

Professional fuel and oil supply modules

for mining machinery, vehicles and equipment







Friedemann Krampitz – Managing Director of Research and Development



... from professionals for professionals ...

Our company, the Krampitz Tanksystem GmbH, is a highly specialized manufacturer of high quality containerized units, such as transport and storage tanks, space cells and functional containers in an extremely robust design, best quality and very good design. The cooperation with approval and acceptance certification authorities, such as the German Lloyd, TÜV, BAM, DiBT and PTB is the standard operation procedure for us and part of our business.

Our customers are international operating companies from energy plant-, power plant- construction, mining and the oil- and gas industry. Our production figures speak for themselves: over 25,000 units in 22 years. Mr. Friedemann Krampitz, our Managing Director of Research and Development, himself worked for 15 years in the oil and gas industry. For this reason, we understand very well the equipment's problems and requirements for the mining industry and can provide you the right equipment for your company.

Due to the development of our company and our products, we are now in a position to offer the international mining industry a complete range of supply units. For our product range, we have designed a complete brochure series! Just ask us! We are always available to give advice!

F. Krampitz



Environmental commitment

The durability and mobility of our products reduces the use of resources. We place great emphasis on the reusability of the materials we mainly use.

We are committed to take responsibility towards nature. Therefore, we are continuously working towards the vision of an environmentally friendly production. The durability of our products saves our planet's resources. Because of the usage of top quality products, we can store and transport dangerous media safely, which would otherwise harm our nature.

Quality

A high quality CNC-machinery enables the production of tanks and containers of the highest quality

The use of high quality materials and the functionality of our tanks ensure the safe production of durable products.

The quality and functional reliability of our products is paramount and ensured by extensive testing in the manufacturing process as well as our quality management.

Our products are used in all climatic regions of the world and are exposed to the harshest conditions.



Container - production hall in Henningen



CNC - production technology



Certified welders



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Pump manufacturing in Salzwedel



Sales and development center Salzwedel

Tradition

Germany has a long history in relation to the technical construction of small and large tanks. In 1936, the first German DIN standard for tank systems was put into effect. Due to the long industrial history of Germany, extensive experience in environmental damage, the risk of storage facilities for fuel and mineral oils are known. This results in an uncompromising, hard attitude of the German regulatory authorities on innovation, technology and design of tanks, as well as one of the toughest environmental laws in this market segment worldwide.

Therefore, tanks and containers by the label „Made in Germany“ correspond usually with the highest standards in safety, function and design. We feel obliged to these claims as a successful family business with over 20 years of experience.

We have consistently accepted, implemented and further developed the technical specifications of the safety standards for petrol stations in Germany.

Our principles include both reliability and on-time delivery to our customers. A special importance is attributed to the friendly and professional customer service. The „Made in Germany“ obliges us to develop consequently our product range, as well as to supplement with innovations.





Innovation

Our task is to identify the trends of the national and international markets and to develop solutions.

We strive continuously to advance our production and to develop new products.

A comprehensive, individual counseling is our central focus.

Research and Development

Our focus lies on market-oriented and progressive research and development that helps our customers to offer innovative, enhanced products in the future.

In the long term, we wish hereby to ensure our technical and quality advantage over our competitors.

Customer orientation

Our principle is to meet professionally the expectations and individual requirements of our customers.



Traditional field of activity and main business

We are a highly specialized manufacturer of storage and transport tanks made of steel for vast storage of fuels and lubricants as well as professional modules for power supply systems.

Mission

With over 20 years of experience, we guarantee high quality, high security and an attractive, practical design.

Our standards cannot be met by imitations and copies.

Therefore, innovation and development are our constant drive. On the national and international market, we are an established manufacturer. Through the realization of international projects in many countries around the world, we have intercultural skills and understand the specific needs of different regions of the world.

In a global comparison, we know that we are already today the „Number 1 “ in terms of innovation and quality. To maintain this, we will continue to invest in innovation and technology.





Range of Service

We are a highly specialized manufacturer with a powerful production and highly motivated, professional staff members.

We attach importance to the development of our products on a high level of product safety, simple operation, installation and serviceability.

Out of our global experience, we develop high-quality standard products with a good price-performance ratio. In addition, we have also the expertise to design and to produce special tanks and containers.

Our services range from individual components to complex systems (turnkey solutions) as a fast-construction-system, which we supply to industrial and professional clients. For a better understanding, a telling comparison: Our large industrial plants can installed and expanded without any problems be just as easy like a modular construction system.

Our corporate culture is committed to manufacturing low warranty products to meet promised delivery dates and to build a good service organization. We treat our long-term customers not only as customers, but as our partners.



Why our concept validates our success

Our concept was developed by the mining professional for mining professionals. As our Development Manager, Mr. Krampitz himself was over 15 years in the oil, gas and mining industries.

For this reason, we have extensive experiences in construction of heavy-duty conditioning systems.

We now have the most approvals and certificates for the construction of tanks and tank containers and are perceived by our customers as the top specialists in this area.

Your daily work is made easier and helps you to reduce operating costs by our products, because the fueling and servicing of excavators, trucks, bulldozers and tipper can be done on-site.

This minimizes downtime and increases efficiency.

We are professionals for:

- Quick-Assembly Systems
- Quick-Refueling Systems





What products we offer:

Regardless of location, Krampitz container units are professional, flexible supply units which can be used at short notice for realizing huge major projects with several units.

What products do we have in program for the mining industry?

Stationary

- Storage tank containers made of steel for the storage of diesel and oils for supply of machinery and equipment
- Fuel, cleaning and treatment station KRP 5000
- Storage tank container for drinking water
- Fresh-keeping drinking-water and filter system Triton Tasty
- Gas station container for mining machinery
- Gas station container for vehicles and trucks
- Gas station container for aeroplanes, helicopters and small aircrafts
- Office containers for use as an office, laboratory, workshop and store
- Battery tank farms for intermediate storage of fuels
- Storage tank farms for the supply of diesel power plants with fuel
- Distribution module for the supply of fuel from up to 8 diesel engines on drilling sites



Storage tank container



GAS station container



Office container

Mobil

- Tank trailer airfield for 1000 liters of fuel for supplying of aircrafts
- „on-site“ service module for mounting on trucks for the supply of mining equipment with fuels, oils and greases
- „on-site“ maintenance module for mounting on trucks for maintenance of mining equipment in the field such as oil changes and minor repairs





Mobil service module in use



Mobil maintenance module in use



Fuel cleaning and treatment system



Fresh-keeping drinking-water system

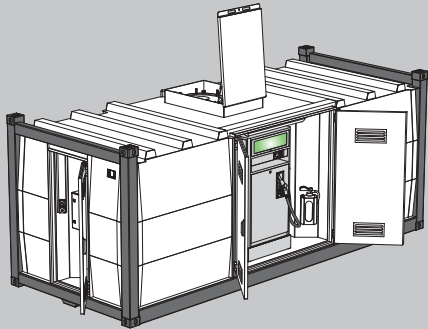


Robust - functional - ultra
modern system units
Finest German Quality





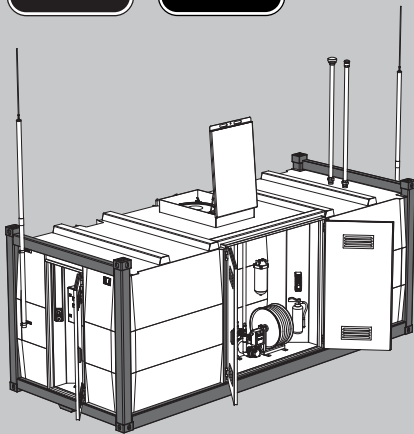
Minotaur® gas-station container are characterized by their robustness, high security, flexibility and quick installation. Equipped with extensive international approvals, they are used in all areas of professional fuel supply. The containers are suitable for all popular media such as gasoline, diesel, bio diesel, ethanol fuel, jet fuel and vegetable oil.



