

DIVERSIFIED

PHARMACEUTICAL Meeting the high quality standards of pharmaceutical components often leads to major challenges. We are there to support you in precisely this regard! Designs with minimal dead space, optimal surface qualities or complex documentation records - you can master any requirement with our help.

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Our water is not just any water: pharmaceutical water, dialysis water, brewing water or water for beverage blending – wherever quality makes a difference, we provide the best filtration according to individual criteria, oriented to your concrete needs.

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BRETTEN-GÖLSHAUSEN LOCATION

From here we operate domestically and internationally – with expertise and in the 50th year of our success story.



When it comes to handling hazardous liquids and gases, extensive regulations must be observed with regard to the design, manufacturing, acceptance and documentation. We have specialised in this field and provide support with these requirements to major customers from the chemical industry that are represented globally. We manufacture our stainless steel components according to AD 2000, ASME or EN 13445, with many international approvals and acceptance options, including CRN, SELO or KEA.

FOOD & BEVERAGE

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Hygiene is of central importance in the food & beverage industry and must meet high quality standards in every area – at all times and without any gaps. Our stainless steel elements, modules and plants are made with a hygienic design and special properties specifically to suit a wide variety of applications. Filter housings, including bag filter housings, and membrane housings are just some of the components to meet the highest standards.

PLANT ENGINEERING

Effective design

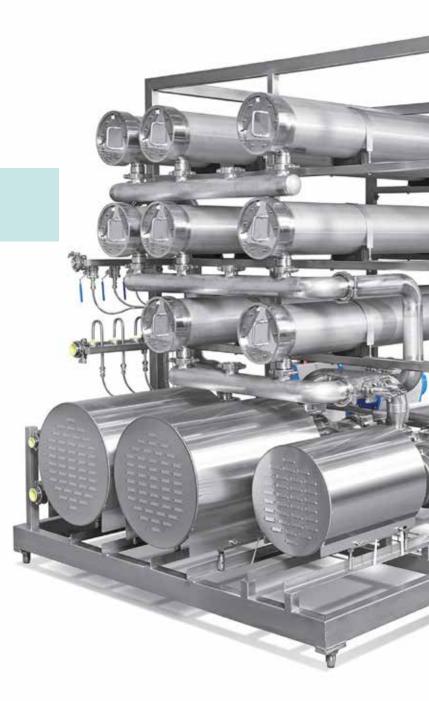
Whatever industry you come from, we will construct your plant on the basis of the flow chart, the 3D design or even just a sketch. We are happy to use our tanks, MembraLine® membrane housings or our FiltraLine® filter technology, which enable us to complete whole plants particularly quickly and optimise delivery times.

Our plant engineering processes enable us to erect structures up to eight metres high. We will furnish your plant with piping in accordance with one of the most important American standards for pipelines ASME B31.3.



Use of customer designs





TECHNICAL DETAILS:

Height up to 8 m

Pipelines in DIN, ISO and inch dimensions

Special materials; pipelines and assemblies that are subject to approval

Solutions from a single source



Testing and documentation

We carry out specific tests, such as X-rays. dye-penetrant inspections or pressure tests inhouse. At your request, an endoscopic inspection of the pipelines can be carried out by VT inspectors. It is also possible to supplement our comprehensive documentation with endoscopic filming or photography. We will be happy to welcome you to our premises for an FAT; we will of course organise the appointments for the Technical Control Board (TÜV) inspections.

We will construct your plant with the maximum precision!



MEMBRALINE® MEMBRANE HOUSINGS

For your filtration task, rely on our MembraLine[®] membrane housings, which will serve you well from microfiltration up to 160 bar high-pressure reverse osmosis and can be configured individually.

Our membrane housings are designed for various operating pressures, membrane sizes and numbers of elements. Made of high-quality stainless steel, they meet the high requirements of long-term and continuous use. In addition, they accommodate any standard membrane element.





