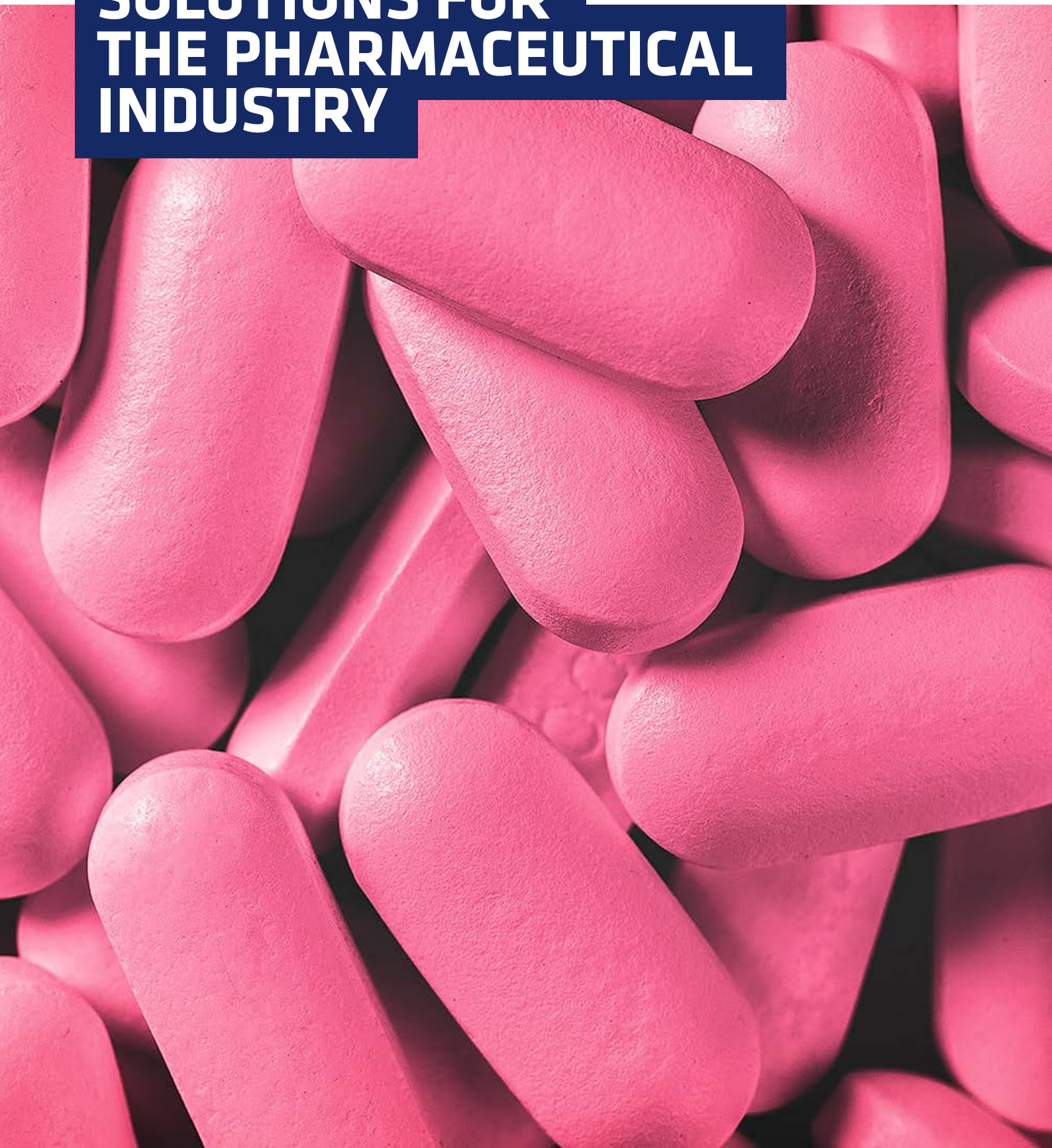




# **SOLUTIONS FOR THE PHARMACEUTICAL INDUSTRY**



# WELCOME

## ABOUT US

As one of the world's leading manufacturer of stainless steel containers, THIELMANN delivers unsurpassed container expertise. The profound knowledge we've gathered in more than 275 years of container production and use, in a diverse range of industries, render us uniquely qualified to confidently and successfully tackle your business challenge.

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# THE BEST CHOICE FOR MAINTAINING THE INTEGRITY OF YOUR PHARMACEUTICAL PRODUCTS THROUGHOUT THEIR JOURNEY

THIELMANN IS AN ESSENTIAL SUPPLIER TO MANUFACTURERS OF PHARMACEUTICALS, ENABLING THEM TO STORE AND TRANSPORT THEIR PRODUCTS IN COMPLIANCE WITH THE HIGHEST QUALITY AND SAFETY CERTIFICATIONS IN EVEN THE MOST DEMANDING CONDITIONS. YOUR TRUST IN THIELMANN MEANS TOTAL QUALITY ASSURANCE FOR YOUR CUSTOMERS

**Pharmaceutical products are subject to constant quality controls and testing. These requirements are indispensable for distributing them to end consumers, and it is essential that they travel in storage and transport containers that fully guarantee their efficacy and integrity.**

THIELMANN's range of containers for the pharmaceutical industry offers all of the guarantees and reliability demanded by the different quality certifications. Because they are made from AISI 304 / AISI 316 austenitic stainless steel, the products inside remain intact, uncontaminated by air, oxidation or container particles, and unaltered by temperature. Stainless steel preserves all of their properties.

