defortec

# design for technology

# About us

## visionary design for products.
## smart solutions for success.
## **design for technology.**

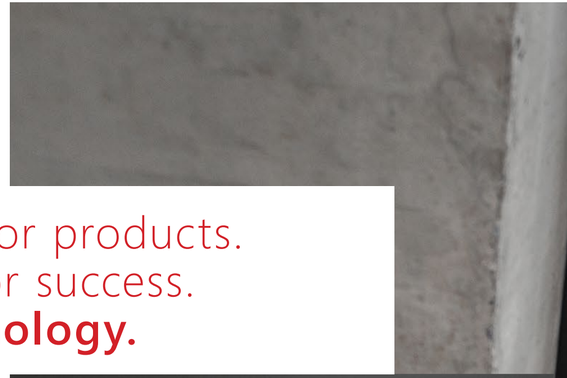
defortec GmbH is an innovative company specializing in customer-specific design and product development. In addition to product design and user interface design, our expertise primarily encompasses capital goods design, i.e., the design development of technically complex products ranging from laboratory equipment to production facilities.

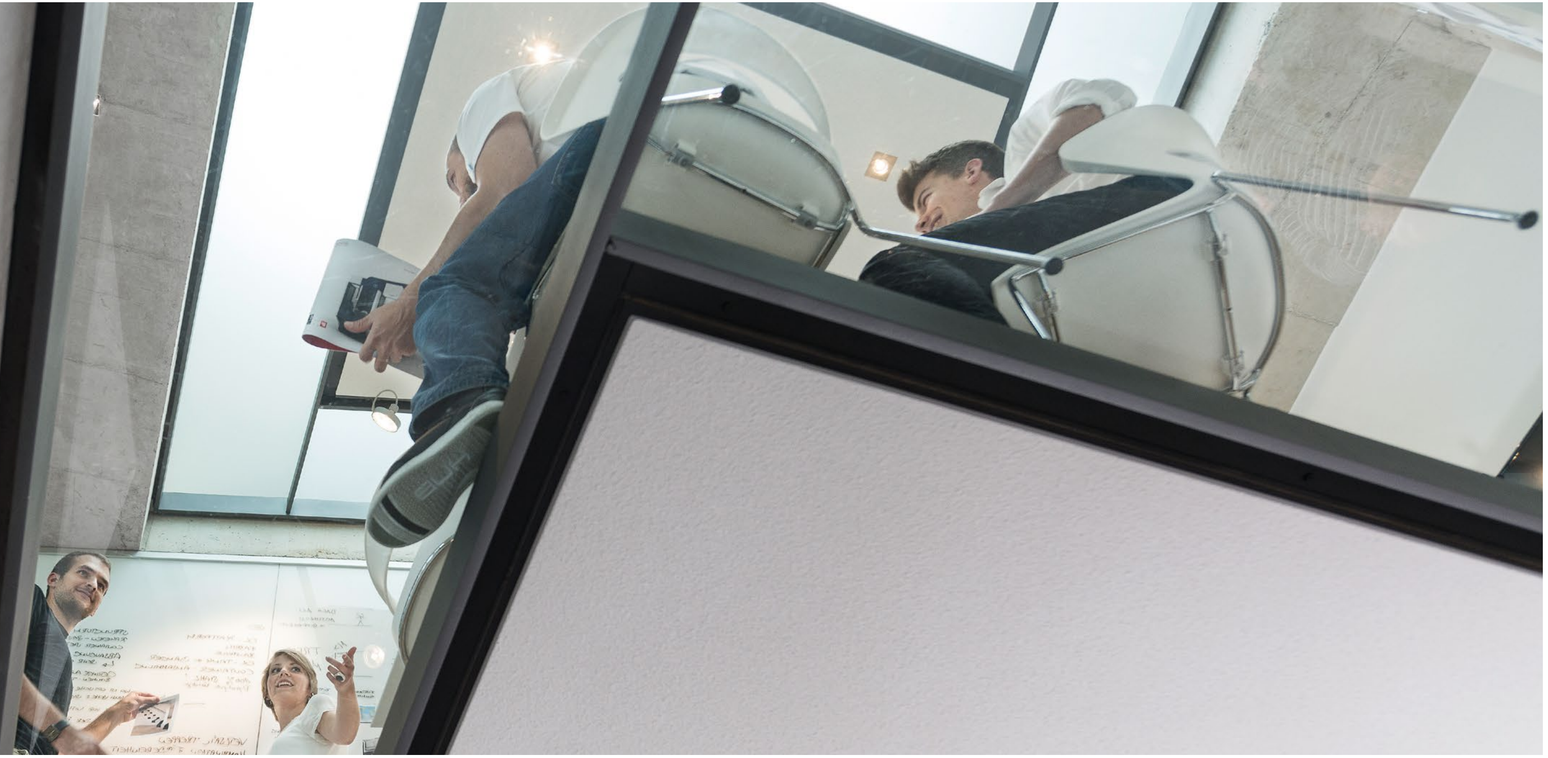
In short: we are experts in high-tech.

A particular focus of our design work is on the economic implementation of the products we design.
Our mission – **design to cost** – stands for intelligent design that enables our customers to achieve cost-saving production and rapid profitability.

The success of our customers and over 100 national and international design awards are proof of the quality of our work. Our managing partners **Stefan Grobe** and **Angelo Schulz** lead the defortec team with experience and the highest level of motivation.

**We look forward to a successful collaboration!**



# Reference clients


# Award winning design made by defortec

For over 30 years, our work has been recognized with design awards both nationally and internationally. We deliver outstanding design quality, develop unusual solutions, and inspire jury members and our clients. More than 100 awards include the renowned iF Product Design Award, the Red Dot Design Award, the Focus Open - Design Award Baden Württemberg, the Chicago Design Award, and the Design Award of the Federal Republic of Germany - the prize of prizes.

Over 100 design awards are unusual, above all because they were awarded for technical products and machines. We combine new and clear design approaches with our clients' innovative technologies. That is precisely why behind every award is not only our team, but also a great collaboration with our partners. Together, we have given spectacular technology a form, made it tangible, and thus convincing.

German Design Award 2026
Focus Open Special Mention 2024
Focus Open Silver 2022
2x iF Product Design Award 2022
Focus Open Gold 2021
Reddot design award winner 2020
Reddot design award best of the best 2020
iF Product Design Award 2020
Focus Open Special Mention 2019
Focus Open Silver 2019
2x iF Product Design Award 2019
Focus Open Gold 2018
Focus Open Silver 2018
reddot design award winner 2018
Focus Open Gold 2017
Reddot design award winner 2017
German Design Award 2017
iF Product Design Award 2017
2x Focus Open Silber 2016
Focus Open 2016 Special Mention
German Design Award 2015 Special Mention
3x Nominierung German Design Award 2015
Focus Open 2014 Special Mention
4x iF Product Design Award 2014

Focus Open 2013 Silber
iF product design award 2013
GOOD DESIGN Award 2012 Chicago USA
Nominierung Designpreis BRD 2012
reddot design award winner 2012
2x iF Product Design Award 2012
Designpreis BRD 2010
4x Nominierung Designpreis BRD 2009
Focus Green 2008 Gold
Focus Green 2008 Silver
2x iF product design award 2008
GOOD DESIGN Award 2008 Chicago USA
Nominierung Designpreis BRD 2008
Focus Security 2007 Silber
Nominierung Designpreis BRD 2007
iF product design award 2007
Focus Energy 2006 Silber
iF product design award 2006
Nominierung Designpreis BRD 2006
reddot design award winner 2005
Animago 2003
BDG Logo award 2002
iF exhibition silver award 2001

# visionary design

Emotionalization, individualization, and the development of brand-specific product features form the core of our design development.
Our clients' products are therefore characterized by a clear design language, sustainability, and high recognition value.