Test your membrane elements with our MembraLine[®] test membrane housings

Membrane racks/systems

Assumption of the complete plant engineering and manufacture of the rack with collector manifolds and other piping

Special membrane housings

High-pressure applications up to 160 bar and in high-alloy stainless steels or special materials

MembraLine

TECHNICAL DETAILS:

Test membrane housings on a laboratory scale for 1.8" / 2.5" membranes

For all standard membranes from 3.8" to 8.3"

Up to 160 bar

Advantages of our MembraLine®

Modular system: the right housing for your application can be assembled from standard components without long development and design times.

Adaptation system: membrane replacement without replacing the pressure pipes

Extensive testing and documentation possible on request.

Individual solutions for specific filtration tasks and special elements; surface qualities to the industry standards of the food & beverage and pharmaceutical industries.

Accommodation of any standard membrane module of the same membrane diameter.

Wide range of connection options

Conversion of existing plants from GRP to stainless steel pipes.

Housings with certifications according to DGRL, ASME, SELO, as well as CRN and KEA registrations, possible.

RESILINE[®] MEMBRANE HOUSINGS

Membrane housings offer you unimagined possibilities and can be flexibly customised. Our ResiLine® membrane housings are suitable wherever aggressive media are used. The corrosion-resistant lining allows versatile use in different areas. The ETFE-coated membrane housings impress our customers with an attractive price-performance ratio in comparison with pure special materials. This is made possible by an ETFE coating, which is applied by means of a rotational lining process and ensures that a permanent bond is formed between the stainless steel and the polymer coating. Extremely compact plant design thanks to the use of our housings with three or four side ports; no piping required between the housings.

For aggressive media

Designs for an area subject to approval up to Cat. IV according to PED possible

Combinations with special materials



EXTRUSIONS



With our extruded distributors and collector manifolds, we are able to provide you with efficient and hygienic plant engineering. This is a significant advantage and a way of reducing the number of weld seams for customers in the pharmaceutical industry in particular, as well as for those in the food & beverage and chemical industries.

Savings in the number of pipe connection parts Reduction in the number of weld seams Minimisation of welding distortion Better weldability Use in plant engineering, pipeline construction and mechanical engineering

For food processing and water/wastewater treatment

ASEPTRALINE[®] HIGH-PRESSURE FLANGES



These **high-pressure flanges** provide you with the optimal solution for the current demands and standards of the food & beverage industry when it comes to working at high pressure. In the food & beverage industry, hygienic connections are essential at operating pressures above 40 bar: standards such as TC fittings according to DIN 32676 and aseptic connections according to DIN 11864 are no longer sufficient. For this reason, we have developed new solutions for connections in pipeline construction as well as for pump connections and housing connections.



LONGITUDINAL SIGHT GLASSES

With the **longitudinal sight glasses**, you no longer have to compromise on hygienic design and problems regarding seal installation from now on. With us, glass breakage is also a thing of the past. With the special AseptraLine' sealing geometry, we have managed to produce a seal with minimal dead space and yet to compensate for a slight welding distortion. This avoids the tension on the sight glass and makes the installation easy and safe.

Material 1.4404/316L, other materials possible Interior surfaces Ra < 0.8 μm Seals with FDA, additional certificates possible Pressures up to 63 bar, higher pressures possible on request Fields of application: food & beverage and pharmaceutical industries

FILTRALINE[®] CARTRIDGE FILTER HOUSINGS





TECHNICAL DETAILS:

Operating pressures - 1 / + 10 bar

Temperatures – 10 / + 150 $^{\circ}$ C

Standard materials: 1.4404 / 1.4435 (also with reduced ferrite content), special materials on request

1-place to 80-place

Advantages of FiltraLine® cartridge filter housings

Customer-specific designs possible

High surface quality

Modular and can be adapted to different filter cartridge lengths (5", 10", 20", 30" or 40")

Heatable

Available in a completely drainable design, specifically for the pharmaceutical industry

Wide variety of possible documentation available

Can be combined with AseptraLine longitudinal sight glass

Liquid filtration and gas filtration (gases, CO_2 , N_2 , H_2 , etc.)