Our proprietary discharge systems ensure complete product emptying, thus avoiding contact with any external element and also guaranteeing the safety of your employees. Your product thereby remains unaltered until it enters your manufacturing plant. A safe solution offering you assurance and peace of mind, which is also 100% recyclable and environmentally friendly.

In any case, your partnership with THIELMANN gives you access to a global engineering team, a solution with a geometrically perfect design and, most important of all, special attention and adaptation to your specific needs.

## ADVANTAGES OF STAINLESS STEEL FOR THE PHARMACEUTICAL INDUSTRY

- Hermetic storage that prevents the entry of external substances and agents.
- Best choice for hazardous materials for contamination-free and clean room requirements.
- Perfect geometry that eliminates bridging, rat-holing, or segregation.
- Smooth performance in your plant processes.

THIELMANN containers are an excellent choice for storing and transporting pharmaceutical products and keep them intact and unchanged from the moment they are filled.

If you would like our advice on the ideal stainless containers for your pharmaceutical products, do not hesitate to contact us. We are eager to hear from you.



# INDUSTRY APPLICATIONS

## ACTIVE PHARMACEUTICAL INGREDIENTS (API)

Active pharmaceutical ingredients (API) are pure drug powders that should be free from any impurities and foreign materials. Our stainless steel container solutions are made with precision to assure the integrity of drug powder during storage, transport, and manufacturing.

## ORAL SOLID DOSAGE (OSDS)

We supply a wide range of containers to store any type of OSD form like tablets, capsules, chewable, effervescent, or caplets, perfectly designed to protect to friable oral solid dosage forms like tablets against mechanical stress. We provide specialist dosing systems automation for precise and repeatable results at scale.

## LIQUID MEDICINE (SYRUP, SOLUTIONS, AND MIXTURES)

Liquid medicines remain unblemished, uncontaminated by air, oxidation, or container particles, and unaltered by temperature by using THIELMANN's containers specifically made for the pharmaceutical industry. Our wide range of containers can store a range of liquid drugs like syrups, ointments, emulsions, eye drops, etc. The perfect geometry of the container ensures the good flowability of any type of liquid dosage form.

## MEDICAL GASES

Our containers can be used to store medical gases used in treatment like anesthesia and driving medical devices and tools. There is mainly 7 kind of gases used: oxygen, nitrogen, nitrous oxide, helium, argon, carbon dioxide, and compressed air. Most of these gases can be stored for a specific time in our container with the required pressure and safety assurance.

## DRUG ADDITIVES

THIELMANN stainless steel containers are the best choice to store drug additives and excipients. They can handle powder, liquid, or oily excipients with safety and integrity assurance. We provide a wide variety of bulk materials containers to keep excipients in airtight condition over a wide range of temperatures.

## INHALABLE FINE POWDERS

THIELMANN stainless steel containers are ideal for storage, transport and dosing of inhalable fine powders with quality assurance. The appropriate cone or butterfly valve system ensures the elimination of bridging, rat-holing, and segregation during operations.

## BIOPHARMACEUTICAL PRODUCTS

THIELMANN stainless steel containers can be used for the storage and transportation of a wide range of biopharmaceutical products like vitamins, hormones, blood factors, etc. Usually, these products are very sensitive to the outer environment and temperature. We supply containers for hermetic storage that prevents the entry of external substances and agents.

## OTHER RELEVANT APPLICATIONS

- Saline solutions
- Rubbin alcohol
- Vitamins
- Suppositories
- Insuline
- Soap
- Cannabis
- Inhalant substances
- Dental fluor
- Blood & Blood processing
- Pelletization
- Pharmaceutical lotions
- Therapeutic Monoclonal Antibodies (mAbs)
- Vaccines

These are indicative applications you might use our containers for. The raw materials you work with will always be submitted for technical evaluation by our experts first. They will subsequently review and recommend the best containment solution to meet your needs based on residence time, temperature and concentration of your materials. Please contact us to check the suitability of your application.

# CERTIFIED QUALITY

## RIGOROUSLY TESTED AND FULLY ACCREDITED STAINLESS STEEL CONTAINER SOLUTIONS

Now, more than ever before it is key that your container solutions carry the relevant certifications or approvals proving that they have met specific safety and quality standards. Quality control is a key part of our business, and thanks to our global reach we are well-versed in the international expectations demanded from us by our customers to achieve these certification requirements.

We have many years of experience in managing these quality assurance processes with clearly defined practices,

documentation and control procedures which confidently deliver exhaustively tested and fully accredited certified solutions, delivering quality that is second to none.

THIELMANN containers can be adapted to comply with all international markings and regulations, offering total assurance and peace of mind that our solutions have met the rigorous standards to assure quality, safety, and protection of the environment and human life.

### ISO 9001

Internationally recognized quality management system standard.

### WHG

Certified to act as a specialist company in compliance with Germany's Water Resource Act.

### CE APPROVAL

According to Pressure Vessel Directive 97/23/ECC for fluid categories 1 (dangerous) and 2 (non dangerous).

### ASME "U"

Certified Pressure Vessel manufacturer in accordance with ASME Code Section VIII Division I (ASME U Certificate Holder)

### AD 2000

Certified for the AD 2000 pressure vessel code in Germany.

