# castus®



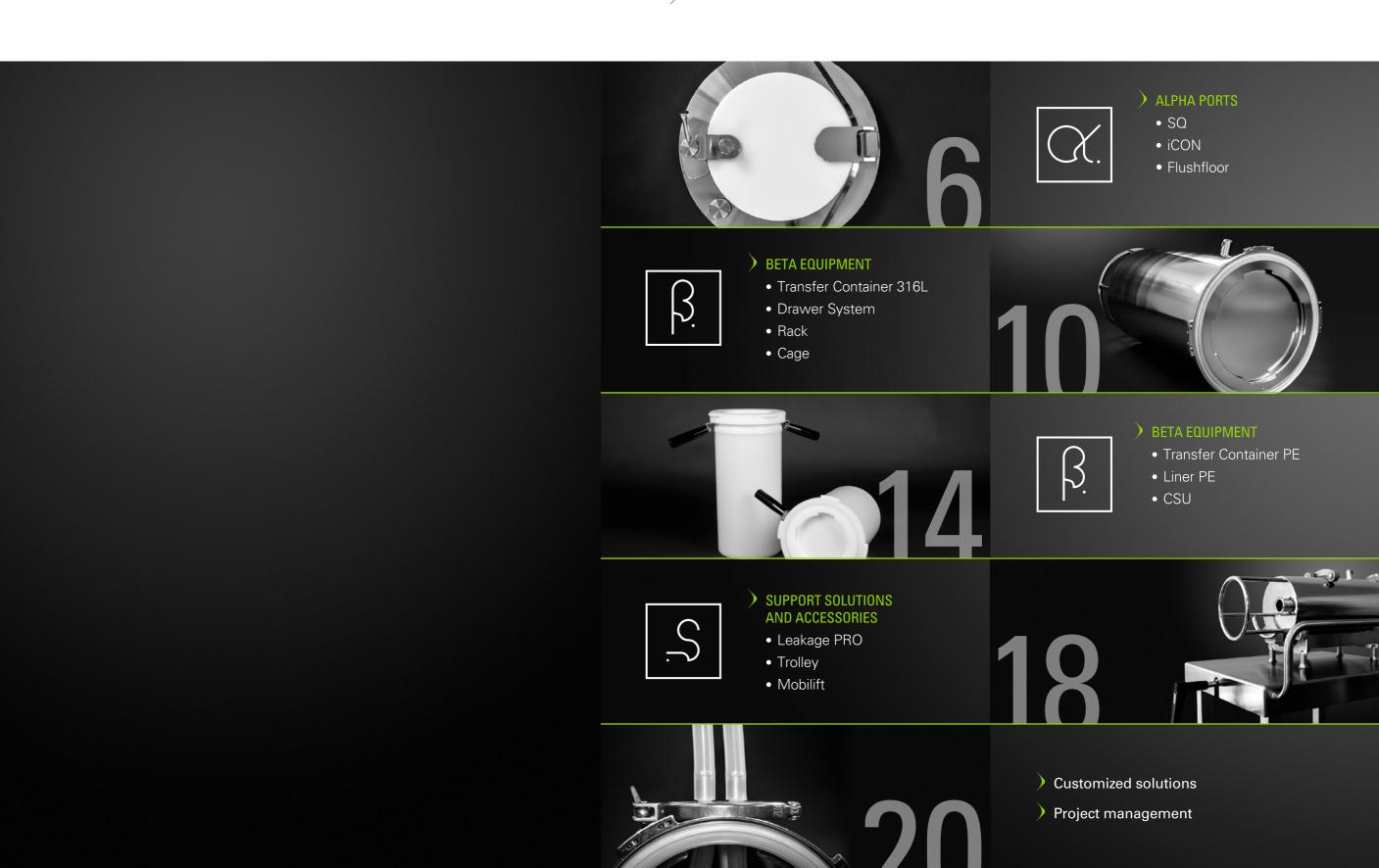








## **OVERVIEW**





## **INTRODUCTION**





## Welcome to castus GmbH & Co. KG

your specialist for a safe and sterile product transfer

As an owner-managed company, we have been at the fore-front of Rapid Transfer Ports (RTP) since our establishment in 2011. The castus system is designed to facilitate the transfer of components into and out of isolators, guaranteeing a contamination-free process. Our focus remains on ensuring the utmost safety for both operators and products. All our products are meticulously developed adhering to hygienic design principles and meet the stringent quality benchmarks of the pharmaceutical industry.

Our core products are conceived, manufactured, and assembled in Ochsenhausen, in southern Germany. From this location, we cater to a global network of partners. Over the years, we have emerged as one of the premier RTP manufacturers, driven by our commitment to excellence.