Fields of application: chemicals, food technology (F&B), pharmaceutical industry



FILTRALINE[®] BAG FILTER HOUSINGS

Hygienic design

Various nominal widths and connection options

Variations with additional connections

Filter bags with various levels of fineness

Our **FiltraLine® bag filter housings** for efficient pre-filtration for plants, especially membrane plants, and the filtration of liquid media meet the highest standards. Since 2004, our bag filter housings have met the highest standards in the food & beverage and chemical industries and in the field of water technology. The bag filter housings can be customised in various nominal widths and connections. The filter bag that is available as an option provides different levels of fineness for maximum efficiency.



Unribbed Various fastening options Quick-release fastener Folding screw design possible



FILTRALINE[®] MODULE FILTER HOUSINGS

Hygienic design

Various nominal widths and connection options

Variations with additional connections

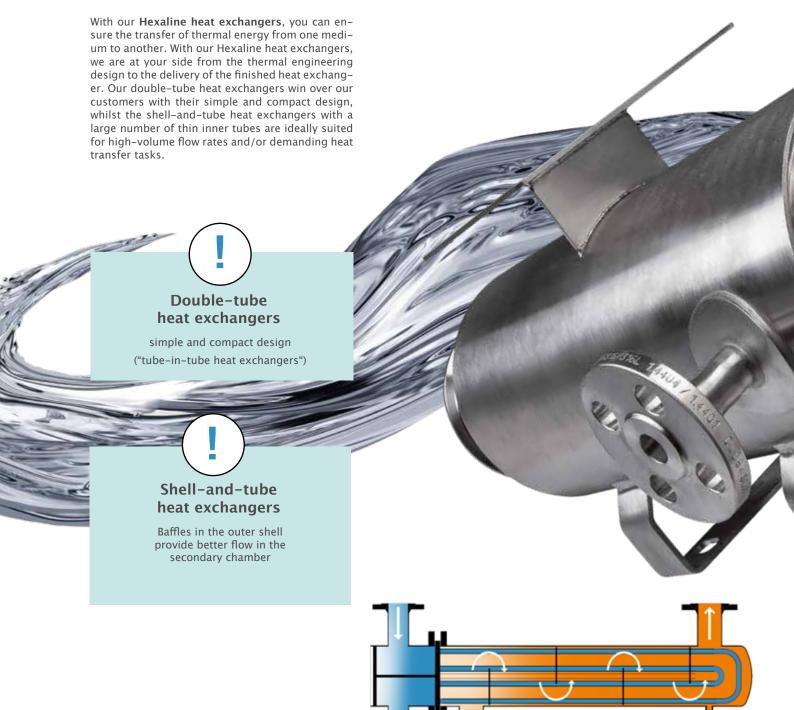
Pneumatic clamping unit

Various materials possible

Here we impress our customers with a sophisticated design of up to six lens modules arranged one above the other and a contact pressure on the modules that can be changed from the outside. This is unbeatable when an efficient filtration and separation of liquids and gases must be ensured. Whether they are used in the food & beverage, pharmaceutical, chemical or water industry, our 12" or 16" modular filters are optionally available with a flat-sealing or double O-ring connection. Also with regard to the selection of materials and the module heights, we manufacture our innovative FiltraLine modular filters according to the customer's requirements and the filtration task.



HEXALINE HEAT EXCHANGERS



Functional principle of heat exchangers

Advantages of our Hexaline heat exchangers

Custom-tailored product solutions for your thermal engineering heating or cooling task

Completely drainable aseptic design for the food & beverage and pharmaceutical industries

Special applications (multi-stage heat exchangers, U-tube heat exchangers)

Double-tube heat exchangers also in a pharmaceutical design

Baffles provide better flow through the heating jacket.

