liter bottles for highly effective Sonax glass cleaners with integrated handle

**The three-liter bottle of Sonax Xtreme glass cleaner attracts the interest of drivers at gas stations and on store shelves like magic.** It has ideal measurements: a height of 250 mm at a body diameter of 225 mm, with a unique round design. And it has a flawlessly transparent plastic that provides a free and clear picture of the contents. The latter underscores the message of the product: Sonax Xtreme glass cleaner ensures a clear view.

## Ergonomic and functional

The striking bottle is also convincing in daily use. Its design and the unique shape of the handle give it excellent handling properties. It rests perfectly in the hand and enables fine dosing as well as accurate, precise pouring.

The handle also delivers production and financial advantages. The Greiner Packaging Division Kavo makes the bottle and handle in the same manufacturing step, thus eliminating downstream assembly work entirely.



## Packaging facts

- ▶ Capacity: 3 L
- ▶ Material: PET
- ▶ Technology: Injection stretch blow molding
- ▶ Seal: Screw cap with tamper-proof ring made of PE
- ▶ Decoration: Labeling





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**Greiner Assistec GmbH**  
4550 kremsmünster, austria  
tel.: +43 7583 7251-0  
[www.greiner-assistec.com](http://www.greiner-assistec.com)