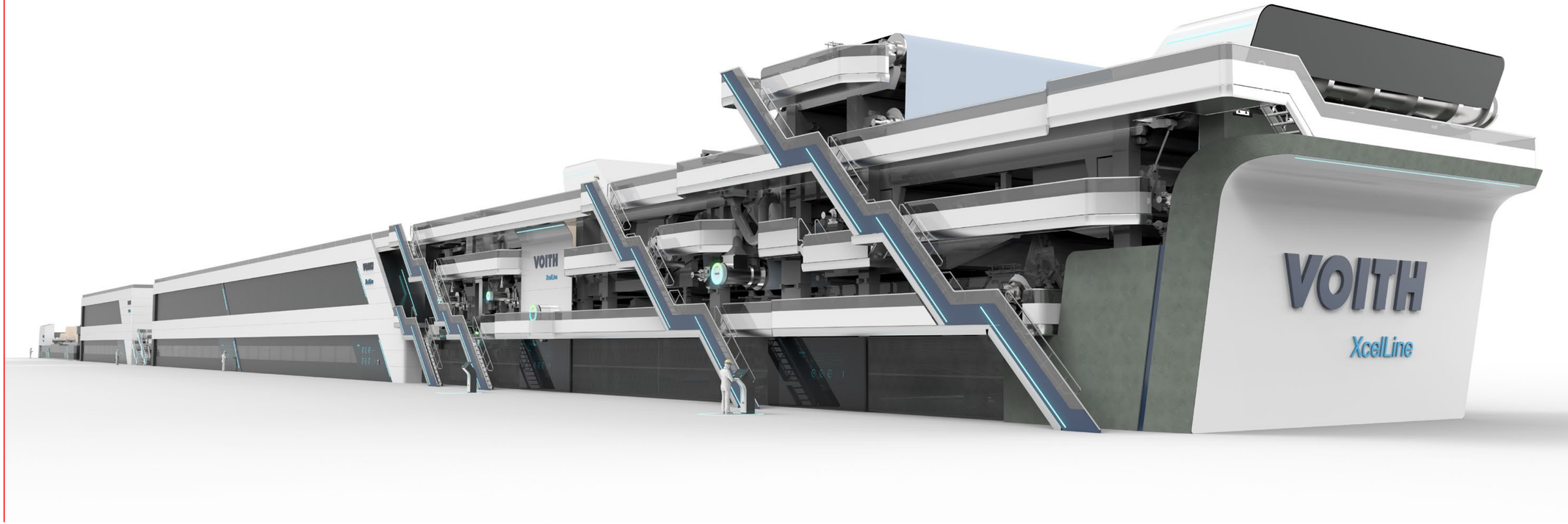
This applies to pocket-sized sensor technology as well as to 200-meter-long production lines that impress with their size yet must be clearly structured and accessible, meet high quality standards, and require safe handling.

Our design makes innovations transparent and comprehensible at first glance. We optimize operating procedures, improve ergonomics, consider process engineering, and create safety and trust in the new product.

# smart solutions

We develop innovation. Because we don't just think in terms of design, we also conceive new, intelligent technical solutions.
For example, connections, joints, opening systems, or material innovations are things we bring into new contexts.
We combine technical and digital solutions and think ahead for sustainable products of the future.

A very special focus of our design work is on the economic implementation of the products we design.
Our mission – **design to cost** – stands for intelligent design that enables our customers to achieve cost-saving production and thus rapid profitability.



Focus Open 2021
Silver

## Dieffenbacher Fiberpress | Hydraulic press

CLIENT
**Dieffenbacher GmbH Maschinen- und Anlagenbau**

SERVICES defortec
**Functional analysis**
**Design conception**
**CAD detailing**

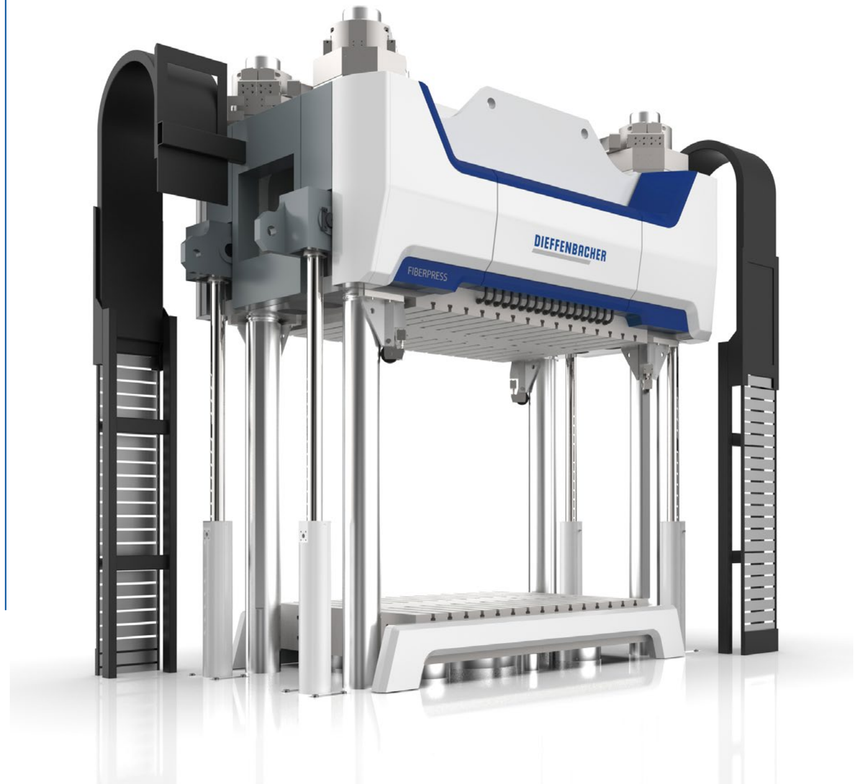
SPECIAL FEATURES
**Production technology: hand laminated**

An industrial robot grips the component and inserts it into the die of the Fiberpress. The compact press transfers the flat laminate into a three-dimensional finished component with pressures of up to 50000 kN.

The short-stroke cylinders of the press require little hydraulic oil and thus allow a short cycle time within a production cycle. For safety reasons, the design of the press is kept open so that it is always possible to see what is taking place in the pressing area. Overall, as is necessary for automated systems, the machine operates in an area that is inaccessible to humans.

Due to the open design, the design primarily takes place in the upper area of the press. The fronts again feature Dieffenbacher elements such as chamfered edges, which also serve to separate colors. This cladding, with a large, central maintenance flap, tapers towards the center, emphasizing the press's massive bearings and guides. The inevitable drag chains on the left and right have been incorporated into the system.

In this way, this installation fits perfectly into the brand-specific system design.






## Dieffenbacher knife ring flaker | Wood chipping plant

CLIENT
**Dieffenbacher GmbH Maschinen- und Anlagenbau**

SERVICES defortec
**Process analysis**
**Design concept - design detailing**
**Optimization of maintenance processes**

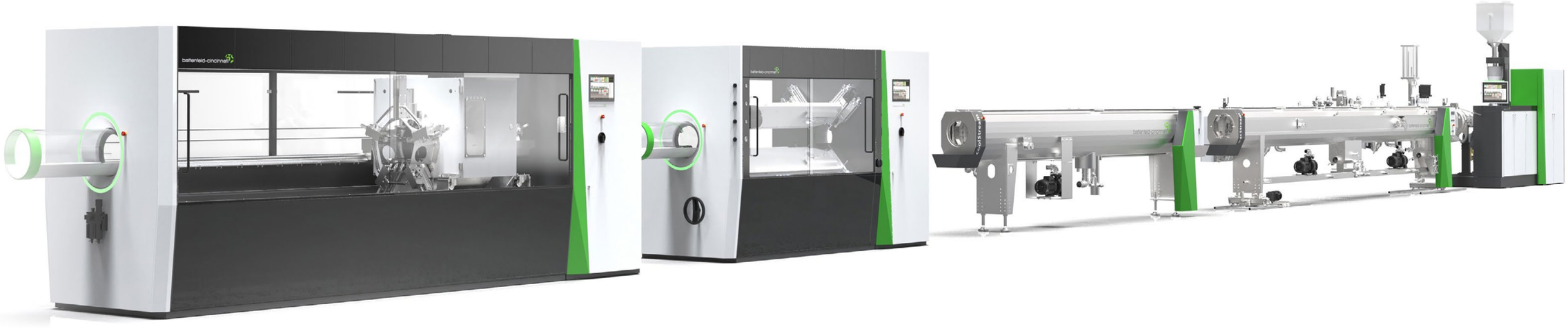
SPECIAL FEATURES
**System design**
**Robustness and dynamics**

The knife ring flaker of Dieffenbacher convinces with a strong, individual and expressive form language, which further developed the corporate design. Plants of this type are used for the flaking of wood, wood waste as well as other recycled materials. The material produced by the plant is the core product in chipboard production.

The intelligent transfer of the new system design for the Dieffenbacher company also focuses on the production process for this product. In this way, an interplay of clear, distinctive structures and a dynamic, trend-setting design was created.
Other aspects included the optimization of the adjustment and maintenance processes, which led to a fundamental handling improvement of the product.