In the pharmaceutical industry, the DTS (doubletube-sheet) design is used, in which the primary and secondary compartments are completely isolated from each other by means of an additional head plate, in order to prevent any mixing of the two media.

TANKS



Volume from 0.5 l to 1,500 l with a heating or cooling or insulation jacket Agitator or bottom outlet valve Designed according to AD2000, EN13445, ASME

As a specialist in stainless steel processing, we offer high-quality tanks in various designs for your individual challenges. With the production of pressure tanks, process tanks, bioreactors, fermenters, agitator tanks and storage tanks made of stainless steel, we can meet all requirements. With volumes from 1.5 I to 1,500 I, with heating or cooling jackets, insulation jackets, agitators or bottom outlet valves. You can make the decisions in line with your requirements.



Specific tests, such as X-rays, dye-penetrant inspections, riboflavin spray shadow tests or pressure tests, possible in-house

Design and layout of the tanks created in close consultation with the customer

Completely drainable in accordance with ASME BPE 2016 SD-6.4



ACCEPTANCE DOCUMENTS & APPROVALS

ISO 9001:2015 ZERTIFIKAT Our stainless steel pressure components are designed and calculated according to AD2000 as Servertant A Med standard. The set of rules is widely accepted even Carlot And outside Germany due to its testing and documentation requirements. Our pressure equipment can be delivered with the following acceptance documents or approvals: DGRL 2014/68/EU Module A to H/H1 ASME Sec. VIII Div. 1 U-Stamp, UM-Stamp and R-Stamp SELO licence (China Special Equipment Licensing Office) **CRN** (Canadian Registration) KEA (Korea Energy Agency) UKCA marking (Certificate for export to Great Britain) CANADA BRETTEN From here we operate domestically USA 🕓 and internationally - with the expertise arising from 50 years of experience.

Quality management, certified according to DIN

You can find detailed information at: www.sus-bretten.de/en/approvals-certificates/ 0

KOREA

CHINA

SOLUTIONS FROM A SINGLE SOURCE

In a 13,500 m² production and administration area, we execute all the production steps from a single source. Every day, approximately 160 employees work to achieve our primary goal: your satisfaction. With our modern and versatile high-tech machinery, we are able to implement numerous manufacturing options. We also have manufacturing and welding approvals for special materials. CNC machines, grinding robots, 3D milling machines, a 5-axis machining centre, and plasma and orbital welding equipment are used in our manufacturing and assembly processes. We also do the pickling and e-polishing in-house. We are also constantly investing in the expansion of our machinery and our capacities in order to meet the high demand, both domestically and internationally.



We turn your idea into a concept: due to our 50 years of experience, we not only have a large range of products, but also comprehensive knowledge that we can call upon in order to implement your ideas. Whether you bring us a picture, a sketch or a flow chart, we will make

a flow chart, we will make something out of it!



Our design department creates 3D designs on Inventor and will provide you with stp-files on request.



Service with passion

A partner that is really there for you!

Technical advice, FAT, remote FAT

50 YEARS OF EXPERTISE IN STAINLESS STEEL

Know-how and years of experience in the industry come together in our around 160 employees. In 2022, Sommer und Strassburger and HUBL came together to form the newly established INEX Solutions GmbH. Together, we are your leading solutions provider in the



field of stainless steel processing.

3 PRODUCTION

Our production department is the beating heart of Sommer & Strassburger; it sets our pace. Intelligent software for optimal production planning has increased our tempo.

CONTROL

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Every product that we deliver is checked by our quality assurance department. We are, of course, also there for you after the delivery.



Contact and service

Our team will be happy to provide you with comprehensive advice!

+49 (0) 72 52 / 93 95 - 0 info@sus-bretten.de www.sus-bretten.de



We act responsibly.

As one of the leading companies in stainless steel plant engineering, we see it as a matter of course to act sustainably in the areas that are within our control. We also stand for regional production partnerships: together we can make a difference!

We are working to continuously reduce our carbon footprint.



A company in the GESCO Group

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