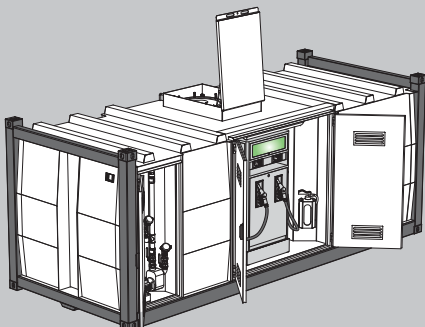
Storage tank container, industrial standard
KCD-ISO-TS-V1-20



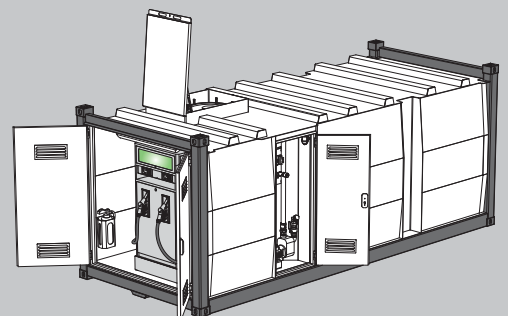
**KEROSIN
JET A1**



Storage tank container, helicopter
KCD-ISO-TS-V10-20



Storage tank container, mining standard
KCD-ISO-TS-V4-20



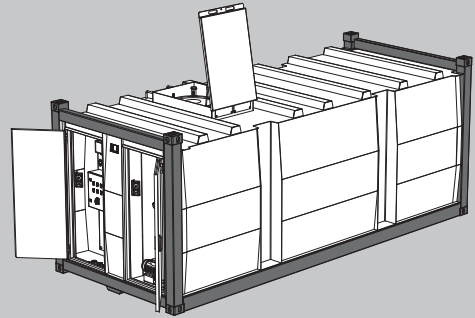
Storage tank container, mining standard
KCD-ISO-TS-V5-20

Minotaur® storage tank containers are extremely portable due to standardized, cubic design by ISO dimension and in an empty condition, they can be stacked up to eight times. Since the single storage tank containers can be connected together, a capacity of up to 2,000,000 liters volume can thus be achieved. Thereby, a higher fuel demand at any point of the earth can be guaranteed in the longer term.



Diesel

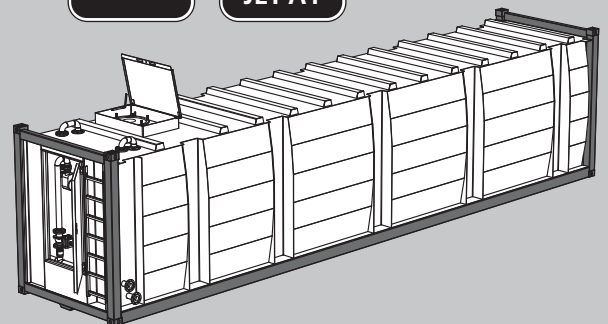
**Gasoline
Jet fuel
JET A1**



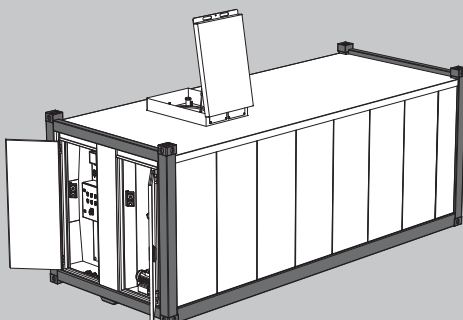
Storage tank container „Komfort“
KCD-ISO-ST-V2-20

Diesel

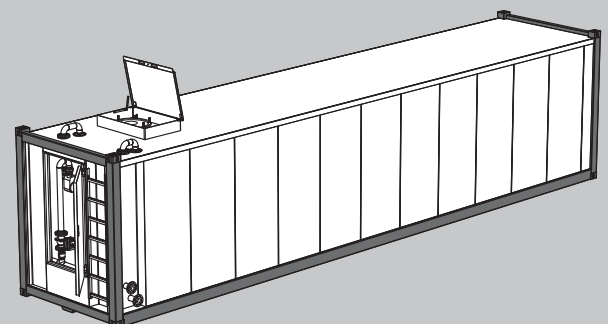
**Gasoline
Jet fuel
JET A1**



Storage tank container "battery tank-farm"
KCD-ISO-ST-V4-40-HC



Storage tank container "Komfort"
KCD-ISO-ST-V2-TI-20

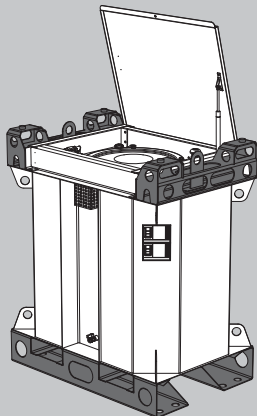


Storage tank container "battery tank-farm"
Thermo-insulated KCD-ISO-ST-V4-TI-40-HC



Diesel

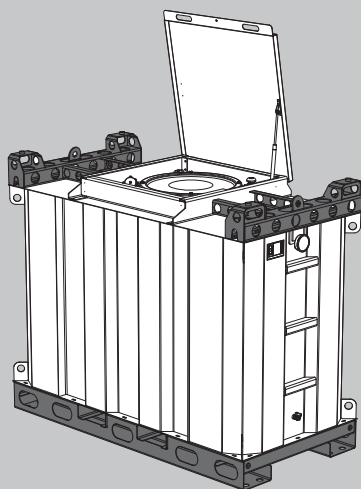
Gasoline
Jet fuel
JET A1



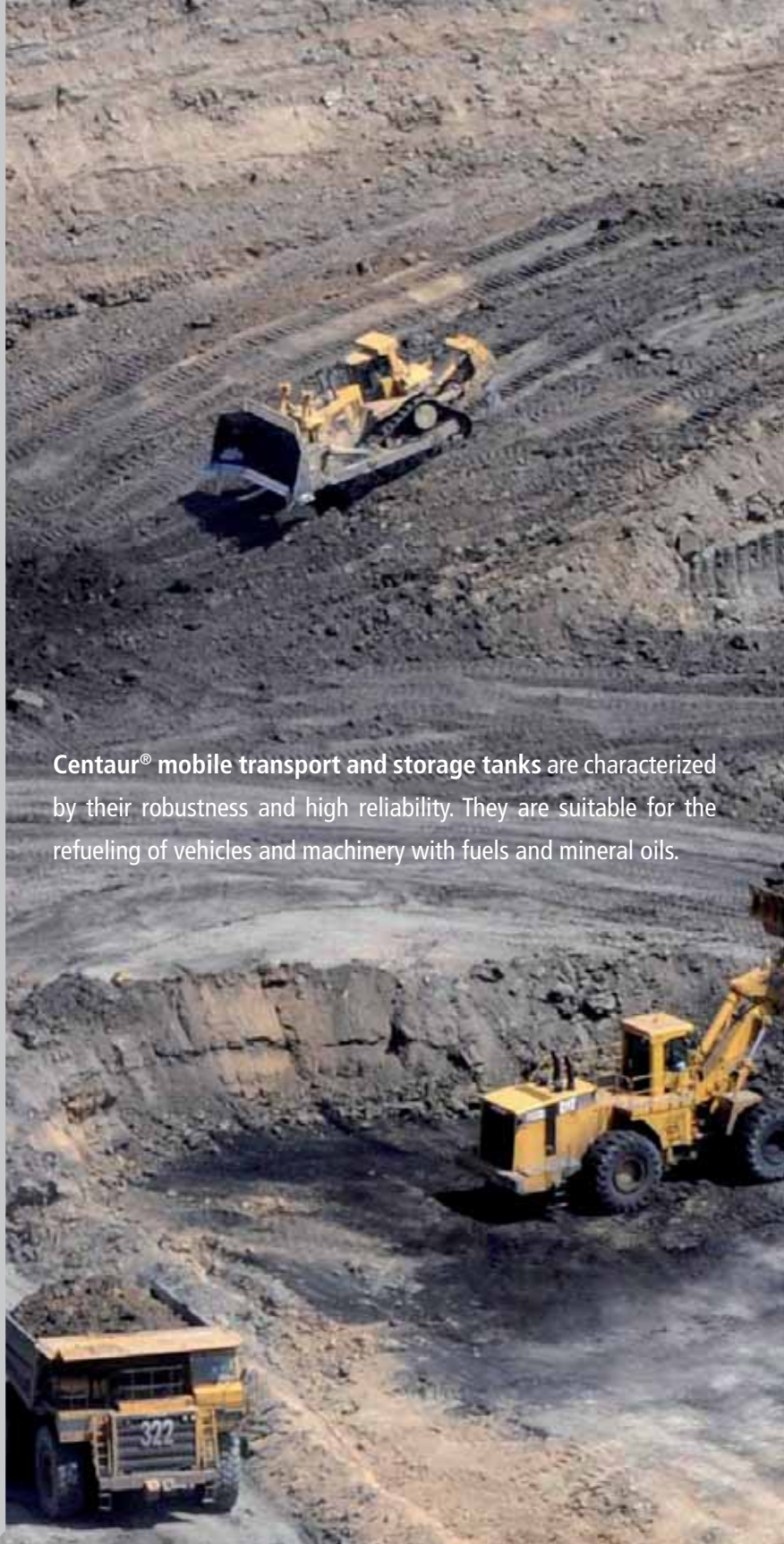
Centauro® TC-TA-500
TC-TA-700
TC-TA-1000