Awarded:
Design Award Focus Open 2018 Silver




DESIGN AWARD 2022

# Battenfeld - Cincinnati BC Line 160 | Industrial Design for profile extrusion line

CLIENT
**Battenfeld - Cincinnati Extrusion Holding GmbH**

SERVICES defortec
**System design**
**Integration of standard components**
**Design to cost**

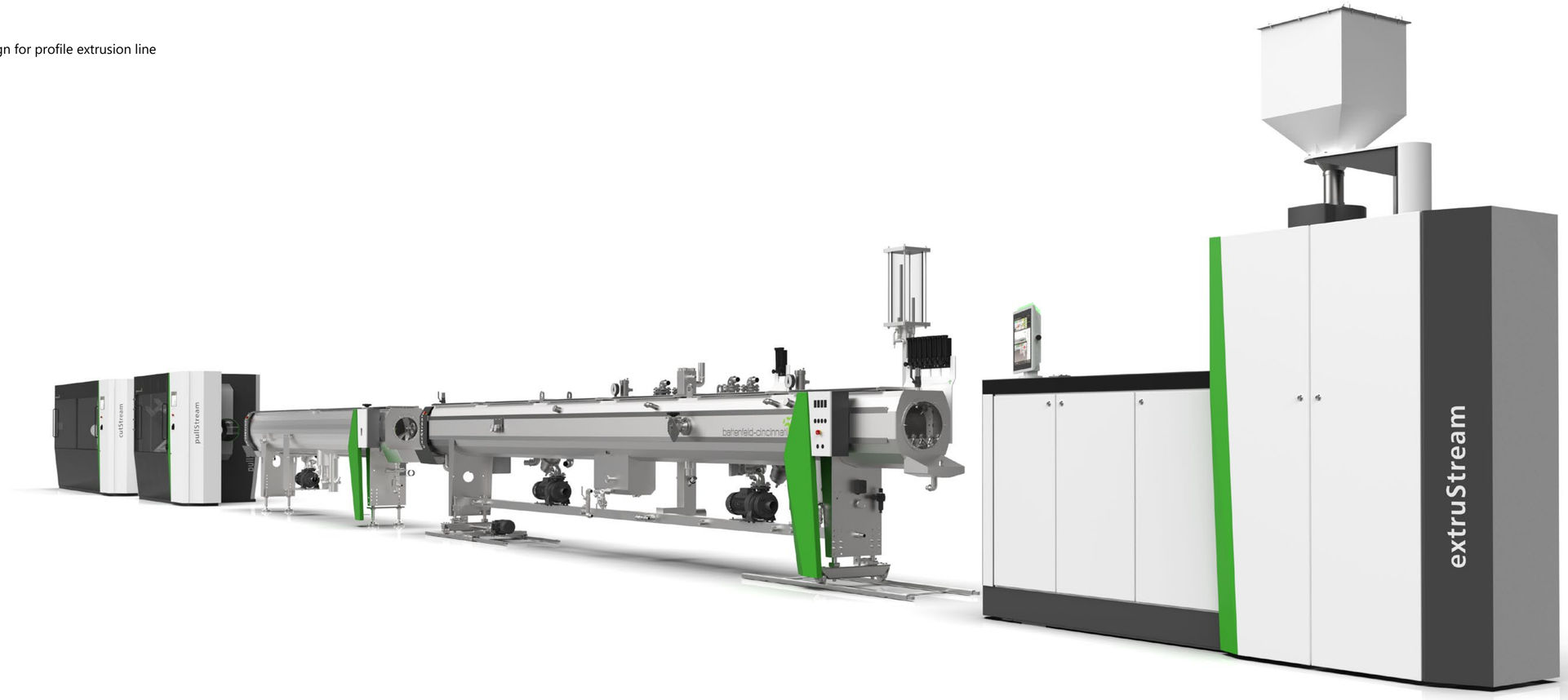
SPECIAL FEATURES
**Consistent appearance**
**Visible technology**
**Design + Ergonomics**

The production of plastic pipes is not a trivial matter and can only be mastered with special extrusion lines consisting of precisely coordinated functional units. The Battenfeld Cincinatti company develops such production systems and sells them worldwide. Now the manufacturer is presenting the BC Line 160 integrated production line for pipe diameters up to 630 millimeters.

The line is characterized by a clear color, shape and material concept. A characteristic feature here is the use of black-coated glass. These areas not only allow an optimum view of the production processes, they can also be opened over a large area for maintenance work.

The clear lines and edges underline the precision and efficiency of the system. The modular design of the cladding and control cabinets reduces the variety of components and thus also the manufacturing costs.

Awarded:
iF product design award 2022




Centrotherm C.FIRE | Photovoltaik - Produktionsanlage

Centrotherm C.FIRE | Photovoltaics - production plant

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CLIENT
**Centrotherm photovoltaics AG**

SERVICES defortec
**Industrial Design**
**System design**
**Cost reduction**

SPECIAL FEATURES
**Transparent design**
**Visible technology**
**Improved usability**

For centrotherm photovoltaics AG, the world's leading technology and equipment provider in the photovoltaic industry, defortec developed a new, cross-product industrial design for the production plant presented. The design convinces especially by a reduced, modern color and form concept. It is also characterized by its strong material combinations as well as high-contrast and functional plant areas. The calm overall appearance underlines the high quality and reliability of these complex systems.

The design-to-cost approach used here combines optimized costs, high-quality industrial design and user-friendly ergonomics. In the course of the design development process, the most cost-effective solution is constantly sought for all system components, while complying with specified design and quality standards. The new development and design standard for centrotherm production equipment has been delivered to customers since 2011.

Awarded:
iF product design award 2012


 


MAAG Pearlo CS | small batch Underwaterpelletizing

KUNDE
**MAAG Germany GmbH**

SERVICES DEFORTEC
**Optimization of machine structure**
**Ergonomic optimization**
**Industrial design**
**Cost reduction**

SPECIAL FEATURES
**Improved usability**
**Double-sided use**
**Simplified machine structure**

Together with the MAAG Group, defortec has developed the new generation of laboratory systems for underwater granulation. The result is a brand-defining, compact, high-performance system that can produce up to 250 kg of granulate per hour.

The key outcome of the collaboration was the simplification of the machine structure, which has an impact on the space requirements, usability, and cost structure of the system. In the new system, there is no need for right/left variants, as optimal accessibility from both sides is guaranteed for cleaning-intensive process parts. The touch panel, which can be swiveled up to 180°, supports flexible, two-sided use.
Extensive ergonomic considerations led to simplified handling processes for maintenance, service, and regular cleaning activities.

The entire process area is mounted on a height-adjustable stainless steel support, allowing flexible adjustment of the system height.

MAAG's end customers benefit from easy cleaning and a significantly reduced footprint of the system.

The system was presented at K2025 in Düsseldorf.


Daimler TF/V | Robot head

CLIENT
**Daimler AG**

SERVICES defortec
**Product design**
**Collision testing**
**Prototype development + production**

SPECIAL FEATURES
**Automation technology**
**Human machine collaboration MRK**
**Light signal system**

Human-robot cooperation is the future in the area of automation technology. The robot becomes a partner of the human, cooperates directly with the workers due to its sensor technology without protective fence and danger.

defortec developed for the Daimler AG the design for components of this new technology.
The TF V robot head is used for the automated of sealing plugs on the underbody of vehicle bodies. vehicle bodies.

The design shows sympathetic, soft basic forms to give this more human technology an appropriate expression. Complex lighting elements also play a crucial role, communicating various messages for movement or even completion of a work step.

In addition to design development, defortec supported with detailed CAD development, manufacturing and assembly of this complex housing system.


Gravity Mode

Process Done

Loading Mode


reddot award 2017
winner

Daimler MRK | Robot head

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CLIENT
**Daimler AG**

SERVICES defortec
**Product design**
**Prototype development + manufacturing**
**Safety engineering**

SPECIAL FEATURES
**Automation technology**
**Human machine collaboration MRK**
**Light signal system**

For the Tecfabrik of Daimler AG, defortec developed the design of a ride-on MRK capable assembly robot. This new robot technology enables collaboration between humans and robots. In addition to its collaborative design, extensive safety aspects and rapid production and delivery of the prototype were required.

The resulting overall structure is characterized by its contemporary and clear appearance as well as its high user and maintenance friendliness. The integrated LED status indicators are clearly visible from any position and visualize the travel of the entire assembly robot.

The sound insulation located inside significantly reduces the noise level and thus designs a more pleasant working environment.