### UL APPROVALS

(Underwriters Laboratories) Approval for electrical equipment used in the US.

### ADR

Transport by road.

### GMP CONFORMITY

Good Manufacturing Practices: Regulation for risk minimization during pharmaceutical production.

### UN APPROVAL

Regulation for the transport of dangerous goods.

### ATEX

Explosives Atmospheres. Explosion prevention and protection.

### NATIONAL BOARD "R" AND "NB"

Certified for the repair and/or alteration of boilers, pressure vessels, and other pressure-retaining items.

### ISO 3834-2

Quality certified for fusion welding of metallic materials.

### DOT

US Vibration tests.

### RID

Transport by rail.

### IMDG

Transport by sea.

Our technical team will assist you to guarantee that your products are safely stored and transported from the point of origin to the destination fulfilling all the requirements that apply to them. Please contact us to request further information about any certification or approval needed.

# SMALL INDUSTRIAL CONTAINERS

## ASME STAINLESS STEEL PRESSURE VESSEL

ASME PORTABLE STAINLESS STEEL PRESSURE VESSEL,  
DESIGNED FOR STATIONARY USE UNDER PRESSURE

THIELMANN General Purpose Pressure Vessel can be built in accordance with the requirements of the ASME Boiler and Pressure Vessels code and are designed for multiple applications. They are safe for use up to a maximum working pressure of 145 psi (10 bar), and are manufactured using only the highest quality stainless steel (AISI 304, up to AISI 316L/AISI 316 Ti).

THIELMANN Pressure Vessels represent the perfect solution for storing liquids under pressure, which are generally used for laboratory analysis and sampling purposes or for different testing procedures. They are available in several industry relevant (e.g. lubrication industry) sizes and specifications.

Equipped with an easy-to-handle oval handhole cover and a pressure relief valve, THIELMANN ASME General Purpose Pressure Vessels can also come equipped with an additional safety valve and/or a pressure gauge on request.



### VOLUME

3.8 - 200 Liters / 1 - 53 Gallons



## MULTIPURPOSE VESSELS

FLEXIBLE CONTAINER SOLUTION AVAILABLE IN MANY  
DIFFERENT SIZING FORMATS

THIELMANN Multipurpose Vessels are suitable for products which do not require any specific certification. As such, this renders them the ideal versatile solution for customers who require a flexible high quality container suitable for a multitude of different applications.

The main advantage of the THIELMANN Multipurpose Vessel is the vast range of flexible customization options available. For example, they can be constructed using either AISI 304 or AISI 316L/316Ti high quality stainless steel depending on your requirements, and are also available in many different capacity formats from 0.6 - 66 gallons (2.5- 250 Liters). The different diameter sizing options range from 216mm - 550mm.

Due to their customizable nature you can create a truly unique high quality container solution for use within a myriad of industries.



### VOLUME

2.5 - 250 Liters / 0.6 - 66 Gallons





## CE PRESSURE VESSEL FOR HIGH PURITY APPLICATIONS

CE STAINLESS STEEL PRESSURE VESSEL, DESIGNED FOR STATIONARY USE UNDER PRESSURE

With decades of experience in the production of stainless steel containers and drums, THIELMANN confidently designs and delivers customized products.

Our portable stainless steel pressure vessels are manufactured using only the highest quality stainless steel (AISI 304, up to AISI 316L) can be built in accordance with the requirements of CE.

If required, the surfaces of our pressure vessels and containers can be treated with electro polishing, in this process, metal is removed ion by ion from the surface of the object via electrolysis. As a result, the surface of the metal is microscopically featureless, with not even the smallest speck of a torn surface remaining, this therefore avoids the deposit of any material whatsoever.



VOLUME

From 5.7 to 120 Liters / 1.5 - 32 Gallons



## PORTABLE PRESSURE VESSEL TROLLEY

ALLOWING YOU TO MOVE PRESSURE VESSELS AROUND YOUR FACILITY WITH EASE

THIELMANN Portable Wheeled Pressure Vessel Trolleys provide a safe and convenient solution for the transport of pressure vessels around your facility with ease. They are constructed using high quality stainless steel, safeguarding your delicate cargo under pressure from UV light as well as external impurities and sudden temperature changes.

THIELMANN's state of the art manufacturing processes ensure a superbly built final product which is durable, easy to handle and simple to clean and maintain.

Our Portable Wheeled Pressure Vessel Trolleys are available in a standard capacity format of 5 gallons (19 liters) with a diameter of 216mm, however on request can be customized to any desired size or capacity format, and can also be purpose built to your specific requirements, along with a whole host of further personalization options.



VOLUME

19 - 100 Liters / 5 - 26 Gallons



## ION EXCHANGE VESSELS

### CE APPROVED VESSEL FOR WATER SOFTENING AND ION EXCHANGE

Pressure vessels are the holding vessels for ion exchange resins and can play an integral part of most water treatments systems. These pressure vessels are an essential component within the Water Treatment Industry to ensure impeccable water softening and demineralization.

Our Water Treatment Pressure Vessels are manufactured using only the highest quality stainless steels (AISI 316Ti) and can be used at varying temperatures and pressures. These vessels are designed to be filled with the correct resin mixture in order to remove ions from the water.

THIELMANN supplies ion exchanger solutions in stainless steel that perform desalinization, decalcification and decarbonizing tailor-made to your specific business needs.

THIELMANN. Your preferred industrial partner for custom-made pressure vessels.