Diesel

Gasoline
Jet fuel
JET A1

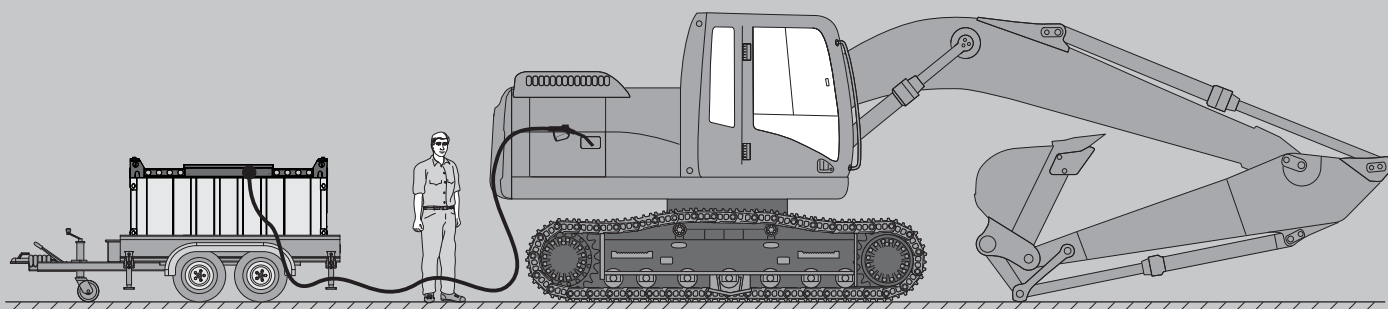


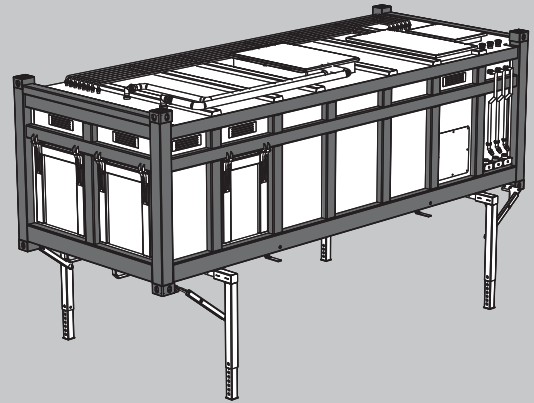
Centauro® TC-TA-1000-ISO
TC-TA-2000-ISO
TC-TA-3000-ISO



Centauro® mobile transport and storage tanks are characterized by their robustness and high reliability. They are suitable for the refueling of vehicles and machinery with fuels and mineral oils.

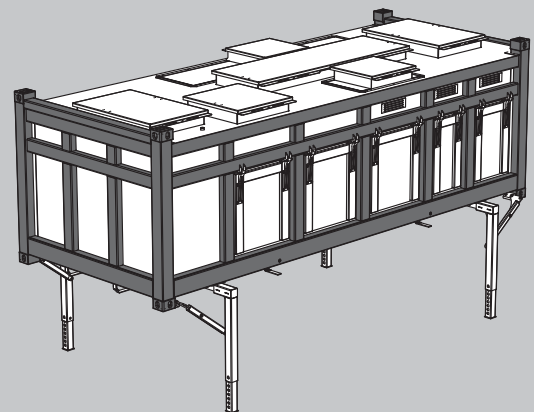
Supply story





Mobile service module

- On-site at the machine
- Quick refueling system

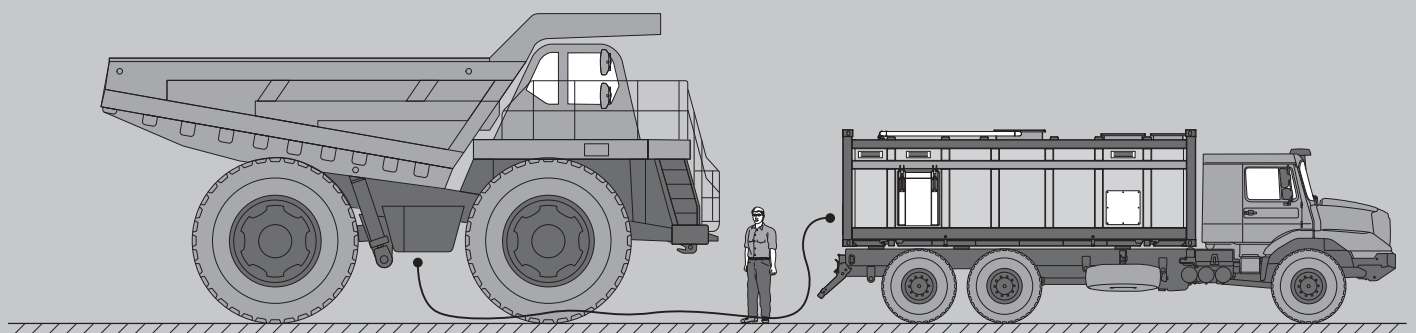


Mobile maintenance module

- On-site at the machine
- Quick maintenance system

The refueling and maintenance is ensured fast and perfect at every machine within a very short time, directly in the field on-site, daily by each employee by means of the mobile service module and maintenance module.

Supply story



Production advantages

- **Made in Germany**

The technical approval and certification authorities in Germany are considered the toughest inspection agencies in the world.

- **Safety and Approvals**

All series of Krampitz have their own audited approvals and declines in national and international scope.

- **High quality of products**

Our products have a high quality, because we have well-trained and skilled workers and a professional machine park.

- **Extrem robust products**

Through our global installations, we have extensive experience in the harshest areas of the world. For this, we design our products easy, secure and robust.

- **movable**

As our units are manufactured under the CSC standards, the container design allows an easy loading in the whole world.



Examination - Made in Germany



Long-living



Approvals



Extrem robust construction



Extrem areas of applic. - Offshore



Able to stack up and solid



Fast construction and installation on-site



Movable

- **Long-living**
Robust materials in conjunction with global experience, solid construction and high quality corrosion protection guarantee a minimum life expectancy of our products for 20 years - assuming regular maintenance.
- **complex equipment**
We supply complete units as needed with complete equipment, overall top, and fundament.
- **fast-construction system**
Fast construction on-site by pre-transportable modules or complete systems.
- **simple handling**
Easy understanding of the system elements through simple design and function.
- **ustomer-specific design**
Customer-specific colors, media-specific internal coating and custom-built branding are available at extra cost.
- **custom-built equipment**
is available at an extra cost.



Undestructable



Customer-specific equipment



Customer-specific design

Package solutions for climate zones

Everywhere tanks from Krampitz are in use.

