



# Mobile service module for on site employment in mining

for supply of large machinery with fuels,  
oils and lubricating grease

**Krauppitz**  
TANKSYSTEM  
GMBH



# The on-site supply concept



Krampitz - solution: mobile service module





We have developed a completely new supply unit for the new generation of large machinery of the open-cast mining - the mobile service module. It transports a maximum of fuel and lubricating oil volume, realises high refuelling rates, is extremely robust and works independently and containerized as an exchange system.

The mobile service module of Krampitz Tanksystem GmbH is characterized by future-oriented and innovative technology. It allows the refueling and maintenance of large machinery on-site.

The single-walled cubic steel body is the striking trademark of all Krampitz constructions.

By means of special statics, construction and perfect manufacturing, our products also show high stability and structural strength under extreme conditions.

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supply unit for large machinery of the open-cast mining



# Tasks



diesel refueling -

refilling oil -

refilling cooling water



The new generation of mining equipment is extremely productive, extremely large, very expensive and has a very high fuel and oil consumption. Downtimes of these devices are very expensive.

We have developed a new mobile service module for this new generation of mining machinery. It is characterized by compact dimensions, large tank capacity, high performance pumps and robust equipment.

The following media are available for the provided services:

- diesel fuel
- engine and hydraulic oil
- cooling water
- lubricating greases

The daily refueling and maintenance by the employees in a very short time directly, quickly and perfectly in the field, on site of each machine are guaranteed by the mobile service module.

Perfect and fast service means:

- gain in real production time

on site - directly at the machines



**Robust - Perfect - Fast**  
**Professional**  
**finest German Quality**



# Advantages



easy transport



cubic body



interchangeable bridge system

## Design features

- ISO - type according to ISO 668
- CSC international approval for ship, rail and road
- high stability and robust construction
- 8 ISO-corners
- revolving protection profiles

## Container body

- robust, cubic body
- single-walled steel construction
- equipment protected in the niches of the tank body
- every niche secured by a hinged door
- burglar-proof closure system
- one key for all locks

## Interchangeable bridge system

- allows stable placing of the transport tank container
- 4 x interchangeable bridge feet
- dimensions according to DIN EN 284
- permissible load max. 18.000 kg per pillar
- adjustable pick up height of 1.080 to 1.430 mm



### Transport

- tank container in transport design
- smooth road behavior in rough terrain by surge plates and baffles
- optimized axle weight and distribution of load
- low lying balance point on vehicle

### Special design

- low tank height only 1.500 mm
- container's total height only 2.000 mm
- no problems with low passages
- removable railing
- folding access ladder
- easy access to the roof area

### Ease of use

- fast and convenient access to the fuel nozzles, placed on the reverse side
- fuel nozzles installed in hand height
- level indicators and flow meter installed at eye level
- easy access to control panels
- integrated crane structure for grease traps change



robust construction



special design



convenient and easy handling



# Equipment



dry clutch - type Wiggins



dispensing valve - type ZVA



fuel gauge and switch for diesel system



cooling water-dispensing nozzle



content displays and switches for oil- and cooling water systems

## Fuel supply

- 1 x extraction point for diesel approx. 200 l/min, consisting of: top-class dispensing valve type Wiggins - dry clutch, hose length 15 m
- 1 x extraction point for diesel approx. 80 l/min, consisting of: dispensing valve type ZVA, hose length 10 m
- conveyor - high-quality industrial gear pump of a renowned German manufacturer
- automatic operated hose reel spring-actuated, i.e. the hose is rolled up automatically by spring power

## Supply with oils and cooling water

- oil and cooling water dispensing nozzle with swivel joint and anti-drip nozzle
- electrically powered oil and cooling water pumps
- 1 x extraction point for engine oil approx. 13 l/min, hose length 10 m
- 1 x extraction point for hydraulic oil approx. 13 l/min, hose length 10 m
- 1 x extraction point for cooling water approx. 13 l/min, hose length 10 m

## Supply with lubricating greases

- grease guns with reinforced hose and 4-jaw socket
- pneumatically powered grease pumps
- 2 x extraction points for two different greases, each about 6-8 kg/min, hose length 10 m each
- or 50 kg fat with an open discharge in 6 minutes