With our highly skilled engineers and advanced machinery, we specialize in delivering innovative, custom solutions for our customers. Post-development, we remain steadfast in providing continuous support as it's an integral aspect of our operations. Fueled by innovation, we are a company continually growing and geared towards the future.

castus is ready to meet your challenges.



ALPHA PORTS

– SQ, iCON, Flushfloor alpha Port –





## -SQ-

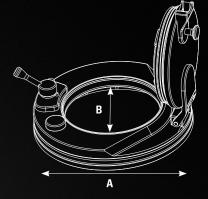
The castus alpha Port is fitted in the isolator system wall and acts as a contamination barrier during the transfer of components into or out of the isolator.

Our patented castus Safety Interlock System (CSIS) prevents the improper operation of the lock and ensures a high personal and product protection. The door of the alpha Port can only be opened after the beta part has been docked correctly. The beta part can only be undocked after the alpha Port door has been closed.

When space at the workplace is limited, the alpha Port can be equipped with a removable door. After having opened the door by only 20°. It can be completely unhinged and placed in the isolator.

## **UPDATED GENERATION**

- Reduced moving parts
- Complete CSIS is housed and sealed
- Optimized for WIP
- Reduced outer diameter and height



## **TECHNICAL DATA**

### Diameter A

Ø 225, 315, 395, 475, 590 mm

### Diameter B

Ø 105, 190, 270, 350, 460 mm

### Material door:

PE-HD, PE-EL, 316L

### main frame: 316L seal: silicone

### System

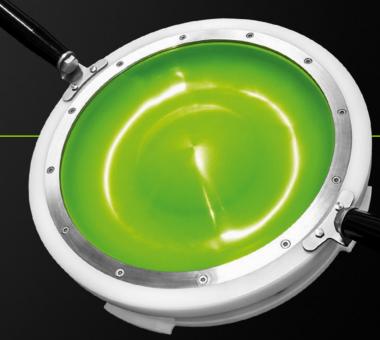
(castus safety interlock system) patented safety lock

## + OPTIONS

Customised handles, Limit stop operable from the outside

## optional **FALSE CONTAINER**

Accessory to open the alpha Port during decontamination of the isolator. By this, the surface of the alpha seal can be sterilized safely.







## -iCON-

The castus alpha Port iCON, the latest alpha Port generation, meets growing GMP standards. Operable externally, it minimizes movements within isolators or filling machines, thus minimizing the impact on airflow and the production process itself.

Focused on design and functionality, it features reduced contours for easier cleaning and efficient decontamination. Operator-friendly, it offers flexibility and ergonomic handling.

Tailored for specific applications, its engine integration and hand crank positions are adjustable in 30-degree increments.

## **OPERATIONAL SCENARIO:**

Alpha Port needs to be operated from the outside

## **TECHNICAL DATA**

Effective diameter: Ø 190, 270 mm

Material

door: 316L main frame: 316L



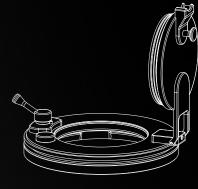
## - Flushfloor -

Elevate your safety standards with castus.

An exclusive solution designed for flush-to-floor installation within isolators. Its edge-free sleek design ensures an effortless process while handling cleaning solutions or in case of disposal of broken glass within the isolator. Experience the unique convenience and specialized features available solely from castus.

## **OPERATIONAL SCENARIO:**

Effortless waste disposal inside the isolator



## **TECHNICAL DATA**

Effective diameter:

Ø 105,190, 270, 350 mm

Materia

door: PE-HD, PE-EL, 316L

main frame: 316L

System

csis: (castus safety interlock system)

patented safety lock





## -316 L -

The beta transfer container serves the purpose of a contamination-free loading and unloading of components in or out of the isolator, their transportation and storage.

With a 60° turning motion the beta transfer container is docked to the alpha Port. Thanks to a lip seal both parts become hermetically sealed. With the castus safety interlock system the alpha Port can only be opened after the correct docking of the beta transfer container. All containers are e-polished and have a modular design.