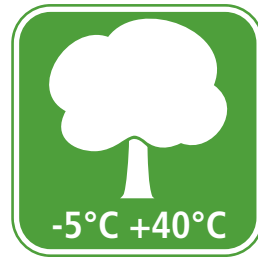
Standard package for mild climate

- designed for temperatures ranging from -5°C to $+40^{\circ}\text{C}$
- corrosion protection for outdoor installation
 - inside: crude, oiled
 - outside: KTS-System LA-3 (coating for resistance to stress by moderately warm climate with low humidity, according to EN 12944-2 C3 medium)

Tropic package for use in the jungle

- designed for temperatures up to $+40^{\circ}\text{C}$
- sunroof as an additional cover for the roof area for protection against intense sunlight
- air dryer, water absorber in ventilation/ exhaust pipe
- corrosion protection for outdoor installation
 - inside: bottom pan coating
 - outside: KTS-System LA-4-WA (coating for resistance to stress caused by tropical, warm climate with high humidity, according to EN 12944-2 C4I medium)

Krampitz has for all world's climate zones relevant experience and specialized equipment. There are now packaged solutions for the various requirements of the climate zones. Our products are already adapted for each location and the customer can concentrate on his application.



Mild Climate

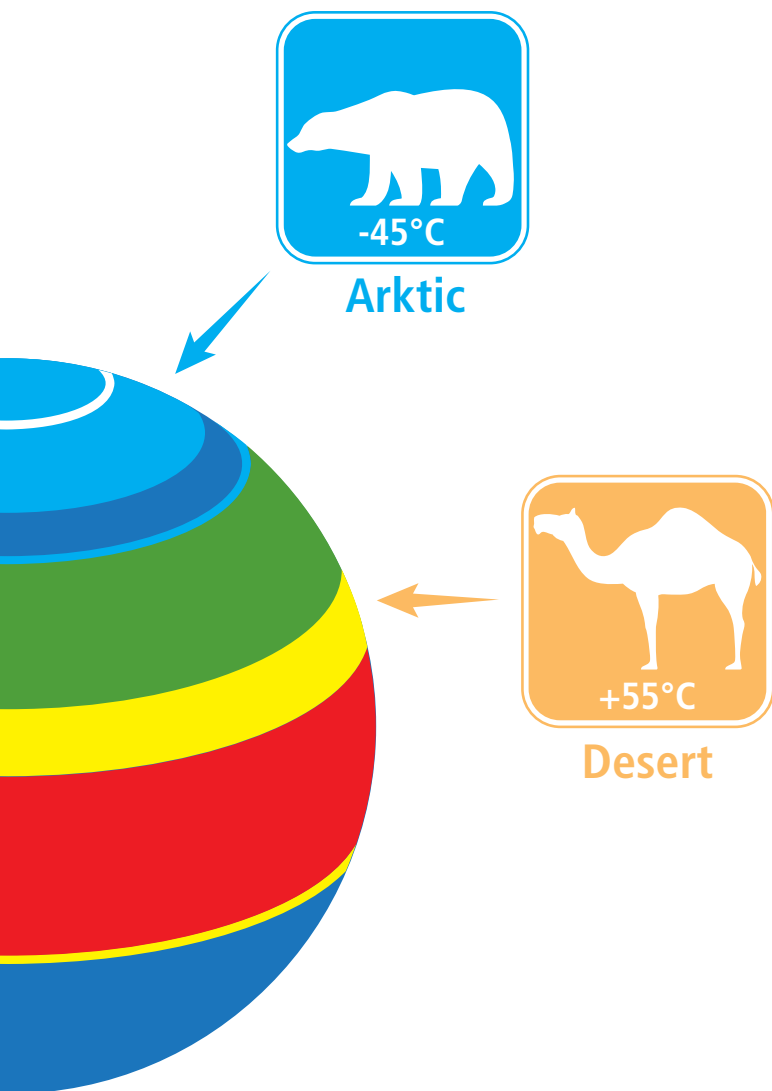


Tropic



Sea





Offshore package for use in marine climate

- air dryer, water absorber in ventilation/ exhaust pipe
- fittings made of stainless steel V2A rust-free
- corrosion protection for outdoor installation
 - inside: floor pan coating
 - outside: KTS-System L-A-4-OS (coating for resistance to stress by moderately warm climate with high humidity and aggressive salt content, according to EN 12944-2 C5M medium)

Arctic package for operations in the polar circle

- designed for temperatures down to -45°C
- cold resistant steel S355
- quality thermal insulation to prevent condensation and frost risk
- electric tank heater or heating coils for fluid heating
- corrosion protection for outdoor installation
 - inside: floor pan coating
 - outside: KTS-System LA-4-WA-TI (coating for resistance to stress caused by extremely cold climates with low humidity, according to EN 12944-2 C4I medium)

Desert package for use in the desert

- designed for temperatures up to +55°C
- sun roof as an additional cover of the roof area for protection against intense sunlight
- fitting closure to prevent dust ingress into venting / and exhaust line
- corrosion protection for outdoor installation
 - inside: crude, oiled
 - outside: KTS-System LA-4-WA (coating for resistance to stress through hot air with low humidity and increased dust particles, according to EN 12944-2 C4I medium)



Technical changes reserved!

Safety concept of the storage tanks and gas stations

Leakages in underground gas stations:

Traditional gas station systems do not allow any inspection from the outside. For this reason, leaks are not detected at an early stage due to external corrosion; the environment is polluted.

Advantage of our modern gas station unit:

Each time an inspection from outside is possible. Due to the high quality of the outside's coating, there is no corrosion of the tank. (Internal coating is optional.)

Vacuum leak monitor system:

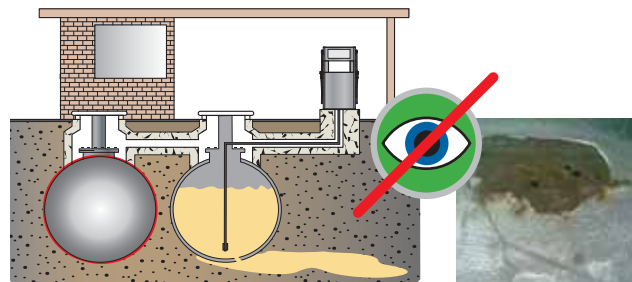
The simple collecting pan of traditional tank systems has no exact alarm message in defective condition. Our double-walled tanks with vacuum leakage monitoring are secure against leaks caused by internal and external damage.

Traditional gas station system

no inspection from outside - danger of corrosion and leakage risk due to external corrosion



Danger of leakage



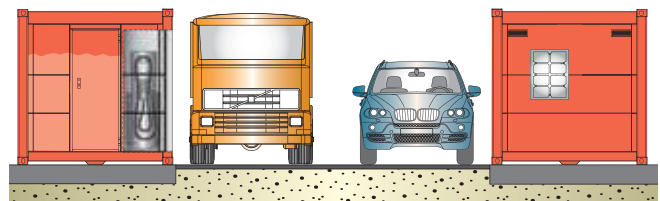
Modern gas station units

Inspection from outside possible

No danger of leakage through accurate monitoring of tank interior and exterior wall



No danger of leakage

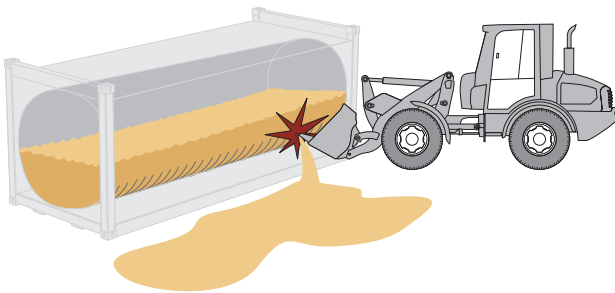


Traditional gas station system

in a simple collecting pan, no exact alarm message possible by a broken collecting pan.