**Power supply of the transport tank container by:**

a.) its own power generator (diesel Gen-Set) for autarkic isolated operation

- electrical continuous power rating about 13 kW
- three-cylinder diesel engine, water-cooled design
- alternating current generator, single bearing version,
- generator niche with sound insulation, air flow, exhaust pipe and exhaust silencer
- generator's maintenance, easy and comfortable with extending platform with integrated day tank, approx. 100 l
- control for generators integrated into electrical niche

b.) alternatively: connection to the public power supply system

**Compressed-air supply**

- transport tank container is equipped with air compressor
- switch for air compressors and compressed air connections installed in dispensing niche

Air compressor:

a.) primary task:

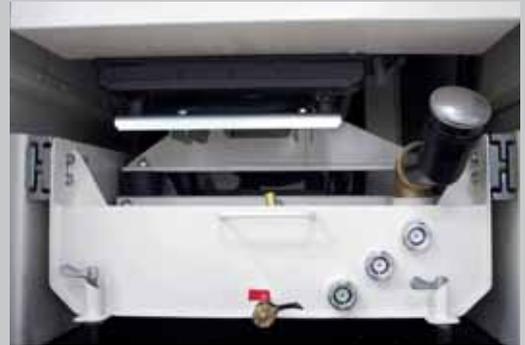
- supply of pneumatic grease pumps with needed air

b.) secondary tasks:

- resetting tire pressure
- cleaning dustfilter with compressed air
- automatic refill of the compressed air tank