VOLUME

10 - 100 Liters / 2.6 - 26 Gallons



## HAZARDOUS STORAGE & TRANSPORT VESSEL

### UN APPROVED VESSEL SUITABLE FOR MANY APPLICATIONS, INCLUDING ASME APPROVED STORAGE, FILLING AND EMPTYING

THIELMANN UN Vessels for hazardous products are constructed using high quality stainless steel (AISI 304, up to AISI 316L) and are designed for the storage and transportation of dangerous goods, and other products commonly used within the Oil & Biofuel, Biotechnology, Chemical, Health & Beauty, Pharmaceutical, Hygiene, Semi-Conductor, Food, Pulp & Paper and Power Generation industries.

They are suitable for applications under pressure, including stationary filling and emptying, and as part of our extensive customization options, THIELMANN UN Approved Stainless Steel Vessels can be built in accordance with the requirements of CE or the ASME Boiler and Pressure Vessels code.



VOLUME

10 - 250 Liters / 2.6 - 66 Gallons





## PHARMA ASEPTIC VESSEL

FULLY ASEPTIC UN OR ASME PRESSURE VESSEL DESIGNED FOR USE WITHIN THE PHARMACEUTICAL AND BIOPHARMACEUTICAL INDUSTRIES

THIELMANN Stainless Steel Aseptic Vessels are designed and purpose-built specifically for applications within the Pharmaceutical and Biopharmaceutical industries, for example, for research and development purposes, as well as, for the creation of medical-grade drugs.

Manufactured using high-quality stainless steel, they are durable container solutions for materials that need to be kept under pressure. A fully aseptic process is guaranteed with a THIELMANN Hygienic Pressure Vessel thanks to the smooth and seamless interior. If required, the surfaces of our Aseptic Pressure Vessels can be treated with electropolishing, in this process, metal is removed ion by ion from the surface via electrolysis. As a result, the surface of the metal is microscopically featureless, with not even the smallest speck of torn surface remaining, this, therefore, avoids the future deposit of any material whatsoever.



VOLUME

10 - 250 Liters / 2.6 - 66 Gallons



## CHEMICAL CONTAINER

UN APPROVED CONTAINER FOR THE TRANSPORT AND STORAGE OF DANGEROUS MATERIALS AND LIQUIDS

Our containers and drums are designed and purpose built for use with ADR/RID hazardous substances I, II, and III (X/Y/Z). We are also able to provide certifications in line with IMDG, ICAO and DOT compliance.

Our pressure resistant stainless steel containers are designed for UN hazardous material transport and storage of flammable liquids (class 3), flammable solids (class 4), oxidizing substances and organic peroxides (class 5), toxic substances (class 6.1), corrosive products (class 8) and other substances (class 9).

Depending on your specific requirements, the surfaces of our pressure vessels and containers can be treated with electro polishing. In this process, metal is removed ion by ion from the surface of the object via electrolysis. As a result, the surface of the metal is microscopically featureless, with not even the smallest speck of a torn surface remaining, thus avoiding the deposit of any material.



VOLUME

10 - 250 Liters / 2.6 - 66 Gallons



# INTERMEDIATE BULK CONTAINERS - IBCS

## IBCS FOR BULK SOLIDS

### LNB PHARMACEUTICAL IBC CONTAINER

#### IBC FOR PHARMACEUTICAL POWDERS AND BULK SOLID MATERIALS

LNB pharmaceutical container features ideal cleaning geometry, residue-free emptying and non-permeation. With great variety in sizes and non-wearing construction which allows continual re-use, the LNB bulk material container made of stainless steel meets all your requirements.

Our striving for quality and perfection ensures the highest possible degree of safety and longevity. Your requirements and our pioneer culture give rise to customized, innovative products made of stainless steel.



VOLUME

500 - 1200 Liters / 132 - 317 Gallons



### BULK CONTAINER BPO

#### IBC FOR BULK MATERIALS WITH SELF-SUPPORTING DESIGN

BPO features ideal cleaning geometry, residue-free emptying and is non-permeable. With great variety in sizes and non-wearing construction which allows continual re-use, the BPO bulk material container made of stainless steel meets all your requirements.

Our striving for quality and perfection ensures the highest possible degree of safety and longevity. Your requirements and our pioneer culture give rise to customized, innovative products made of stainless steel.



VOLUME

600 - 3000 Liters / 158 - 792 Gallons



## BULK CONTAINER BP

### IBC FOR DANGEROUS POWDER AND BULK SOLID MATERIALS

BP Bulk Container features ideal cleaning geometry, residue-free emptying and is non-permeable. With great variety in sizes and non-wearing construction which allows continual re-use, the BP bulk material container made of stainless steel meets all your requirements.

Our striving for quality and perfection ensures the highest possible degree of safety and longevity. Your requirements and our pioneer culture give rise to customized, innovative products made of stainless steel.



VOLUME

200 - 2000 Liters / 53 - 528 Gallons



### IBCS FOR LIQUIDS

## METERCUBE IBC CONTAINER

### CUBIC IBC FOR LIQUIDS WITH OPTIMAL SPACE UTILIZATION

MeterCUBE Cubic Container features ideal cleaning geometry, residue-free emptying, is non-permeable and unbeatable service life. The MeterCUBE made of stainless steel meets all your requirements.