Awarded:
reddot design award 2017


 

Rena Batch D | Dental implant surface treatment

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CLIENT
**Rena Technologies GmbH**

SERVICES defortec
**Process analysis**
**Designconcept**
**Medical Design**

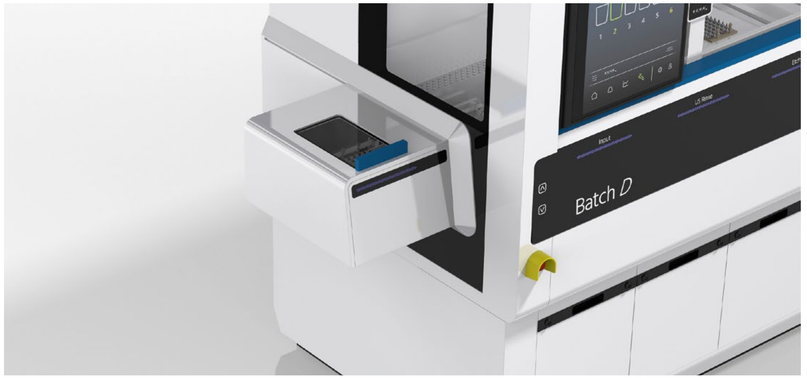
SPECIAL FEATURES
**Systemdesign**
**Installation space - collision check**
**Overall design in PP plastic**

In order for the dental prosthesis to be securely anchored in the patient's jaw, or rather to grow together, it must undergo a complex pretreatment. For this process step, the Rena company is developing complex and fully automated process technologies. The plant, called „Batch D," handles the wet-chemical surface treatment of the implant blanks using etching and cleaning baths to ensure purity, roughness and biocompatibility.

Because the plant works with acids, only corrosion-resistant materials were used.
For example, the entire processing chamber is made of acid-resistant polypropylene.
The basic static structure made of steel was also made corrosion-proof with polypropylene - an engineering-specific solution that defortec developed together with Rena's designers.

Another focus of this plant relates to the design language, which was prototypically developed in such a way that it can also be reproduced on other machines of the manufacturer in the future. Thus, the first foundation stone for a successful system design was laid.

Awarded:
iF design award 2022






Focus Open 2016
Special Mention

GERMAN DESIGN AWARD SPECIAL 2017

SPECS EnviroESCA | Surface analysis system

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CLIENT
**SPECS Surface Nano Analysis GmbH**

SERVICES defortec
**Product design**
**Module development**
**Heat dissipation concept**

SPECIAL FEATURES
**Product design**
**Visible technology**
**Interchangeable modules**

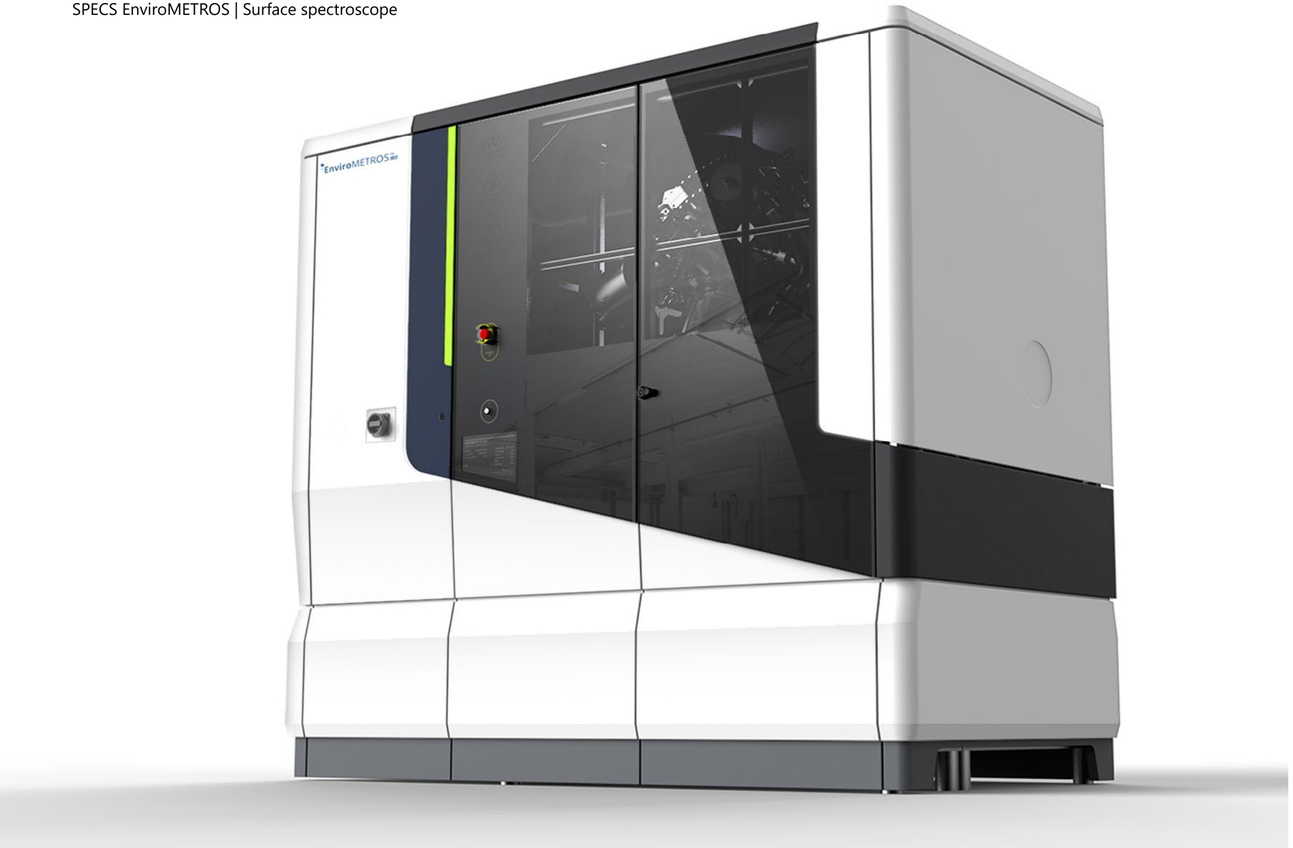
Building on its groundbreaking developments in recent years, SPECS presents the first electron spectroscope for chemical surface analysis under environmental conditions.
As a product system, EnviroESCA and the associated SampleExplorer enable fully automated, intelligent analysis and evaluation of surfaces. This process runs under real environmental conditions and creates new application possibilities in industry, medical technology and biotechnology.

The resulting laboratory system has an innovative modular system for rapid adaptation to different testing tasks. The asymmetric and partially transparent design of the device takes into account all technical requirements of testing technology and features innovative material combinations such as self-healing work surfaces.

This innovative design system underlines the high value of the product, its professionalism and enables a quiet integration into laboratory environments.

Awarded:
Focus Open 2016 Special mention
German Design Award 2017 Special




SPECS EnviroMETROS | Surface spectroscope

CLIENT
**SPECS Surface Nano Analysis GmbH**

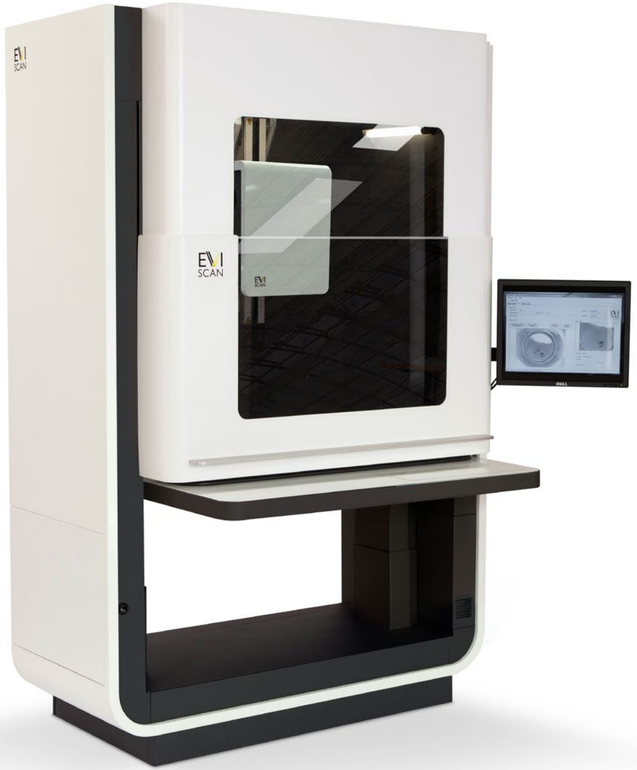
SERVICES defortec
**System design**
**Material combination**
**Design detailing**

SPECIAL FEATURES
**Ergonomics**
**Usability**
**Transparency + Technology**

Under the powder-coated, pure white stainless steel housing, a combination of different methods work in a modern automated system, with which even small material samples can be tested qualitatively and quantitatively with the utmost precision. For this purpose, the surface spectroscopy of the Berlin SPECSGroup works with different radiation sources and evaluation methods. While the method was previously reserved for experimental laboratories, the step into the industrial context is now imminent - with the compact EnviroMETROS systems.