generator on maintenance position



integrated day tank for generator



generator set control



exhaust silencer for container roof



air compressor

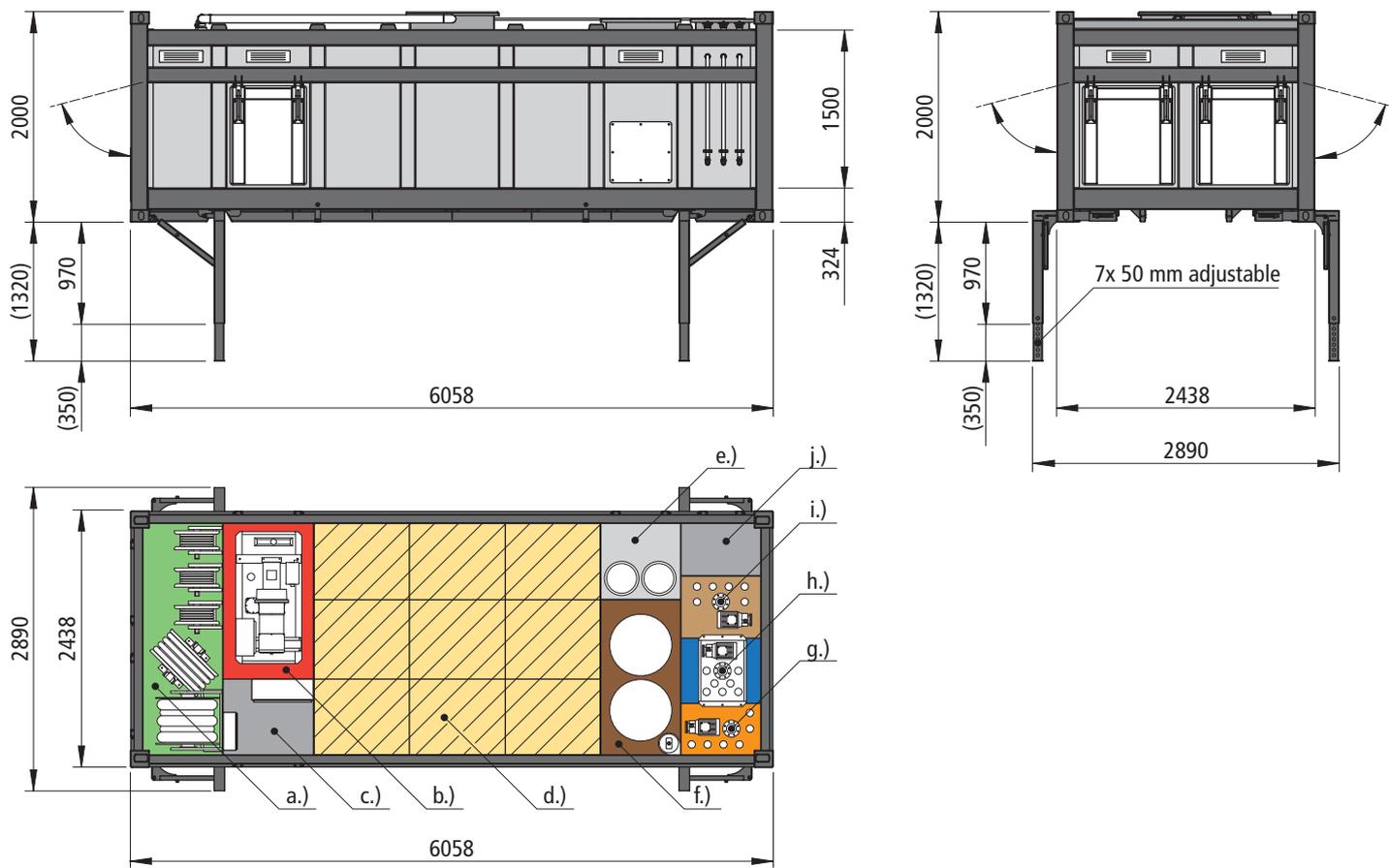


compressed air connections



compressed air - manometer indicator

# Technical data



## Legend:

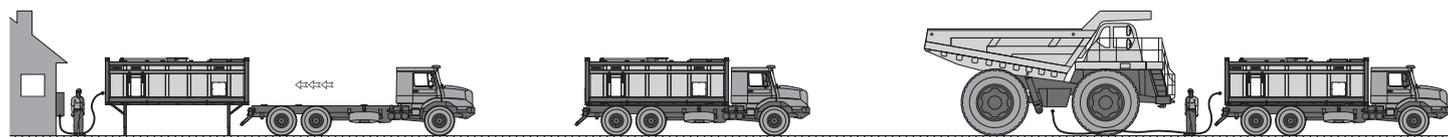
- a.) dispensing niche
- b.) generator niche
- c.) electrical niche
- d.) diesel chamber
- e.) air compressor niche
- f.) niche for 2 x fat barrels
- g.) engine oil chamber
- h.) cooling water tank
- i.) hydraulic oil chamber
- j.) niche for spare parts

type	total length	total width	total height	tank height	weight empty)	max. approved weight
	mm	mm	mm	mm	kg (ca.)	kg (approx.)
TCE-20-V2	6.058	2.438	2.000	1.000 / 1.500	6.700	15.000

medium	diesel	motor oil	cooling water	hydraulic oil	lubricating grease	lubricating grease
	litre	litre	litre	litre	litre	litre
volume	8.200	400	200	300	200	200

Technical changes reserved!

## supply story



# General equipment

- tank container type MINOTAUR® and PEGASUS® for storage and transport
- in ISO design with heavy container frame and 8 ISO-corners
- single-walled, robust, cubic body made of steel S235 JR
- general construction supervision approval Z-38.11-143 for storage tanks
- 4 x interchangeable bridge feet mounted on container frame
- all niches equipped with lighting, light switch and emergency shut-off button
- all niches protected with hinged doors
- complete installation of all components inside the tank container

## a.) Dispensing niche

- filling system DN 50 for diesel with dry clutch system type Wiggins
- filling line with magnetic valve (for overflow protection with horn and flashing light) and manual pump for draining the line
- delivery unit - quality industrial gear pump, flow rate: 200 l/min
- mechanical flow meters and flow meter pulse
- 1 x extraction point for diesel 200 l/min, high performance nozzle NW 50 Type Wiggins - dry clutch, hose reel with 15 m hose length
- 1 x extraction point for diesel approx. 80 l/min, nozzle type ZVA19, hose reel with 10 m hose length
- 1 x extraction point for engine oil about 13 l/min, hose reel with 10 m hose length
- 1 x extraction point for hydraulic oil approx. 13 l/min, hose reel with 10 m hose length
- 1 extraction point for cooling water for about 13 l/min, hose reel with 10 m hose length
- 2 x extraction points for two different greases, each dispensing point approx. 6-8 kg/min
- oil and coolant nozzle with swivel joint and anti-drip nozzle
- grease guns with reinforced hose and 4 jaw socket
- automatic hose reels are spring activated, i.e. the hose is rolled up automatically by spring force
- floor area of the dispensing niche as a drip tray made with an approved leak detector OM 5 by WHG § 19
- digital level gauge for diesel
- ten-stage LED level indicator for engine oil, hydraulic oil and cooling water
- 2 x compressed air coupling for compressed air connection and switch for air compressor