Our striving for quality and perfection ensures the highest possible degree of safety and lifespan. Your requirements and our pioneer culture give rise to customized, innovative products made of stainless steel.

Cost-efficient, cubic IBC for liquids with optimal space optimization.



VOLUME

1000 Liters / 264 Gallons



## CUBICAL CONTAINER LTP

### CUBIC IBC FOR LIQUIDS

LTP cubic container features ideal cleaning geometry, residue-free emptying, is non-permeable and unbeatable service life. With great variety in sizes and non-wearing construction which allows continual re-use, the LTP Cubic Container made of stainless steel meets all your requirements.

Our striving for quality and perfection ensures the highest possible degree of safety and lifespan. Your requirements and our pioneer culture give rise to customized, innovative products made of stainless steel.



VOLUME

250 - 2000 Liters / 66 - 528 Gallons





## TPN CUBICAL IBC CONTAINER

CUBIC IBC FOR STORAGE AND TRANSPORT OF LIQUIDS WITH PROTECTING FRAME

The robust construction allows long-standing performance as a reusable container. With great variety in sizes and non-wearing construction which allows continual re-use, the TPN container made of stainless steel meets all your requirements.

Our striving for quality and perfection ensures the highest possible degree of safety and longevity. Your requirements and our pioneer culture give rise to customized, innovative products made of stainless steel.



VOLUME

445 - 1250 Liters / 117 - 330 Gallons



## CYLINDRICAL CONTAINER LATERAL OUTLET IBCZ-LO

CYLINDRICAL IBC FOR LIQUIDS WITH A HANDY CORNER OUTLET VALVE

The new THIELMANN cylindrical container is here offering an improved design along with an impressive 90kg weight reduction.

The optimized re-design of the IBCz-LO means that it is suitable for a multitude of applications, because it combines clean design, with the durability required to fulfill the demanding requirements that UN approved vessels for dangerous goods need to meet. Minimizes the overall weight without compromising on safety.



VOLUME

500 - 1000 Liters / 132 - 264 Gallons



## ELECTRIC HEATABLE CONTAINER ZBEI

ELECTRICALLY HEATED IBC FOR TEMPERATURE SENSITIVE AND POOR FLOWING LIQUIDS

ZBEI electrically heatable container features optimal product temperature, ideal cleaning geometry, residue-free emptying, and is non-permeable. With great variety in sizes and non-wearing construction which allows continual re-use, the ZBEI container made of stainless steel meets all your requirements.

Our striving for quality and perfection ensures the highest possible degree of safety and longevity. Your requirements and our pioneer culture give rise to customised, innovative products made of stainless steel.



VOLUME

500 - 1250 Liters / 132 - 330 Gallons



## HORIZONTAL TANK CONTAINER TCL

### TANK CONTAINER FOR HIGH-HAZARD LIQUIDS

TCL tank containers feature ideal cleaning geometry, residue-free emptying and is non-permeable. With great variety in sizes and non-wearing construction which allows continual re-use, the TCL containers made of stainless steel meet all your requirements.

Our striving for quality and perfection ensures the highest possible degree of safety and longevity. Your requirements and our pioneer culture give rise to customized, innovative products made of stainless steel.



VOLUME

500 - 1250 Liters / 132 - 330 Gallons



## VERTICAL TANK CONTAINER TCS

### TANK CONTAINER FOR HIGH-HAZARD LIQUIDS

TCS tank containers feature ideal cleaning geometry, residue-free emptying and is non-permeable. With great variety in sizes and non-wearing construction which allows continual re-use, the TCS containers made of stainless steel meet all your requirements.

Our striving for quality and perfection ensures the highest possible degree of safety and longevity. Your requirements and our pioneer culture give rise to customized, innovative products made of stainless steel.



VOLUME

500 - 1250 Liters / 132 - 330 Gallons



## OFFSHORE CONTAINER

## OFFSHORE CONTAINER SYSTEM

### DNV CERTIFIED FRAME TO SAFELY OFFSHORE TRANSPORT IBC SYSTEMS

The THIELMANN offshore container system with DNV frame has been designed to offer the safest solution for the storage and transportation of chemicals for oil and gas drilling operations. It can carry between 1-3 Intermediate Bulk Containers (IBCs) per frame, and is built to resist the corrosive effects of sea water.



VOLUME

1000 - 1500 Liters / 264 - 396 Gallons





Open lid before operating the discharge valve

## ACCESSORIES & SPARE PARTS

### ACCESSORIES & SPARE PARTS FOR INTERMEDIATE BULK CONTAINERS

THIELMANN has available suitable accessories and spare parts for virtually any application and interface so as to meet the individual requirements of your production and your product flow.

Please have a look at our spare parts catalog – our customer services are happy to help you.

[Go to the Spare Parts online shop>](#)







# TANK CONTAINER SOLUTIONS

## ALKALI STORAGE AND TRANSPORT TANK

### ALST RANGE

THIELMANN has been delivering specialized units for the storage and transport of alkalis in any supply-chain for over 40 years. Sensitive cargoes can be protected by heating/cooling systems as required, together with other safety equipment, such as burst-pressure blow-o discs.

### SUITS PRODUCTS

Diverse organic and inorganic liquid acid compounds.