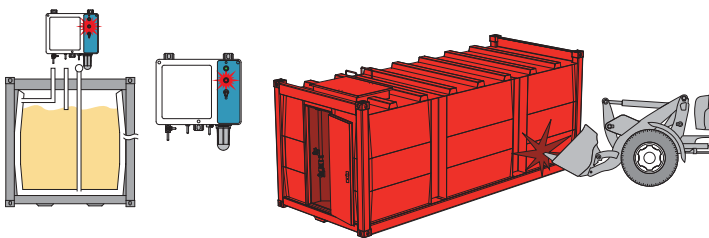
no exact alarm message



Double-walled tanks from Krampitz with vacuum leak monitoring are secure against leakage through internal and external damage - intrinsically safe



accurate alarm message

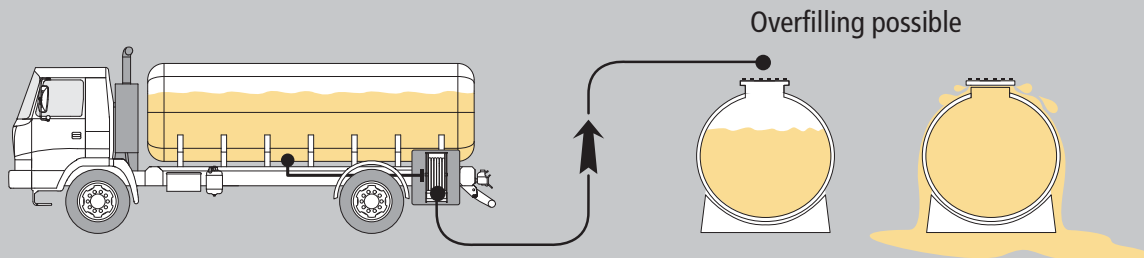


Safety concept



Tank filling without overfill protection

Overfilling of the tank: tank filling without overfill protection can cause considerable damage to the environment!

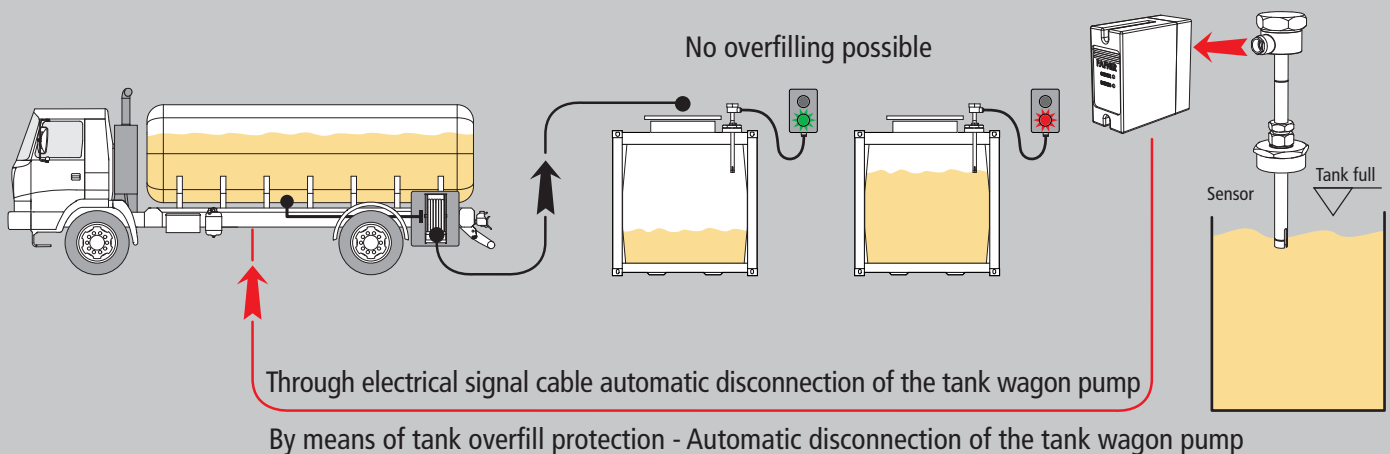


Danger: major environmental damage possible!



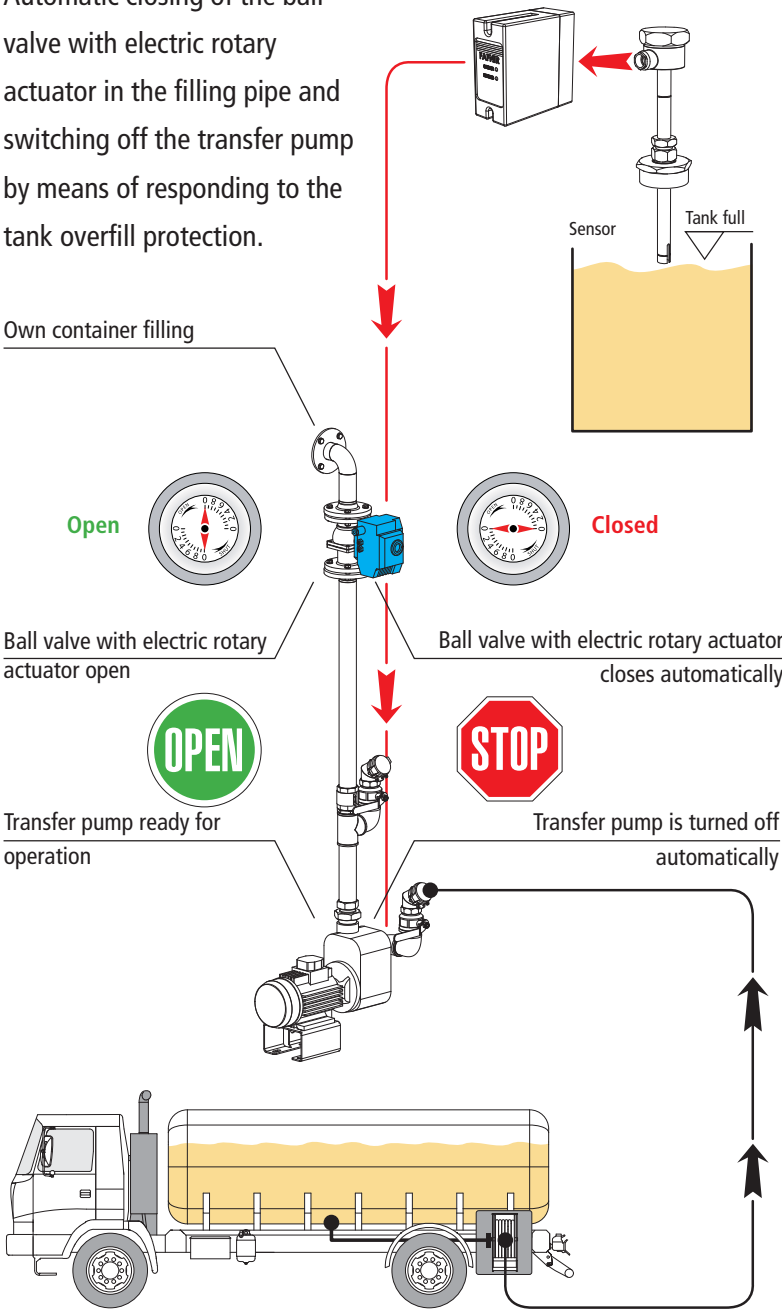
Tank filling with overfill protection - standard

Krampitz Tanksystem GmbH uses for this reason: overfill protection - automatic disconnection of the tank wagon pump by electrical signal cable.



Overfill protection Global by ball valve with electric rotary actuator

Automatic closing of the ball valve with electric rotary actuator in the filling pipe and switching off the transfer pump by means of responding to the tank overfill protection.