## **TECHNICAL DATA**

### Diameter A

Ø 105, 190, 270, 350, 460 mm

### Diameter B

Ø 96, 170, 250, 330, 440 mm

### Length

up to 1 meter

## Material

body: 316L seal: silicone

### Sterilization

autoclaving

## + OPTIONS

Handles, filter protection, trolley connector, lift bolt, drawer & rail systems











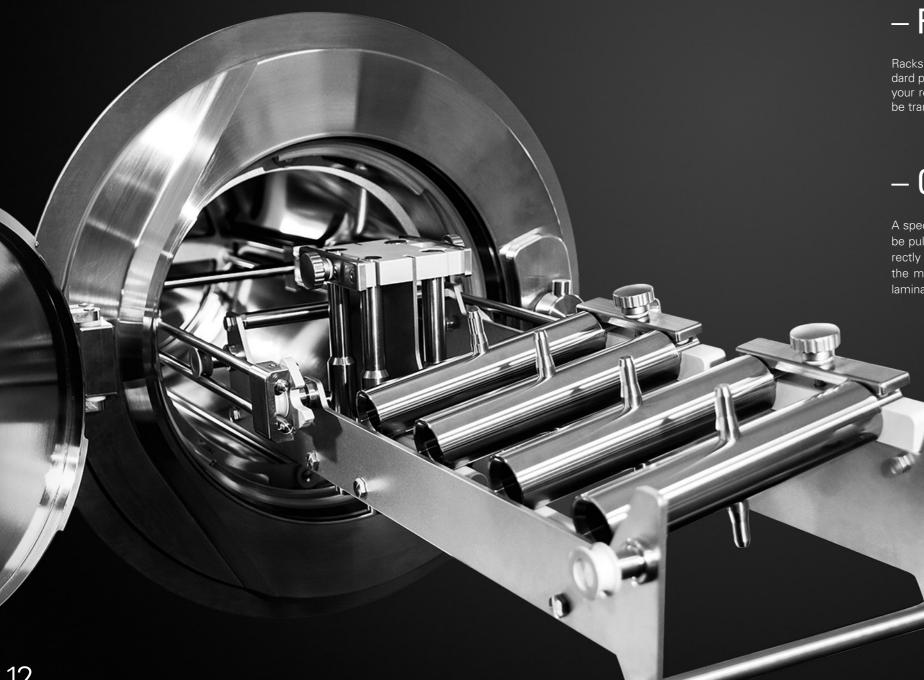


## BETA EQUIPMENT

– beta Drawer System, Rack, Cage –

## Drawer System –

The beta transfer container is made of stainless steel and its interior can be specifically equipped for the transportation of delicate components. The rack can be pulled out of the container as a drawer (drawer system) allowing easy access to the contents by the operator.







## - Rack -

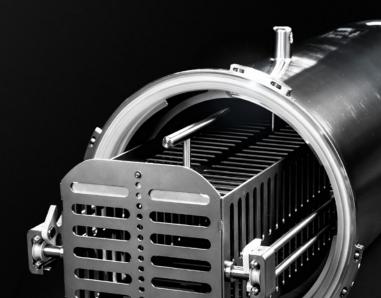
Racks allow easy handling of special format parts and also standard parts. The racks are fully autoclavable and designed as per your requirements. More delicate parts like filling needles can be transferred safely with a customized rack.

## - Cage -

A special solution for stopper and caps handling. The cage can be pulled out of the beta Transfer Container to fill the parts directly to the hopper of the filling line. If direct filling is possible, the metal slide can be eliminated, which has positive for the laminar flow of the isolator.

## **YOUR ADVANTAGES**

- safe loading and unloading of sensible components
- protection of components through fixation
- minimal contact surfaces, easy to clean
- fully autoclavable
- easy handling for operator
- rack fully extractable, can be placed in isolator
- rack is exchangeable



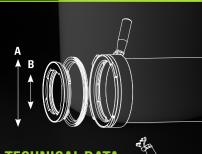
## **BETA EQUIPMENT**

beta Transfer Container PE –



The beta Transfer Container serves the purpose of loading and unloading components in or out of the isolator, their transportation and storage. The container is suitable for sterilization through gas or rays (not autoclaving). A special seamless weld production process makes the container easy to clean.

By a turning motion in the docking process of the beta Transfer Container to the alpha Port, a mechanically joined package is formed sealed at its point of contact by a lip seal. Thanks to the safety mechanism an opening of the alpha door is only possible after proper connection of the beta Transfer Container.



## **TECHNICAL DATA**

Diameter A Ø 105, 190, 270, 350, 460 mm

Diameter B

Ø 96, 170, 250, 330, 440 mm

Material

Length

body: PE

300, 400, 500 mm

seal: silicone

Sterilization

gamma irradiation

+ OPTIONS

Handles (stainless steel or plastic)



## BETA EQUIPMENT

– beta Liner PE –



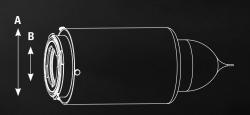
## – Liner PE –

The beta Liner allows the simple unloading of contaminated material and wastes out of the isolator.

The material to be unloaded is placed into the liner, subsequently the film can be clipped or sealed off at the desired point. The detached bag can be then disposed of.