## b.) Generator niche

- diesel generator set, electric. continuous power about 13 kW, 400 V, 50 Hz
- three-cylinder diesel engine, water-cooled design
- generators niche with soundproofing, air duct, exhaust pipe and exhaust silencer
- maintenance for generators, easy and comfortable with extending platform with integrated day tank approx. 100 l

## c.) Electrical niche

- electricity supply and junction box, centralized control
- control box for generator
- wiring of existing electric components
- electrical niche with air flow

## d.) Diesel chamber

- divided in nine small chambers by surge plates
- a hatch on the tank roof
- hole DN 600 Type TS and connection interfaces
- filling- and return line 2"
- suction line with foot valve 2.1/2"
- level limiter type AE 201 overflow protection with design approval
- level sensor type LC VII radar sensors
- ventilation valve with tilt safety device AM-911.5
- emptying including ball valve in the bottom area

## e.) Air compressor niche

- air compressor approx. 10 bar
- 2 x air surge tank 160 l total
- air compressor niche with air flow and additional cooling fan

## f.) Niche for 2 x grease barrels

- 2 x grease barrels (Ø 590, H: 890 mm) approx. 200 l
- 2 x grease pumps about 0.6 l/min, driven pneumatically
- 1 x mobile crane for lifting the barrels out of the niche of the roof area

## g, h, i.) Engine oil chamber, cooling water tank and hydraulic oil chamber

- DN 115 inspection opening and connection interfaces
- delivery unit electric gerotor pump
- flow rate: about 13 l/min
- mechanical counter with pulse
- suction line with foot valve 1"
- filling line 1" with dry clutch and
- return line 1/2"
- filling line 1.1/2" connection in the roof area
- ventilation valve with tilt AM-911.5
- emptying including ball valve in the bottom area
- 4 x level sensor AE-100-E, set to 10%, 40%, 75%, 90% including horn

## j.) Niche for spare parts

- 1 x box for spare parts
- 1 x toolbox

## Corrosion protection for outdoor installation:

- inside: raw, oiled
- outside: corrosion protection system LA-4-WA for resistance, analogous to C4i medium according to EN 12944, sandblasted, primed and painted, RAL 9010 (pure white)

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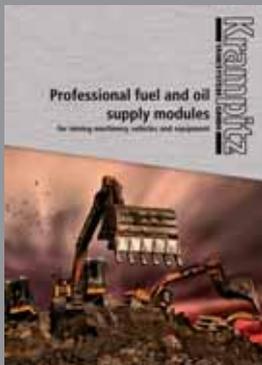
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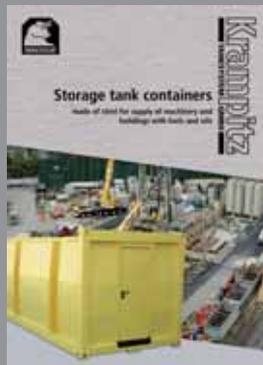
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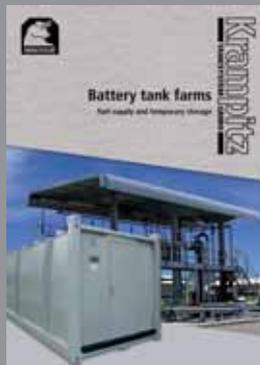
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Professional fuel and oil supply modules



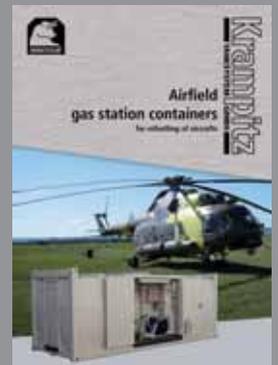
Storage tank containers



Battery tank farms



Mining gas station containers



Airfield gas station



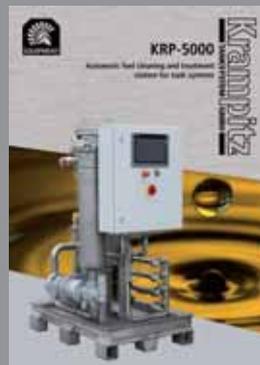
Office container



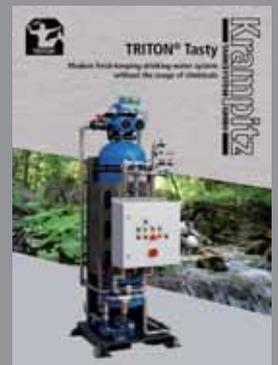
Mobile service module for on-site employment in mining



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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