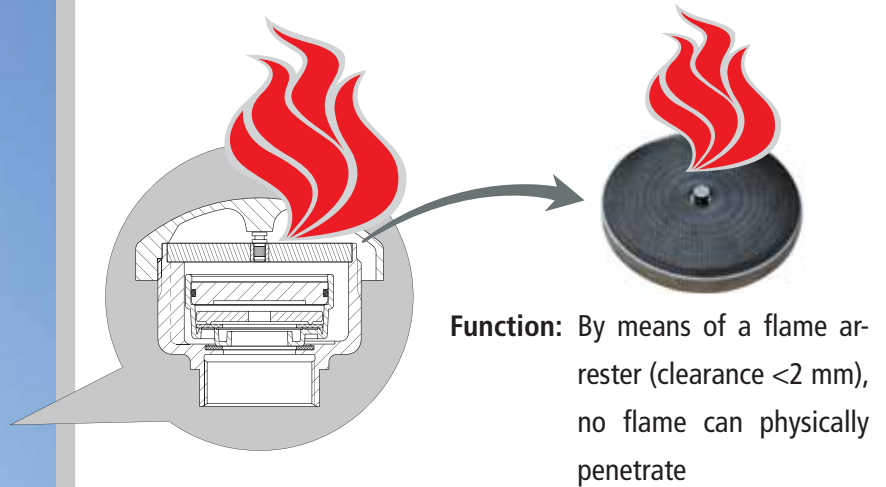
Safety concept

Flame arrester



Penetrating flames and sparks: the flame arrester (gap <2 mm) in the pipe sections prevents a pooling of flames and sparks into the tank interior. If a tank is not equipped with a flame arrester, an explosion might be caused.

The flame arrester prevents a pooling of flames and sparks into the tank interior.



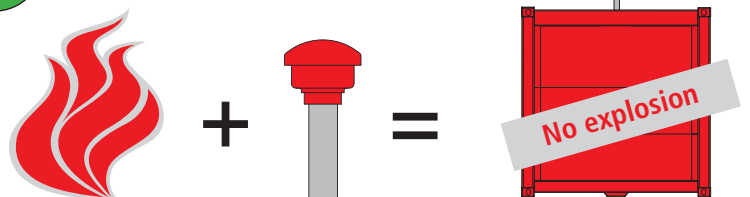
The use of gasoline and jet fuel - danger of explosion



Ohne Without flame arrester



With flame arrester



Safety concept

Potential Equalization

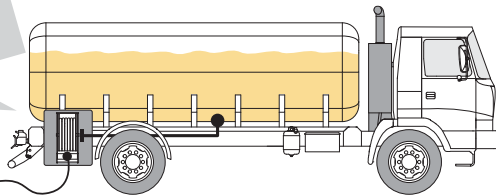
Without potential compensation cable drum of the tanker and the gas station, it may come to different electrical potentials, which can lead to sparks and arcing. The danger of explosion rises! Krampitz products have integrated a potential compensation cable drum in the transfer niche. This connects the tank wagon with the gas station and thus results in a unitized, electric potential.



Without potential compensation cable drum

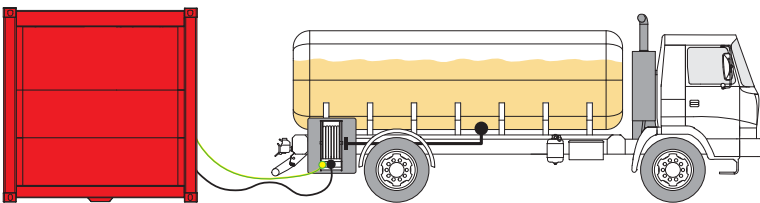
By different electric potentials of the tank wagon and the gas station, sparks and arcing can occur - danger of explosion.

**DANGER OF
EXPLOSION**



With potential cable drum

In the transfer niche is a potential compensation cable drum, this connects the tank wagon with the gas station, thus resulting in a unitized electric potential.



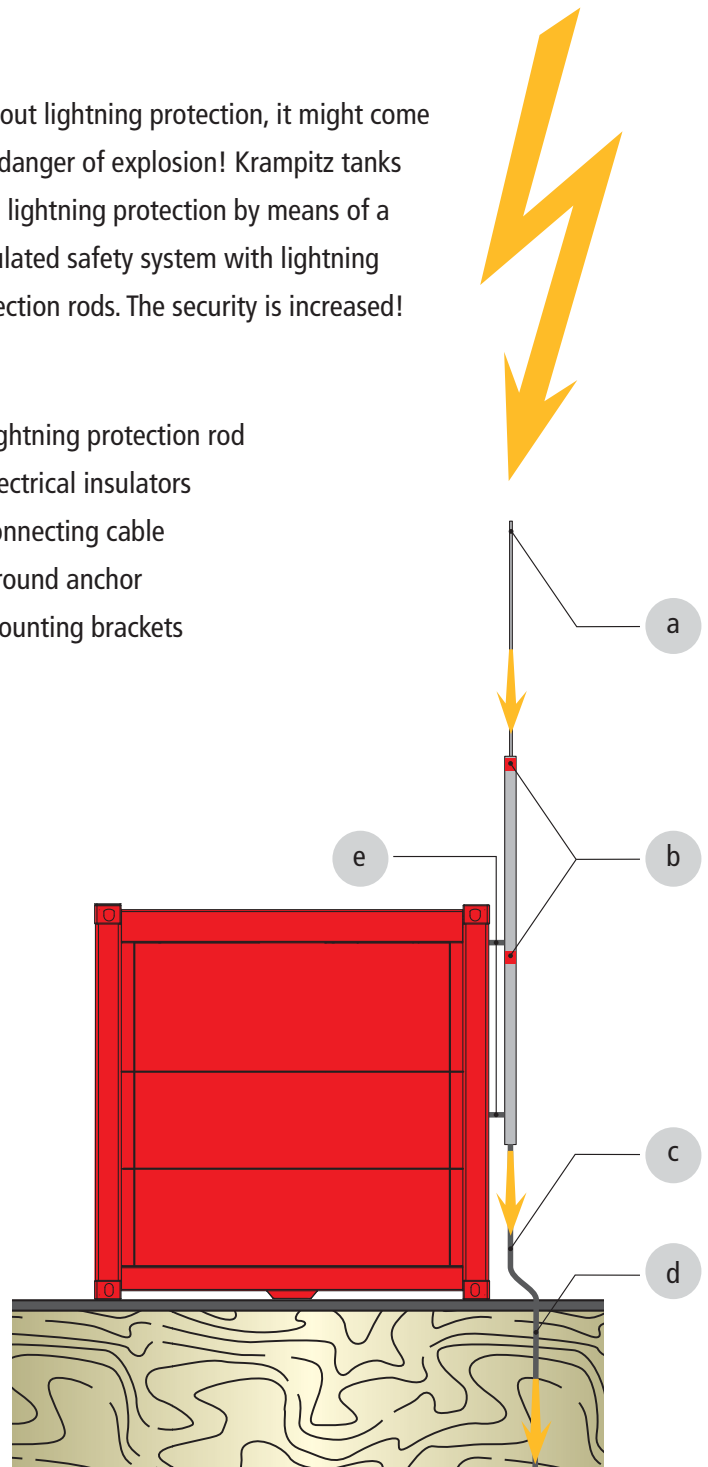
Safety concept

Lightning protection



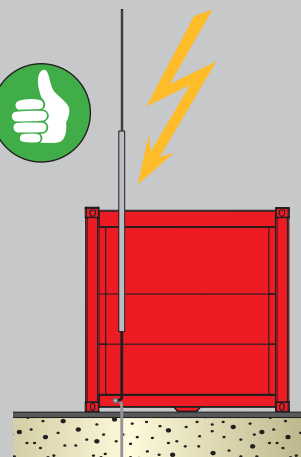
Without lightning protection, it might come to a danger of explosion! Krampitz tanks have lightning protection by means of a calculated safety system with lightning protection rods. The security is increased!