The design helps to emphasize the uniqueness of the system and give the „black box" a brand-typical appearance.
This task is performed by the dark glass area, which asymmetrically overlays the white front, following the internal design, and contains all the main active elements. Due to these large-area glass elements, the system allows a view of the complex anlaysis technology.

This further development of the design system underlines the high value and professionalism of Specs products.




German Design Award 2013

reddot design award
winner 2012

Eviscan 1000 | Evidence scanner

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CLIENT
**German eForensic GmbH**

SERVICES defortec
**Functional concept**
**Ergonomic functions**
**Product design**

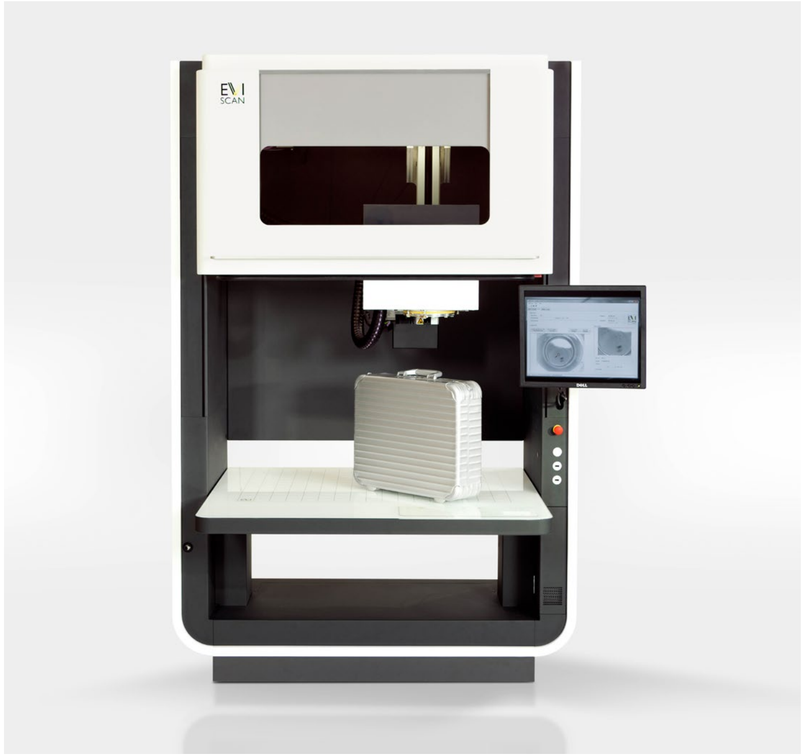
SPECIAL FEATURES
**Short development period**
**Design, construction and prototype**

EVISCAN offers a unique procedure for the forensic evidence recovery. Evidence is optically recorded without the use of harmful substances, and perpetrator traces are automatically detected, digitized and secured.

Since it is contactless, the trace or fingerprint is captured without damage. The analysis is therefore reproducible.

EVISCAN stands for the consistent implementation of the Clean Design concept with particularly smoothly defined exterior and interior surfaces. There are also functional reasons for this: For example, the perfectly cleanable glass work surface with integrated glass keyboard avoids measurement errors caused by contamination of the evidence with dirt or foreign DNA particles. The integrated and infinitely variable height adjustability allows maximum flexibility during analysis.

Awarded:
Reddot design award 2012
German Design Award 2013




reddot award 2017
winner

Venneos Can Q Station | Cell analyzer

CLIENT
**Venneos GmbH**

SERVICES defortec
**Product design**
**Functional concept**
**Prototype construction**

SPECIAL FEATURES
**Usability optimization**
**Passive heat dissipation**

In close cooperation with the Stuttgart-based start-up Venneos, defortec developed the revolutionary CAN-Q laboratory device, which scores points for its ease of use and compact dimensions. The requirement for the new product was the significant improvement of the contacting of the sample unit.
The novel image system for the analysis of biological cells is based on an innovative measurement approach to visualize cellular changes electronically instead of optically as usual.

The prototype, milled from solid aluminum, was put through its paces to ensure smooth assembly and operation.
The first Plexiglass prototypes were used to develop and subsequently test the working principle of the contacting mechanism. For this purpose, various principles of the vkinematics were tested in-house and checked for feasibility and cost-effectiveness. A special focus of the development was the safe, error-free and intuitive operation.

Awarded:
Reddot design award 2017

# Model and Prototyping

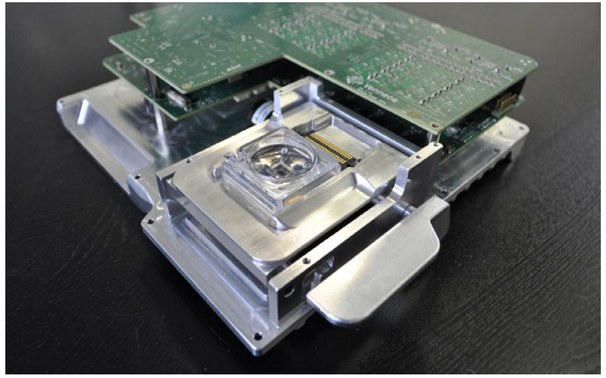
We create the most complex models for you - from mockups and ergonomic models to detailed functional and presentation models.

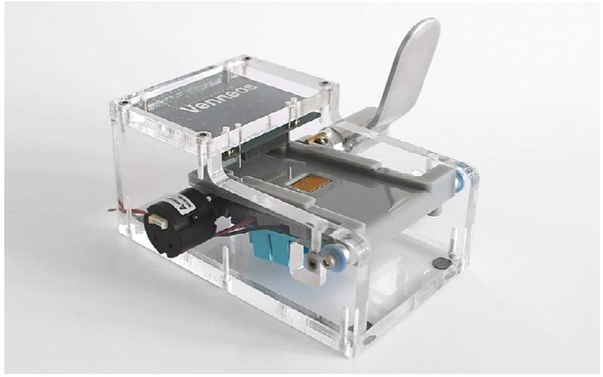
This important process of a product development takes place, closely linked to our development, in our own workshop and on high-quality, own 3D printers.

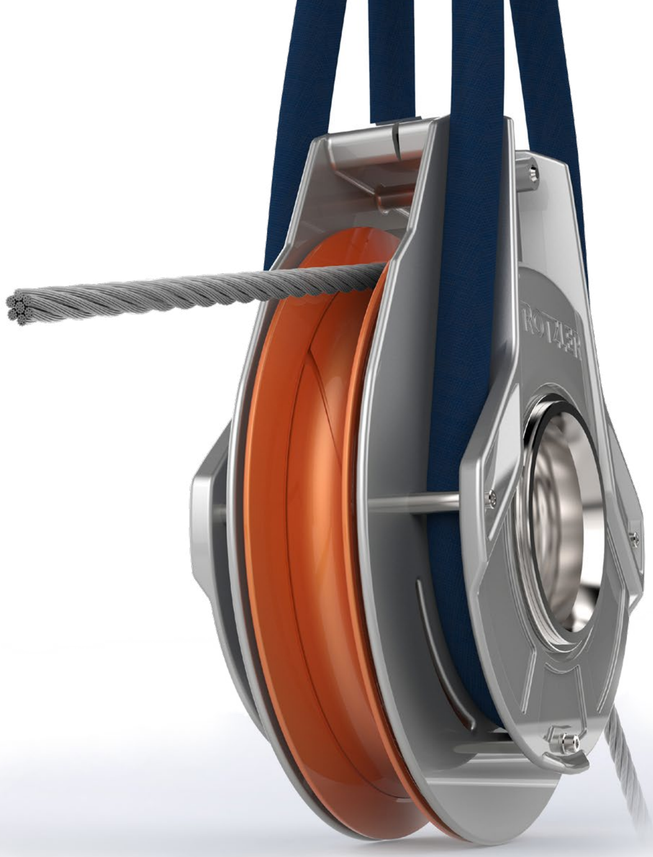
Through the haptic experience of handling the resulting high-quality design model the product can be tested in reality for user-friendliness, material, form and function.

With our own equipment we are able to realize complex prototypes in-house. For series production, we rely on a network of qualified suppliers to meet demanding deadlines.

We manufacture with a high degree of precision, with great attention to detail. This is how we create models and pre-series for your trade fair presentations or your functional tests.






Focus Open 2018
Gold

# Rotzler Tarvos | Cable winch model range

CLIENT
**Rotzler Holding GmbH**

SERVICES defortec
**Product design**
**Functional concept**

SPECIAL FEATURES
**Brand identity**
**Design detailing - target weight**

The Tarvos winch series from the manufacturer Rotzler impressively sets itself apart from all competitors with its purist and powerful appearance.