Thanks to the special folding system 25 or 40m films can be mounted onto the PE carrier. A hard cover provides optimum

As soon as the film has been used up the castus quick-change system allows a safe change of the film cartridge in few minutes. Flange and hardcover are reusable.



## **TECHNICAL DATA**

### Diameter A

Ø 105, 190, 270, 350, 460 mm

### Diameter B

Ø 96, 170, 250, 330, 440 mm

**Length** 300, 454 mm

## **Length Film**

25, 35, 40 m

### Material

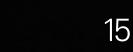
body: PE seal: silicone film: PE-HD 80µm

### Sterilization

gamma irradiation

### + OPTIONS

gamma-sterilized film







## BETA EQUIPMENT

- CSU -



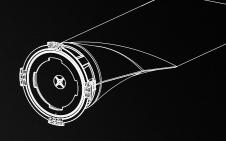
## - CSU -

The castus Single Use System (CSU) redefines sensitive produce transfer processes with its focus on safety and efficiency.

Featuring a permanently injected liquid silicone gasket that ensures reliable containment and a pre-inserted RFID chip that fulfills the requirements for progressive automation in the market. Avilable in PE for gamma-sterilization applications or out of Tyvek®/HDPE for autoclaving purposes.

Its redesigned structure facilitates better waste unloading, while increased bag capacity streamlines workflows.

This system enables faster, more flexible processes and a redefinition to the existing solutions.



## **TECHNICAL DATA**

### Diameter

Ø 190 mm

### Material

Flange and Lid: Polycarbonate
Cover Lid: PET
Gasket: Silicone
Ring: PE

Bag Types: PE-EVOH-PE,
Tyvek® 1073B-HDPE

## Volumes

Standard = 30 Liters, also available on demand in 5 to 100 Liters

### Sterilization

ETO, gamma irradiation, X-Ray, autoclaving

## + OPTIONS

additional chute, pre-gamma-sterilized, reusable 316l handles, trolley







## SUPPORT SOLUTIONS AND ACCESSORIES

- Leak Test Unit, Trolley, Mobilift -

## Leakage PRO –

Compact and lightweight, Leakage PRO offers versatile Compliance is key, and our software meets the strintesting for beta Container sizes ranging from 105mm to gent requirements of 21CFR Part 11, ensuring data 460mm with swift measurements tailored to object vo- integrity and regulatory adherence. The Leakage PRO lume, enabling extensive testing capabilities for various empowers you to comprehensively test the entire vocontainer volumes. The integrity of the container can be lume, including all seals, of stainless steel containers, tested before and after a product cycle or between the guaranteeing thorough examination for leakages. separate processes (e.g. autoclaving).

With a single software interface, manage multiple de- expanding the Leakage PRO's functionality and adaptavices simultaneously, streamlining your workflow ef- bility fortlessly. Enhance usability with an optional barcode scanner, simplifying operation for seamless testing Seamlessly integrate with MES systems, facilitating efprocedures.

For PE Containers, our exclusive Remotedisc is available,

ficient data management and integration within your production environment.



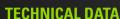
## - Trolley -

The height of the castus Trolley is adjustable by means of a hand wheel, so that the Trolley can be adapted to the height of the alpha Port. The beta Transfer Container 316L is placed on a fitted holdfast and is secured by a retaining bracket. Peek elements prevent the container from being scratched. Together with the Trolley the beta Transfer Container is arranged in the notch of the alpha Port und can be docked by a 60°-rotation. A stopper on the Trolley ensures that the container is in the right position before and after docking.

It can be adapted to the interfering contours of the workplace. Optionally, the Trolley can be equipped with a holder for the inner lid of the beta Transfer Container. The castus Trolley can be delivered fully autoclavable and can be placed in the autoclave together with the beta Transfer Container if requested.

## Mobilift –

An even more comfortable handling device is the castus Mobilift, which is powered electrically and loads up to 60 kg. Freewheeling function and central brake come as standard safety features. The Mobilift can be customized to fit customer specifications.



Testing method pressure-drop

Test pressure -20000 Pa to +20000 Pa

**Testable Containers** 105-460 (PE and 316L)















## beyond standard –

Flexible production lines and a fast-changing environment are not uncommon in the pharmaceutical industry. With our service for special solutions we always have the right product for you.

From the beta Container for the transfer of liquids or powders, individually designed racks for the transfer of delicate pumps to solutions for easier handling of heavy containers. Please contact us for your individual enquiries. We will deliver a special solution for your work.







## PROJECT MANAGEMENT

- from concept to realization -











Successful projects at castus start with learning about your requirements and involving our engineers from the very beginning.

With our own machine park, we are flexible to fulfill your wishes and deliver top-notch quality.

Stay up to date! Follow us on social media and visit our website. WWW.Castus.pro







## castus® 💢