- a) Lightning protection rod
- b) Electrical insulators
- c) Connecting cable
- d) Ground anchor
- e) Mounting brackets



DANGER OF EXPLOSION

No lightning protection of the tank without proven system and lightning protection rods



Calculated lightning protection system of the tank with lightning protection rods

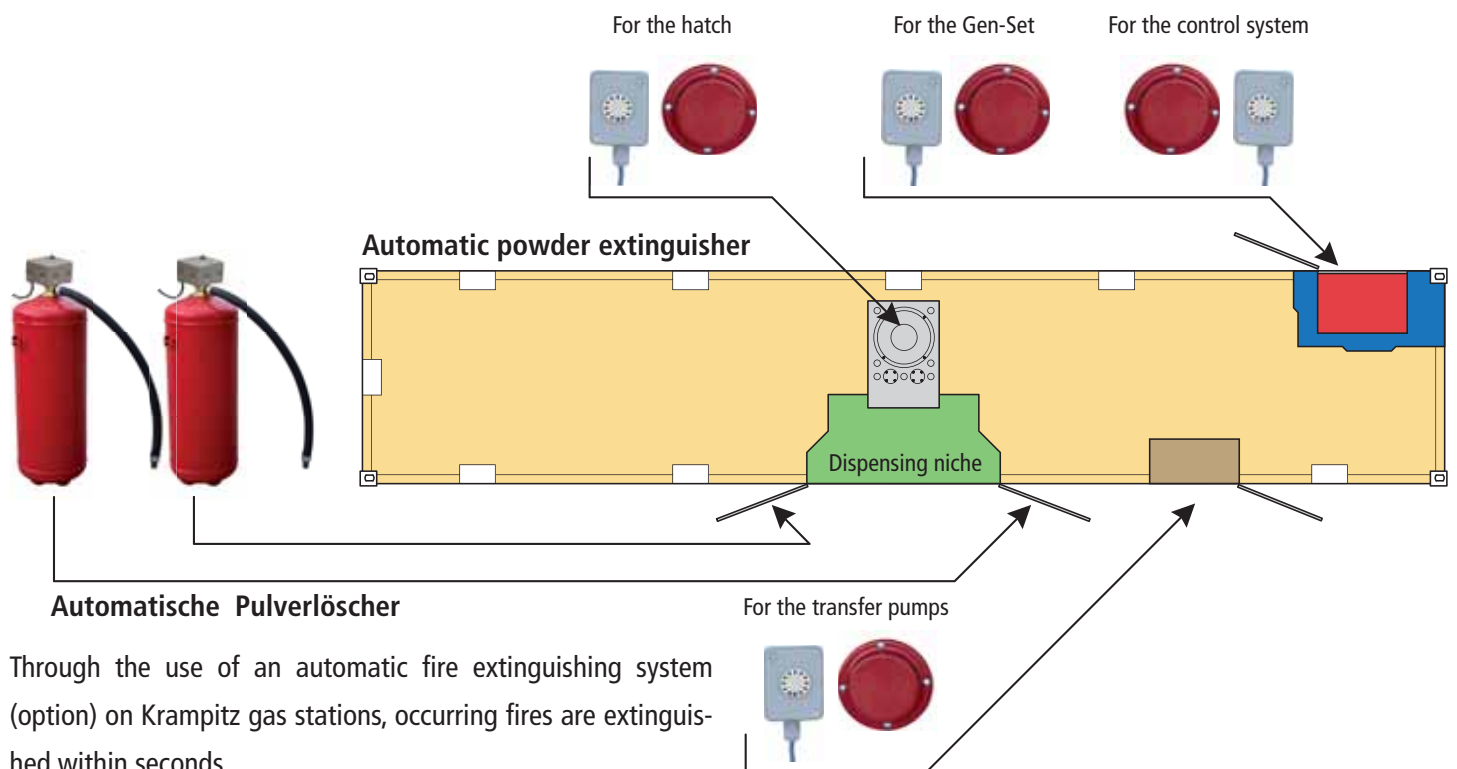
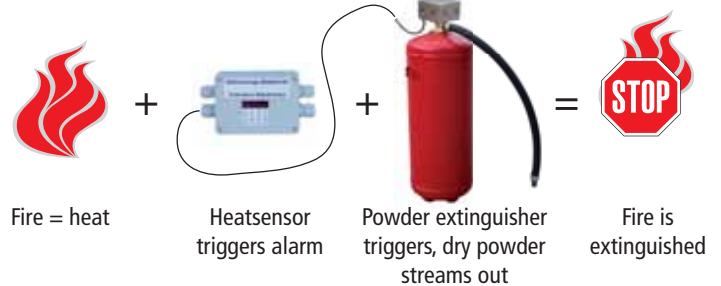
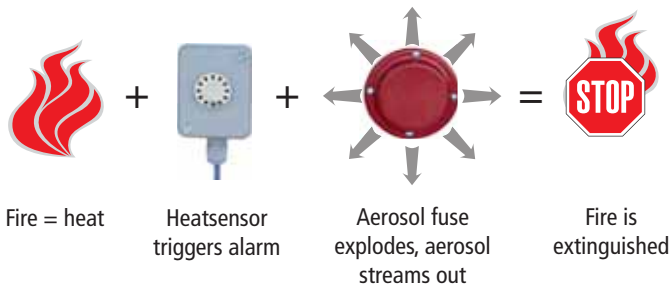
Safety concept

Fire extinguisher

If a fire is triggered by means of customer's misconduct or technology's failure, the extinguishing system is activated automatically. Occurring fires can thus be extinguished within seconds through the use of an automatic fire extinguishing system (optionally).

Function aerosol extinguisher

Function powder extinguisher



Technical changes reserved!

Safety concept

Burglary protection

One key for all doors

Central key system with cylinder lock



Transport lock for hatch compartment for transport to the customer



Standard lock for hatch compartment



gleichschließende Schlüsselsets sind beim Transport im Haubenelement auf dem Dach verstaut



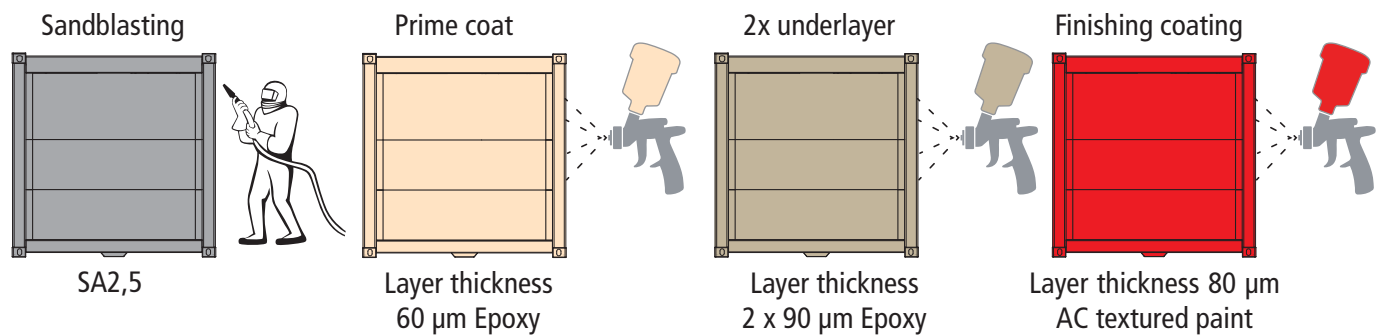
Cylinder locking system



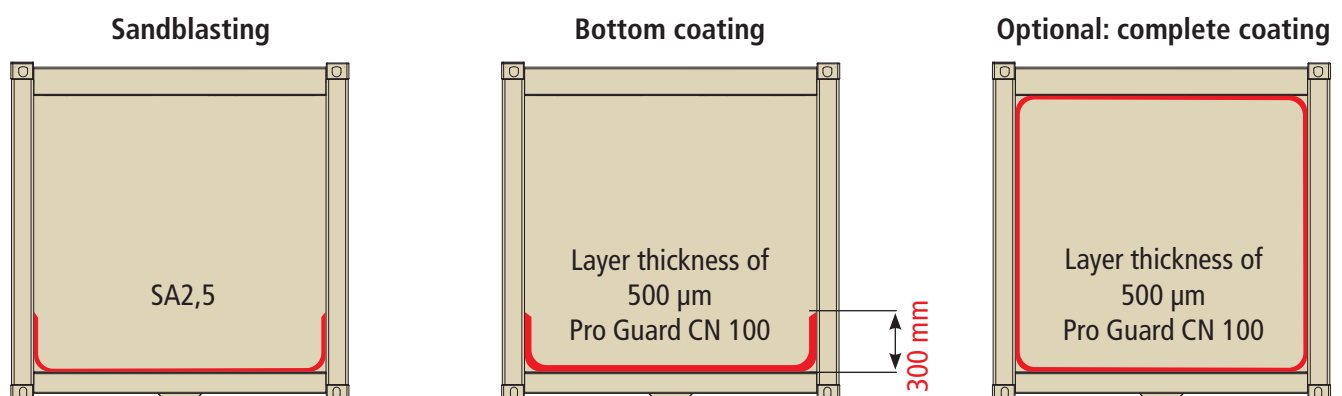
Safety concept

Corrosion protection outside

High quality corrosion protection and media-safe internal coating to protect the tank from inside and outside against corrosion.