Powerful bolted bays as a recurring design feature, coupled with solid connecting flanges, convey stability and value. Calm, flat surfaces also create a professional overall impression and, in combination with striking lettering, ensures a strong brand presence. The compact design and the materials used generate a high recognvition value and emotionalize the technically appealing product.

The color orange is used exclusively for the drum and thus clearly signals a potential source of danger.
The choice of color here is therefore not only subject to the demands of aesthetics, but also fulfills a safety function. The blue color scheme forms a strong contrast to the orange, without putting the components in the foreground. White aluminum as the color scheme for the gearbox covers emphasizes the technical appearance of the drive side.

Awarded:
Focus Open 2018 Gold
Focus Open 2016 Silver



**Focus Open 2016**
Silver

reddot winner 2020

# Synexis Sphere | Air purifier

CLIENT
**Synexis**

SERVICES defortec
**Product design**
**Functional concept**
**Prototype series**

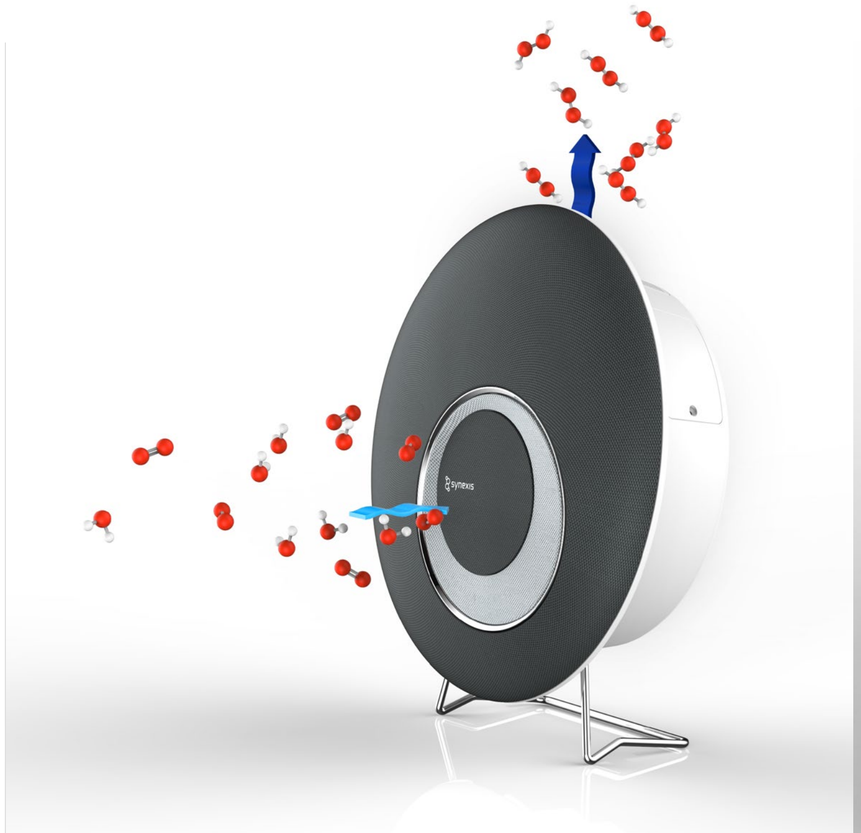
SPECIAL FEATURES
**Innovative technology**
**Design detailing**
**Construction**

The project in cooperation with the American manufacturer Synexis LLC was given a new, unexpected topicality by the Covid-19 pandemic and was successfully developed and brought to market under the greatest time pressure.

The U.S. company has developed a process that renders harmless up to 90 percent of airborne bacteria, viruses or fungal spores from indoor air. This is done using a patented process that requires no chemicals, ozone or generating odors.

The „Dry Hydrogen Peroxide" is generated directly in the device: the integrated fan produces an air flow that passes through a special catalyst fabric activated by a UV lamp. On its surfaces, oxygen and water from the air react to form hydrogen peroxide, which is then distributed into the room. Despite the lowest dosage of this active ingredient in the air, problematic pathogens can be reliably eleminated.

Awarded:
Reddot design award 2020






Focus Open 2021
Gold

CLIENT
**Hella Gutmann Solutions GmbH**

SERVICES defortec
**Design aligned with the use case**
**Iterative design mock-up verification**
**Innovative housing ideas**

SPECIAL FEATURES
**Professional usability**
**Independent design language**
**Rugged design**

The newly developed automotive diagnostic device from Hella Gutmann sets new standards - in terms of functionality, usability design and intelligent industrial design.
Primarily intended for independent garages, mega macs X reads error codes as well as system and driving data from a wide range of vehicle models from all well-known manufacturers via the onboard interface. It then transmits this data wirelessly to an external tablet or notebook, which then starts the system analysis.

The housing has a very unique, dynamic and automotive-looking design. The storage space for the connection cable is innovatively hidden between the two halves of the case. The upper shell can be completely removed after removing a few screws, giving free access to the components inside.

All design details of the mega macs X are user-friendly and extremely well thought-out. Dynamic light signals inform about all running processes.

To improve handling, defortec integrated two LEDs into the diagnostic connector, as the diagnostic sockets in vehicles usually wait very hidden in the dark footwell.

Awarded:
Focus Open Gold 2021

CLIENT
**NMI Natural and Medical Sciences Institute**

SERVICES defortec
**Process and functional analysis**
**Design concept**
**Usability concept + functional tests**

SPECIAL FEATURES
**Material research**
**Ergonomics and function tests**
**Prototype construction**

Histamine intolerance - a widespread diagnosis.
Histamine is found in numerous foods, and the histamine content varies depending on the freshness or ripeness of the food. Histamine is considered a mediator substance for allergic reactions and also plays an important role in immune defense. However, this process can be disturbed so that too much histamine accumulates in the body. The consequences are digestive problems, itching, headaches, cardiac arrhythmias and other reactions, some of which are chronic.

The tool, which is intended as a single-use product, is based on a new test procedure developed by the NMI (Natural and Medical Sciences Institute at the University of Tübingen). The method is capable of analyzing both liquid and solid foods in just a few minutes and outputting a semi-quantitative result by color code. This means that histamine tests could theoretically also be used outside laboratories, i.e. directly in everyday life.

The actual development took place in extensive test series, in which the CAD designs were converted into real, testable models via 3D printing.
In particular, sampling and mixing with the digestion solution had to be repeatedly tested and improved in trials. This combination of usability studies and design iterations resulted in a functional and ergonomic design concept.

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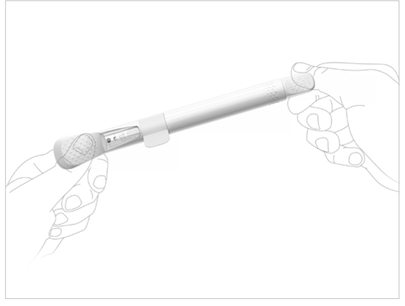
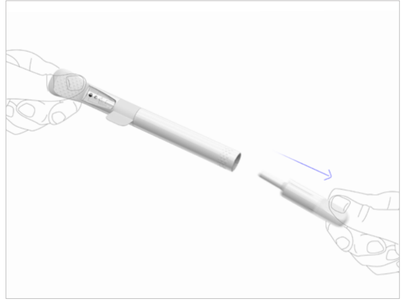
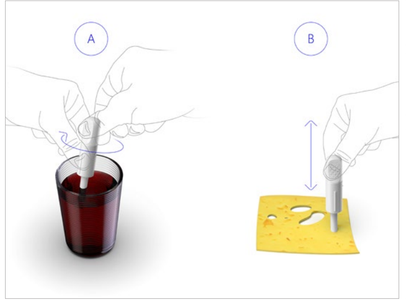
## Step 1:
The histamine tester is prepared by the user, gripping only the areas marked with nubs.



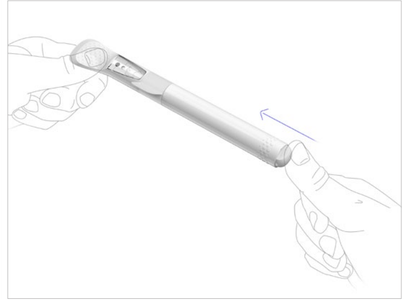
## Step 2:
Removal of the component for sampling.



