Packaging Development and Consulting
Creative, functional, unique: bottle designs from KRONES
More than just a design ...

There is an infinite amount of influencing factors of which the decisions depend that are made for each process step. The interaction of the correlations here is unique for each product and customer.

The influencing factors at a glance
- Target-group expectations
- Sustainability
- Secondary packaging
- Labelling
- Lightweighting
- Shelf life
- Machine configuration
- Light and gas barrier
- Capping options
- Resin assortment
- Branding
- And much more ...
Consultation during the entire development process

Being a part of the KRONES family, we are extremely familiar with the processes and requirements of the line as a whole. Due to our experience and the cross-departmental work, we can cope with any technical challenge.

Our creative and innovative design team will lead you through the entire development process from the first idea all the way to the ideal solution for your product.
Creative, functional, unique

Features offered by the KRONES container development

− Technical optimisation of new and existing designs for weight, surface feel and line efficiency
− Consultancy about materials and product requirements (e.g. light protection, oxygen barrier)
− Ecological and economic requirements such as material selection, recycling ability or weight optimisation
− Finite element analysis (FEA) for an optimised bottle performance to save resources and time
− Machine and process technology requirements such as hotfill, aseptics or labelling

We are looking forward to exciting and challenging projects. Your ideas and requirements are in the focus from beginning on.
What we are working on – packaging concepts

Our declared lightweight champion

Design features
− Highly structured bottle design for improved haptical and functional performance
− High flexibility: different base shapes for several filling technologies possible, different label areas and cap concepts

Technology
− Nitrogen injection possible
− Production with conventional KRONES blow moulders for lightweighting

Benefits to you
− Extremely light design and small dimensions
What we are working on – packaging concepts

Innovative lightweighting containers

Design features
- To-go containers with a volume of 500 millilitres
- Patented decoration design

Technology
- Lightweight neck
- Special base design for nitrogen injection with up to 1.0 bar
- Labelling with conventional KRONES machines

Benefits to you
- Extreme lightweighting with only 7.58 grammes
- Excellent bottle performance concerning stability and top load
- Stable during processing use thanks to nitrogen injection
What we are working on – packaging concepts

Study on storage stability of UHT milk in PET bottles

Design features
– Bottle design for a large number of preform materials for analysing the storage stability of UHT milk in PET bottles (with a shelf life of at least four months)

Technology
– Analysis of
  ▪ Multilayer (WBW)
  ▪ Monolayer with different titanium (IV) oxyde part (TiO₂)
  ▪ Light-block sleeve
  ▪ Coloured monolayers

Benefits to you
– Guaranteed product protection for UHT milk via different material compositions
What we are working on – packaging concepts

Design study – "Square"

Design features
- Recessed grips for glue-free fixation of a paper label
- Grooves for increased wall stability and optimised label application

Technology
- Protection of the product due to the label and different preform materials

Benefits to you
- Large and exceptional advertising space
- Detachable, recyclable paper label
What we are working on – packaging concepts

Origami diamond: Bottle for premium water

Design features
− Multifaceted diamond structure
− Unique light refraction
− Striking style

Benefits to you
− Simple and comfortable to handle
− Stands out from any group of products
− Can be compressed after consumption
− Reduces the volume of waste
What we are working on – packaging concepts

Design study – "Carafe"

Design features
– Premium design in glass look for different products
– Off-centre neck finish
– Conventional water neck finish
– Exquisite design which also takes effect in restaurants

Technology
– New development in cooperation with Husky
– KRONES standard blowing process with orientation system

Benefits to you
– High recognition value through the iconic design
– Optimum pouring thanks to the off-centre neck finish
– Good surface feel provided by the recessed grip
What we are working on – packaging concepts

Perfectly dressed without a label:
bottle for DecoType direct printing

Design features
− Combination of shape and print to create a new, multi-sensorial experience
− Optical accentuation of debossed and embossed bottle structures

Technology
− Direct printing of bottles with the DEKRON DecoType Select direct printing system

Benefits to you
− Personalises products at the push of a button
− Enables the production of the smallest of individual batches
− Allows variable elements such as QR codes to be integrated in the design
− No more surplus glue and labels - and the need to keep glue and labels on stock is now also a thing of the past
The branches we work for – sensitive products

Kingsley
− Contemporary, sporty, streamline silhouette
− Discreet and aesthetic base design
− Slip-proof and comfortable surface feel

Freedom of design thanks to the KRONES NitroHotfill:
The NitroHotfill procedure makes the conventional panel design for hot-filled bottles unnecessary.
The branches we work for – CSD and spritzer

Franken Brunnen Fruit2go bottle

– Fits nicely in your hand thanks to its sporty dumbbell shape.
– Reminds you of a natural fruit shape with its organically rounded shoulder and base areas.
– Has a narrow, semi-transparent label in the middle of the bottle, thus giving the product colour enough space to take effect.
We do more.