## INORGANIC CHEMICAL STORAGE AND TRANSPORT TANK

### SAFE STORAGE AND TRANSPORT OF TOXIC AND AGGRESSIVE CHEMICALS

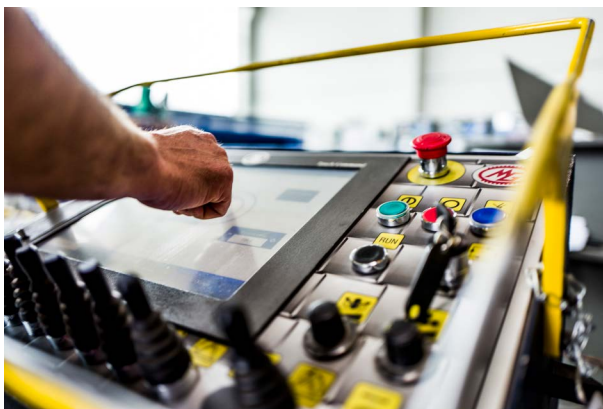
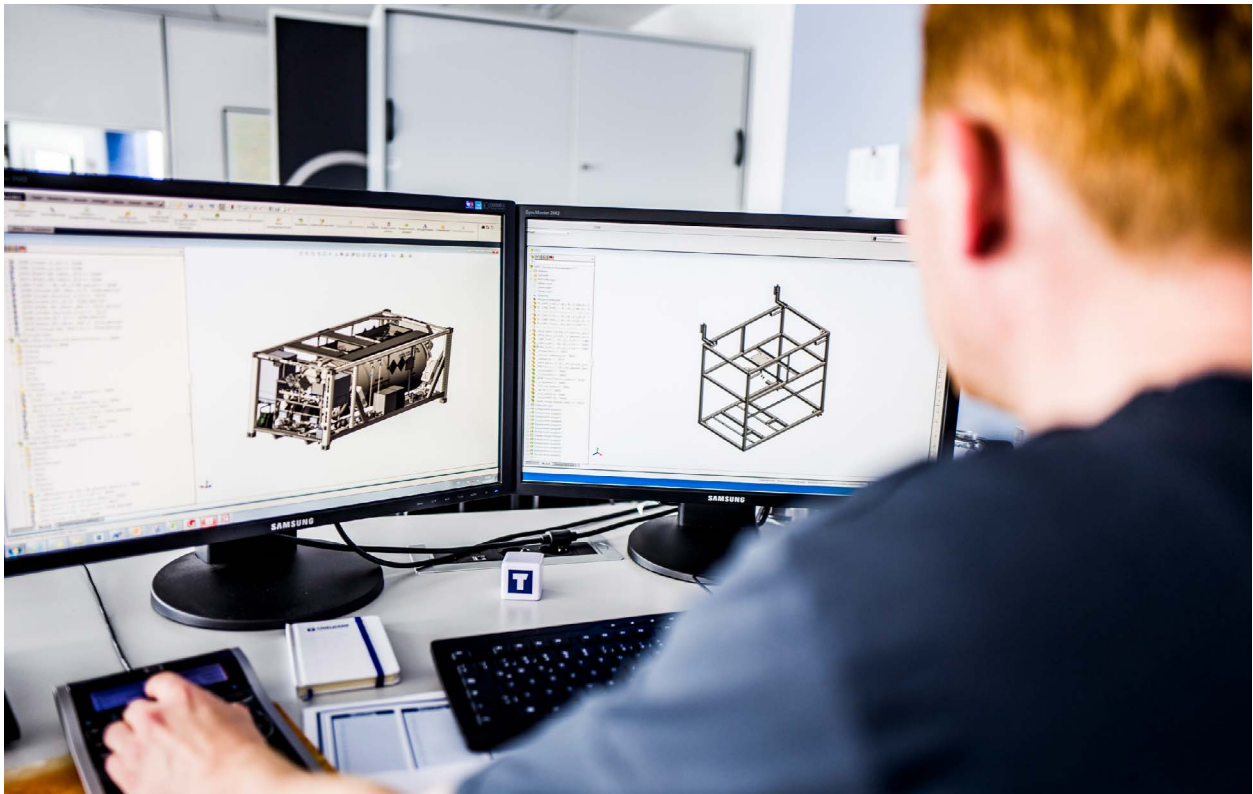
THIELMANN provides safe storage and transport solutions for some of the most toxic, corrosive and aggressive liquid inorganic chemicals on the market. From liquid bromine to aggressive chlorine compounds, THIELMANN provides the right combination of materials and excellent workmanship to handle dangerous elements and compounds.

It has a capacity of 8,350-liter and is approved for the safe transport by road, rail, or sea. This 20-ft x 8-ft x 8-ft intermodal ISO tank container is manufactured from high grade, pressure vessel quality, steel, SA 516 GR 70N, and is lined with lead for corrosion resistance.

### SUITS PRODUCTS

Liquid inorganic chemicals and compounds, highly corrosive liquids, toxic and aggressive chemicals, acids.





## SPECIALIST SOLUTIONS

FOR SPECIALIST APPLICATIONS WITH UNIQUE REQUIREMENTS, THIELMANN OFFERS A DESIGN AND MANUFACTURING SERVICE

**Whether you need deep customization of an existing product or a new 'clean sheet' design, THIELMANN engineers can design, manufacture, test and certify solutions that 100 percent meet your needs.**

Flexible enough to work with any design parameters, we can provide specialist solutions in single or double-walled designs within standard ISO or non-ISO frames.

Materials can include carbon, stainless steel (V2A / V4A) in all grades, hastelloy, nickel and titanium.