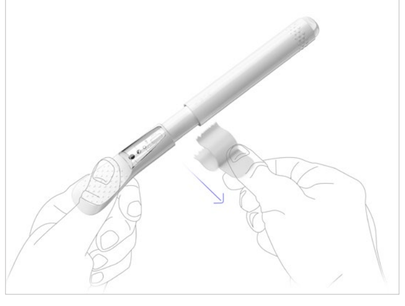
## Step 3:
The sampler aspirates liquids or punches solid food.



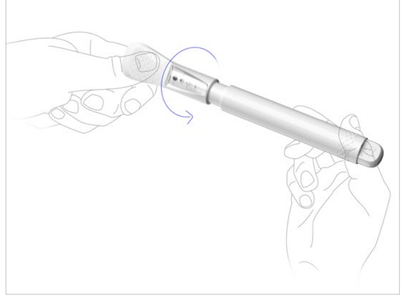

## Step 4:
The sample dehmer is plugged back into the test instrument.



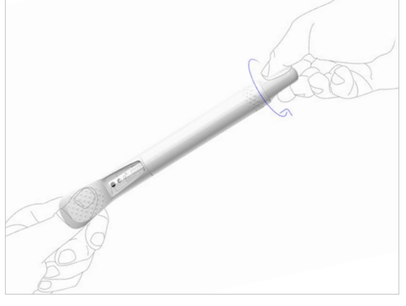
## Step 5:
Removing the safety tab initiates the actual analysis process.



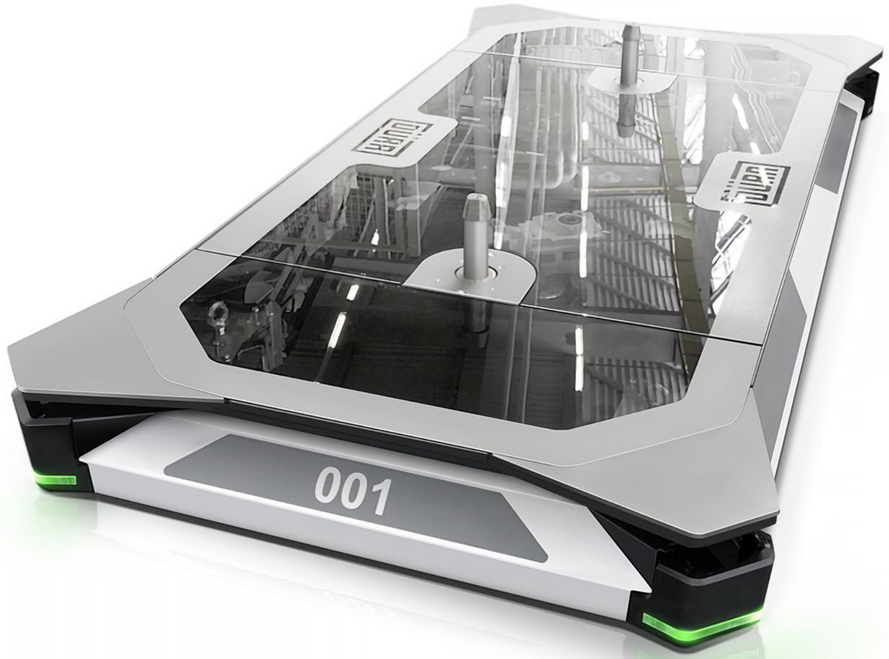
## Step 6:
Solid specimens are crushed by rotating the shaft.



## Step 7:
Activate and mix the buffer solution with the sample.



## Step 8:
After about three minutes, the histamine content can be read off by color code in the read-out field.




reddot winner 2020
best of the best

Focus Open 2019
Silver

DESIGN AWARD 2019

Dürr EcoProFleet | Automated Guided Vehicle

defortec
design for technology

CLIENT
**Dürr AG**

SERVICES defortec
**Product design**
**Material concept**
**Function and lighting concept**

SPECIAL FEATURES
**Ease of maintenance**
**Innovative status display**

In order for the vision of lean, flexible and self-controlling production processes of Industry 4.0 to become reality, new, automated intralogistics are required, among other things. This task is performed by Automated Guided Vehicles, or AGVs for short, which independently transport components, assemblies or raw materials to the respective processing stations.

Dürr offers „EcoProFleet", an AGV specially designed for use in paint lines. At first glance, it is distinguished from normal AGVs primarily by its low overall height of 335 millimeters. Thanks to this flat design, „EcoProFleet" can interact directly with Dürr's modular workstation systems.

The design also clearly differentiates „EcoProFleet" from other AGVs. For example, defortec's creative team has elegantly integrated the laser scanners at the corners of the vehicle into the chassis, and the light strips also placed there signal the status of the AGV.

The jury of the reddot design award also recognized how innovative the industrial design and the concept of „EcoProFleet" are and rewarded the vehicle with the „best of the best" quality seal in 2020.

Awarded:
Reddot design award best of the best 2020
Focus Open 2019 Silver
iF design award 2019


DESIGN AWARD 2019

CLIENT
**Qunfeng**

SERVICES defortec
**Functional concept**
**Product design**
**Construction**

SPECIAL FEATURES
**Functional analysis**
**System design**
**Ergonomics**

With the redesign of a comprehensive product series of urban cleaning and sanitation vehicles, the Chinese company Qunfeng accompanies the recent introduction of stricter environmental protection laws in China. This series offers comprehensive solutions for all sanitation and cleaning tasks in urban areas.

The product series includes a waste truck, a street sweeper and a sewer cleaning vehicle, as well as a smaller electric sweeper and a drinking water treatment truck. This complex vehicle system represents a world first with its range of solutions and is unique in its appearance as a visually appealing product family in this sector.

The versatile design, which is applicable to the different structures and functional areas of all vehicles, gives the vehicles a modern and high-quality appearance. The design also creates a strong brand identity and harmonizes with the different vehicle cabs, which can vary depending on the customer.

Awarded:
iF design award 2019


Qunfeng | urban cleaning vehicles




Dürr EcoCCore | Industrial plant for part cleaning

CLIENT
**Dürr Systems AG**

SERVICES defortec
**System design**
**Design concept and detailing**
**Design preparation**

SPECIAL FEATURES
**Large area glass application**
**Visible technology**
**High quality appearance**

The newly developed process technology of the EcoCCore cleaning system, with its wide range of process variants, offers optimum conditions for meeting the requirements of modern manufacturing processes in terms of quality and functionality.

At the same time, EcoCCore presents itself in a newly developed mineral glass enclosure which, thanks to its materiality and the associated transparency, meets the high safety requirements in an innovative way. When the interior lighting is switched on, the gray glass becomes almost completely transparent and offers a perfect overview of the entire plant technology within seconds.

EcoCCore was developed as an autonomous, self-supporting housing system by defortec and elegantly meets the required cost targets

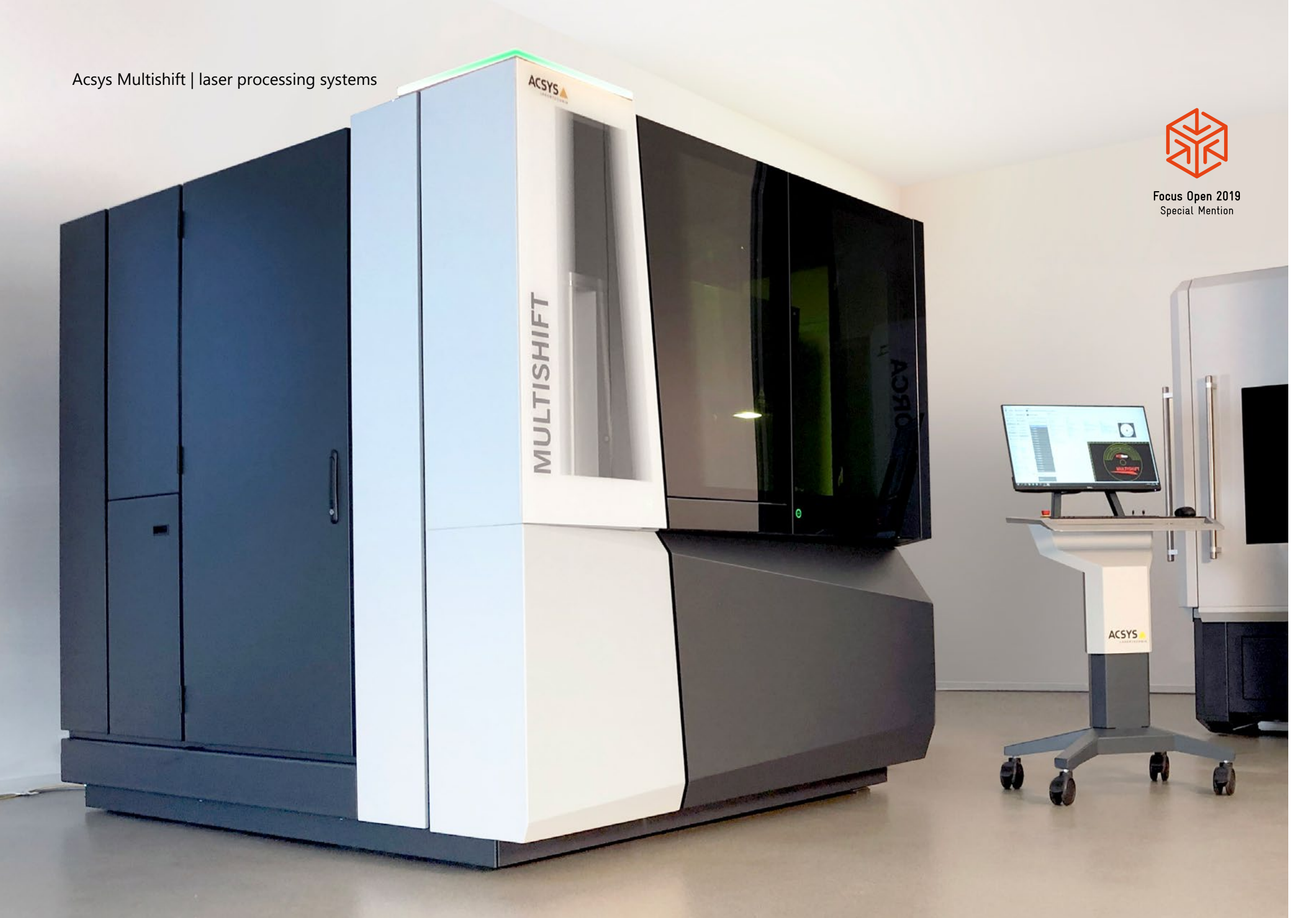
Awarded:
iF design award 2014
Focus Open 2013 Silver