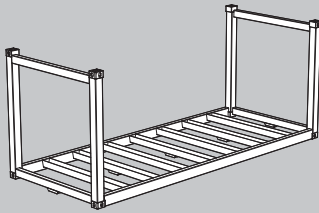
Corrosion protection inside, bottom pan standard



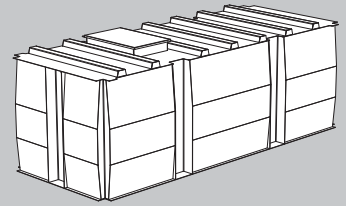
Technical changes reserved!

Approvals

of our container tank and safety devices



Certified transport frame (ISO frame) by Germanischer Lloyd



Tank body with general construction-supervision approval of the DiBt

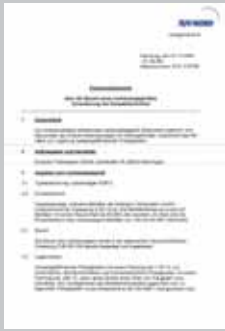
Test methods of the production and national respectively international, extensive approval programs ensure a high quality.

The continuous adaptation and development of the high, German, technical safety standards for over 60 years in our market segment, stand for a world renown and respected safety culture.

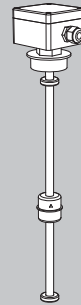
This is the tradition „Made in Germany“ and is lived by our company.

Our company culture rejects for example the incorporating of service-intensive break points into our products. With a continuous realized service, a long life of our products is guaranteed.

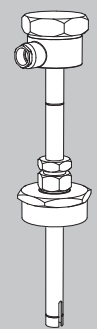




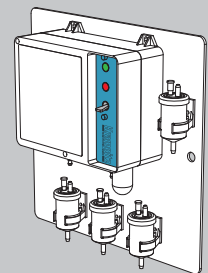
Double-walled leak monitoring chamber of the tank



Level sensor AE-111



Overfill protection type AE 252



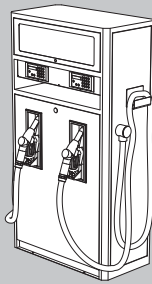
Vacuum leak monitor with general construction-supervision approval of the DiBt



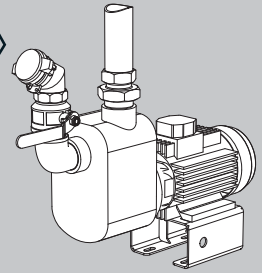
Technical changes reserved!

Approval

of our tank equipment

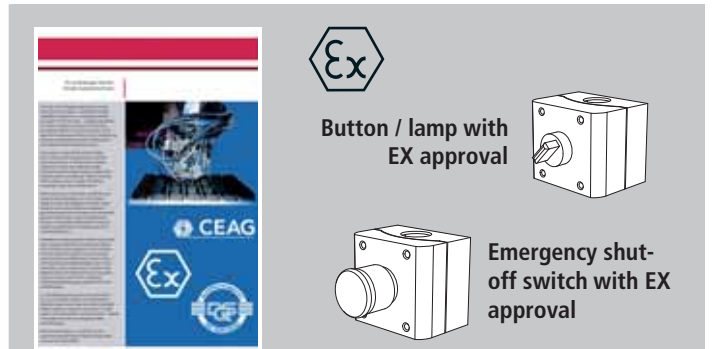
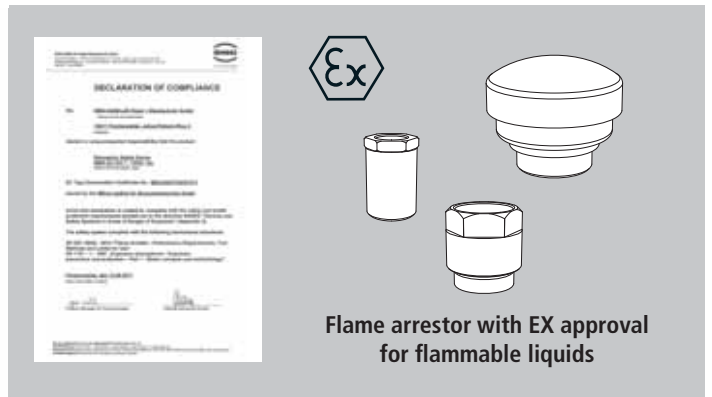
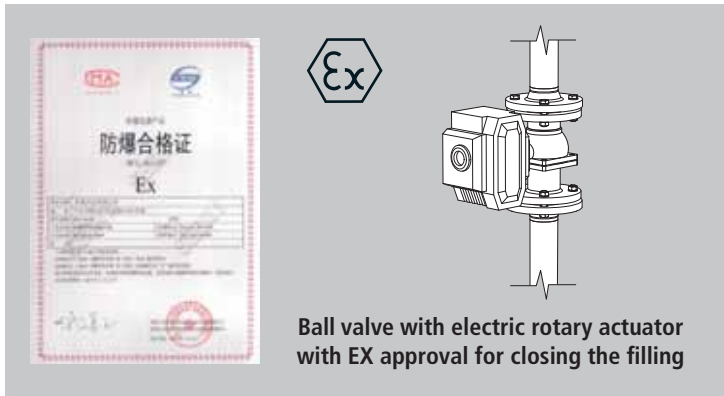


Fuel dispensers with EX approval and MID-Certificate



Transfer pump with EX approval





Approvals for tank and equipment:

Krampitz Tanksystem GmbH has the most approvals. We are the only approved manufacturer by the German Institute for Building Technology, in whose 40,000-liter tanks all highly flammable media may be stored above ground. (Scheme approvals)



Krampitz Tanksystem GmbH

Headquarters Dahlenburg

Dannenberger Str. 15
21368 Dahlenburg/Lbg, Germany
Tel.: +49(0)5851/944 596-1
Fax: +49(0)5851/944 596-9

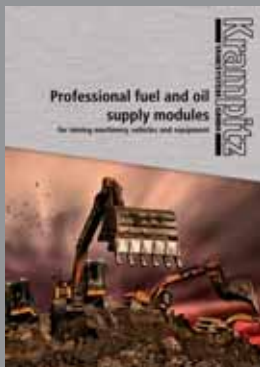
Office Salzwedel
Order Processing

Siedlung des Friedens 40
29410 Salzwedel, Germany
Tel.: +49(0)3901/3088-100
Fax: +49(0)3901/3088-131

Production site Henningen

Henningen 78
29410 Salzwedel OT Henningen, Germany
Tel.: +49(0)39038/9078-0
Fax: +49(0)39038/9078-10

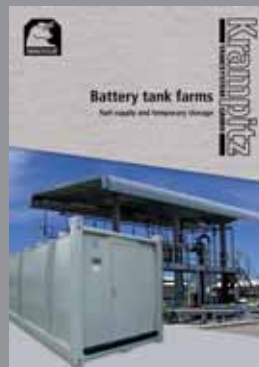
www.mining-tanks.com
info@mining-tanks.com



Professional fuel and oil supply modules



Storage tank containers



Battery tank farms



Mining gas station containers



Airfield gas station



Office container



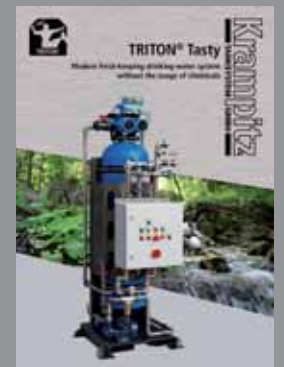
Mobile service module for on-site employment in mining



Mobile maintenance module for on-site employment in mining



KRP-5000 - Automatic fuel cleaning and treatment station for tank systems



TRITON® Tasty fresh-keeping drinking-water system

About the information in this brochure:

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