For customers operating with acids and/or alkalis, we can produce tank container solutions with an inner lining, including ChemLine, Proco-EMAIL, Säkaphen; FA, FEP, Teflon along plastic coatings; special interior lacquers; lead linings; and glass-enamel coatings.



# POWDER HANDLING SYSTEMS

## CONE VALVE TECHNOLOGY

### ADVANCED CONE VALVE SYSTEM

ADVANCED CONE VALVE SOLUTIONS FOR DIFFICULT TO FLOW BULK MATERIALS WITH ADVANCED CLEANLINESS REQUIREMENTS

The THIELMANN advanced cone valves offer an operational advantage when working with poor flowing and sticky bulk materials that have high cleanliness requirements.

Our technical experts will match your bulk material with the right advanced cone valve solution to eliminate bridging, rat-holing and segregation during operations.

Ensure precise dosing and discharge every time with zero cross-contamination.

THIELMANN advanced cone valves are designed to be safe, hygienic and easy to use. They can be controlled manually or via fully automated process to ensure precise dosing every time.



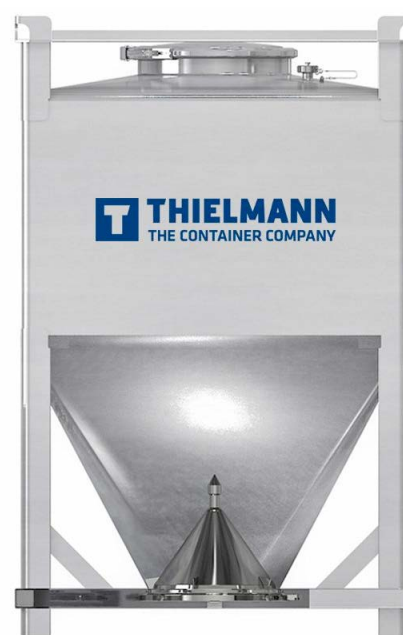
### PHARMA CONE VALVE SYSTEM

PHARMA CONE VALVE SOLUTIONS FOR OPERATIONS WITH HAZARDOUS, DIFFICULT TO FLOW BULK MATERIALS

The THIELMANN Pharma Cone Valve offers an operational advantage when working with hazardous, poor flowing and sticky bulk materials for applications with high cleanliness requirements.

Our technical experts will match your bulk material with the right Pharma Cone Valve solution to eliminate bridging, rat-holing and segregation during operations.

Pharma Cone Valves offer the highest quality solution for the transition of highly hazardous materials between container and receiving unit, with zero cross-contamination to keep the product protected from external agents, and particle-free clean room operations.





## BUTTERFLY VALVE TECHNOLOGY

### BUTTERFLY VALVE SYSTEM

BUTTERFLY VALVE SYSTEMS ARE THE BEST OPTION FOR NON-HAZARDOUS, EASY FLOW MATERIALS WITHOUT HIGH CLEANLINESS REQUIREMENTS

For the easy transfer of non-hazardous bulk materials with good flowability between container and receiving unit, THIELMANN butterfly valves are suited to a range of applications and industries.

Our butterfly valve systems can be manually, semi-automatically or full-automatically operated, giving operators maximum flexibility for their powder bulk handling operations.

Principal areas of application for the butterfly valve systems are non-hazardous, easy to flow bulk materials for operations where high levels of cleanliness are not a primary concern.



### SPLIT BUTTERFLY VALVE SYSTEM

FOR OPERATIONS WHERE CROSS-CONTAMINATION AND THE CONTAINMENT OF DUST AND PARTICLES IS A CENTRAL CONCERN

THIELMANN split butterfly valve systems are designed to meet and exceed the rigorous requirements of industries that require the very highest quality solutions for the transition of materials between container and receiving unit, particularly where highly hazardous bulk materials are in use, or where the product needs to be protected from external agents, as in the Pharma industry.

For the safe and contamination-free transfer of products between container and receiving unit, THIELMANN split butterfly valves control dust and other materials for a safe operating environment, and ensure the integrity of the end product.

Principal areas of application are highly hazardous or delicate, easy to flow bulk materials where contamination levels must be kept to a minimum, and high cleanliness is paramount.



# SERVICES OVERVIEW

Während Entleerung belüften / Vent during discharge

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**THIELMANN**  
THE CONTAINER COMPANY

FROM MAINTENANCE TO REPAIRS AND CERTIFICATIONS, AND EVEN FINANCING SOLUTIONS, HERE AT THIELMANN WE WANT TO TAKE THE HARD WORK OUT OF MANAGING YOUR CONTAINER FLEET.



## SERVICES FOR IBCS

Your trusted global partner for cleaning, maintenance and testing.

Proper maintenance and repair of your container fleet is essential to its performance, safety, uptime, and longevity.

As a company specializing in comprehensive large IBC packaging services, you can receive all services, from a single source, leaving you to focus on your core business whilst ensuring a reliable and cost-effective supply chain of clean and functioning IBCs for your customers.

Take advantage of our professional services:

- Cleaning of reusable hazardous and non-hazardous goods containers (IBCs)
- Maintenance, revision and repair of all types of metal IBCs
- Approved inspection body for statutory tests
- On-time pick-up and delivery logistics



## SERVICES FOR TANK CONTAINERS

Our systems are operated in some of the harshest environments, frequently used by operators who may not be fully conversant with the system design. **Field service support, periodic upgrades, design and safety** case reviews form a critical element of THIELMANN's integrated service package.