defortec
design for technology

Focus Open 2013
Silver

iF product design award 2014




Focus Open 2019
Special Mention

Acsys Multishift | laser processing systems

defortec
design for technology

CLIENT
**Acsys Lasertechnik GmbH**

SERVICES defortec
**Development of a brand defining design**
**Development of special rotary-sliding door**
**Conception of a suitable control panel**
**Coordination of prototype construction**

SPECIAL FEATURES
**Ergonomics: rotary-sliding door**
**Ergonomics: control panel**
**System design**

With the Multishift laser processing system, the manufacturer Acsys sets new standards. Pico- and Femto-class lasers combine minimum exposure times with highly precise and gentle material removal - which not only has a superficial effect, but is also capable of creating reliefs several millimeters deep. Multishift was developed for decorative and functional marking, engraving and structuring.

Multishift is controlled via an external control panel that can be rolled and adjusted in height. The dynamically angled column picks up on the kink in the machine front, while the full-width handle makes it easier to position the panel while work is in progress. Here, too, you encounter a glass surface with backlit, capacitive buttons for central functions. All other inputs are made via keyboard and mouse, whereby the keyboard is not embedded in glass, but in a warm, hand-friendly material.

The design language of the Multishift has been conceived in such a way that it can be transferred to other systems from the manufacturer. Already, defortec is working on the continuation of the characteristic kink and glass fronts in the sense of brand-specific recognizability and market differentiation.

Awarded:
Focus open 2019 Special Mention


DESIGN AWARD 2020

Intravis PreMon | Preform Monitoring System

CLIENT
**Intravis Vision Systems GmbH**

SERVICES defortec
**Design draft and detailing**
**Design preparation**
**Prototype construction support**

SPECIAL FEATURES
**Flash light shielding**
**Ease of use**
**System design**

Plastic bottles are produced from small preforms in the stretch blow molding process just before filling. These blanks made of PET, also called preforms, are subject to strict quality specifications.

The company Intravis has developed a new, innovative inspection process that works purely optically and is capable of analyzing the preforms, which are coming out of the injection molding line in large quantities in real time. The capital equipment design by defortec visualizes the innovative approach of the process by means of an inclined housing, the shape of which is also derived from the spatial position of the inspection technology.

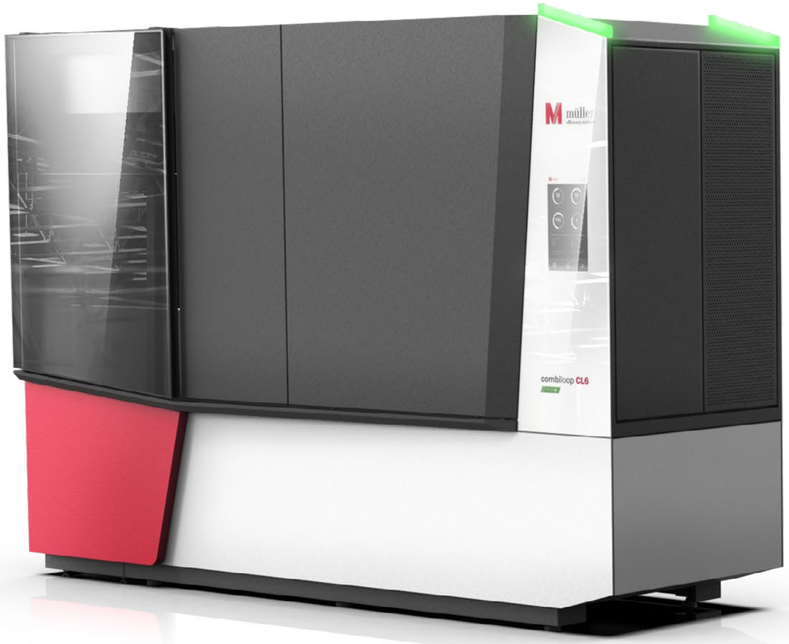
In Intravis' PreMon, the exterior design is derived from the technology inside. The inclination of the sheet metal-based housing firstly represents a formal counterpart to the inclined separation plane, and secondly allows the various camera levels to be completely integrated.

Separated by a yellow accent line, black glass surfaces form the other part of the housing - they are designed as doors and allow quick lateral maintenance access to the conveyor belt.

Awarded:
iF design award 2020

defortec
design for technology


müller
combiloop CL6


müller


müller

CLIENT
**Müller hydraulik GmbH**

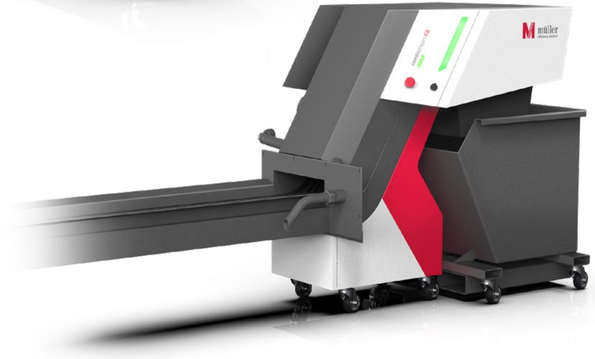
SERVICES defortec
**Functional analysis**
**Usability concept**
**Design concept - system design**

SPECIAL FEATURES
**Consistent design language for all machines**
**Classic manufacturing technology**
**Interface design**

Machining processes cannot do without the permanent supply of coolants and lubricants. Due to the high process speeds and precision requirements, these circulated substances must be free of particles or other impurities.

Müller Hydraulik GmbH is a specialist for such treatment systems and presents with the Combiloop series completely redesigned devices that are more powerful and at the same time clean much better. The industrial design by defortec visualizes this special status of the unit and also took care of the functional optimization.

To show this independence, defortec developed a geometry concept that does not only consist of horizontals or verticals, but places angled lines predominently. This creates a dynamic, complex and concise appearance that unmistakably stands for the manufacturer Müller Hydraulik.
This connection is emphasized by the clever inclusion of the corporate color magenta, which forms a two-dimensional accent to the businesslike tones of white and dark gray.



# Contact

visionary design for products.
smart solutions for success.
**design for technology.**

defortec GmbH
Breitwasenring 15
72135 Tübingen/Dettenhausen
Germny

Fon: +49 (0)7157 / 72118-20
Fax: +49 (0)7157 / 72118-50

info@defortec.de
www.defortec.de

Tax ID No.: DE 276883360
Commercial Register of Stuttgart HRB 737194
Managing Directors:
Dipl. Designer Stefan Grobe
Industrialdesigner Angelo Schulz

**defortec ist ISO 9001:2015 zertifiziert**

We look forward to working successfully with you!

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defortec GmbH
Breitwasenring 15
72135 Tübingen/Dettenhausen
Germany

Phone: +49 (0)7157 / 72118-20
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