We provide an exceptional standard in bespoke support solutions (for our own products as well as third party products) which include:

- Post design services
- Contractor logistics support
- Contracting for availability
- Operator and maintenance training (web-based training and virtual reality simulations)
- Spares
- Codification
- Obsolescence management
- Regeneration and upgrades



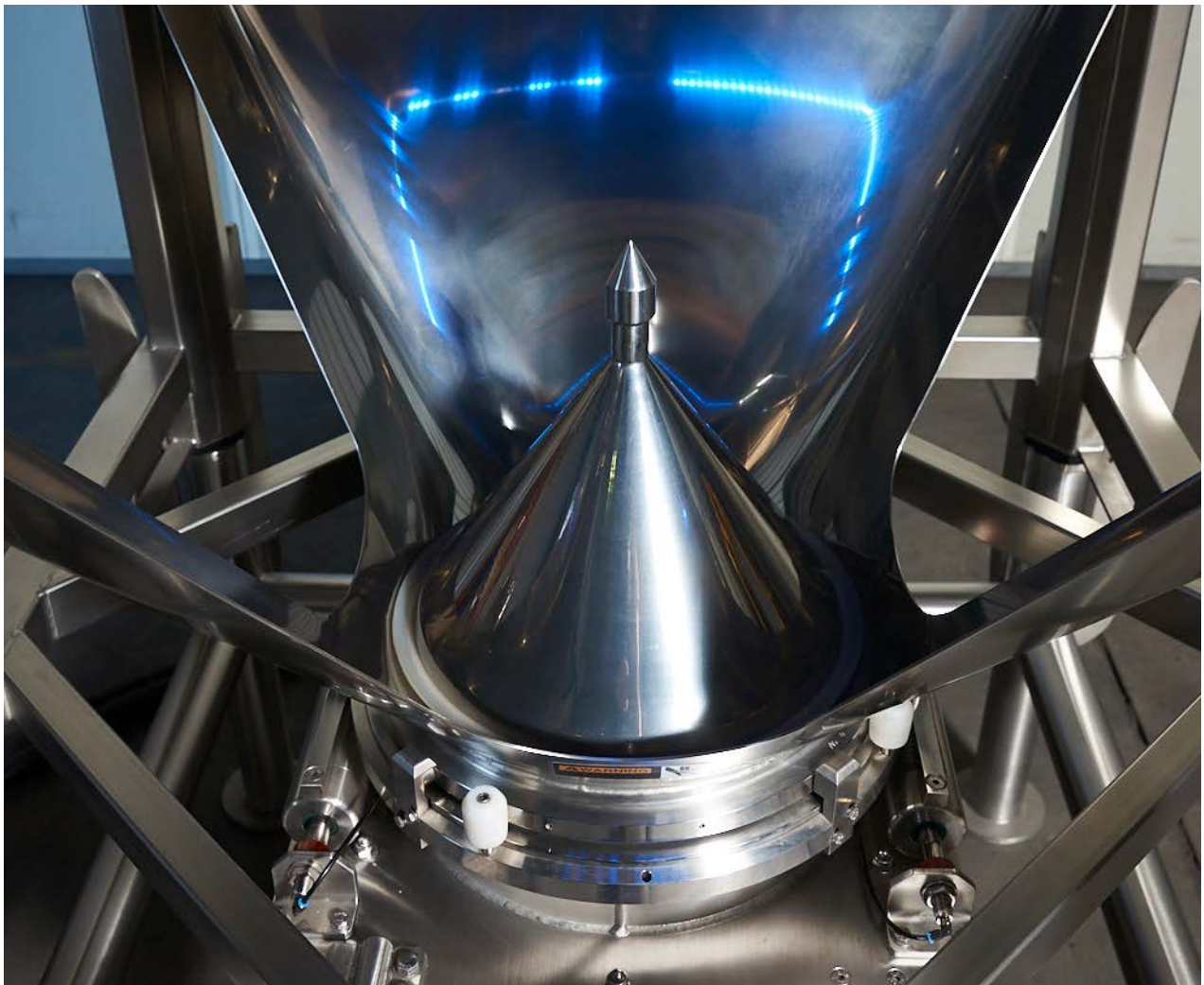
## BUYING AND SELLING SERVICES

Whether you need to dispose of your old containers or are considering buying second-hand ones, we are confident that our 360 services will have the solution for you:

- Purchasing of already-used containers from our customers, including kegs, IBC, and tank containers which we then, depending on the condition, either scrap or recondition and re-sell.
- We also offer to sell second-hand containers to our customers, which we ensure have met our own very high standards, in a wide range of sizes, specifications, and conditions.

## FINANCIAL SERVICES

THIELMANN offers customized financial solutions to meet your business objectives. Whether you're a small company or a large corporation, we have the resources and know-how to help your business to develop and expand.







# WHY THIELMANN?

Here at THIELMANN we endeavor to be the best at whatever we do, and with the reach of our global network we are fortunate that we can respond to change rapidly without causing disruption to our customers. Our commitment to the success of our customers combined with our unrivaled expertise render us the ideal partner for your container requirements. The THIELMANN team is a passionate and dynamic force which doesn't shy away from challenges - in fact we relish them!

Challenge us - and we'll confidently meet and exceed your expectations.



## CONTACT US EXPERTISE YOU CAN TRUST

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