

# CONTAINER ISO 1C DRINKING WATER RESERVOIR CONTAINER AND AQUASAFE water treatment system



**THE CONTAINER ISO 1C DRINKING WATER TRANSPORTER** (hereafter 'the container' only) is fully designed to be filled with drinking water, to transport it and to discharge it. Its maximal capacity is 8 m<sup>3</sup> and is to be consumed in 24 hours. It secures the delivery of drinking water to the following: COOKING BOILER SET, SANITARY CONTAINER, FIELD HOSPITAL etc.

**SANITARY ISO 1C CONTAINER** is manufactured according to technical specification KAR-BOX 045-01. Container is introduced into Czech Army operation. Catalogue property No.: 0118008270025.

## Transportation of container

Czech Ministry of Transportation and Communication issued a Technical suitability certificate for this exchangeable superstructure No. N-1285, ref. No. 17876/98-112. On railway, container is transported as "CONTAINER". During waterway transportation it is transported as "CONTAINER".

## Stacking of Container

The producer allows to stock up to 4 fully loaded containers on each other. The containers must be safely secured under ČSN ISO 3874.

## Container handling

Container is handled in compliance with regulation ČSN ISO 3874. Container can be handled in the following ways:

- a) on container side mover on TATRA T-815 26 OR 81 36 255 - 8x8.2 as well as the on VOLVO FI 12-8 x 4

with handling system KLAUS

- b) on container carrier TATRA T-815 26 OR 81 36 255 - 8x8.2 equipped with MULTILIFT MK-IV hook lift with an adapter
- c) on container carrier TATRA T-815 26 OR 81 36 255 - 8x8.2 equipped with transport platform FLATRACK 20 "M"
- d) on side forklifts

## CSC label

Container is labelled with CSC label according to regulation ČSN ISO 6346 based on authorization TZ-0638/04 issued by Czech Industrial and Naval Register in Prague.

This container is manufactured in compliance with technical regulations regarding the production of ISO 1C containers according to ČSN ISO 668, ČSN ISO 1161 and based on container production certificate No. A-0219/2002 issued by ČLPR Prague. Containers can withstand forces generated during road, railroad, waterway transport according to ČSN ISO 14961

The inside area and the roof of container are lined by isolating sandwich panels (thickness of 40 mm), that are made from polyurethane foam ELASTOPOR SH

226/003. The panels are Al-plate-coated; the thickness of Al-plate is 0,8 mm.

The container floor is made from isothermal plywood panels with non-slippery polyurethane resin finish. The thickness of floor panels is 50 mm.

The entrance into the container is through a single wing door on the side in the middle of the container where a water system is placed. Inside the container on the left and on the right side, there are two plastic feed tanks. To facilitate the easy installation of the tanks, each face of the container is fitted with a double-wing door with rod door latches opening outwards. Behind the rear double-wing door above the tank there are the container's electrical components. Behind the front door there are accessories for tank cleaning and cleaning agents and aids. The container interior is heated with electrical ceiling panels.

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## The Water System

The container is equipped with 2 plastic water feed tanks with a capacity of 2 x 4 m<sup>3</sup>. Both of the tanks are welded of plastic which is certified to come into direct contact with drinking water. Every tank has got 2 pieces of removable covers, an inside baffle system, a level gauge, an overflow pipe with a tap into a drain pipe, an air distribution system for water

clarification, a float for inserting water treatment tablets, and air release valves. The inside water distribution system is fitted with 3 self-priming pumps GRUNDFOS, which allows to fill the water tanks and to discharge drinking water.

Another of its parts is a compressor for water clarification. To let out the residues of drinking water, disinfectant, and rinse water it is possible to connect the container to the container ISO 1CX SUMP by means of a quick-turn closure.

## Wiring Boxes

The wiring box is divided in two parts in the upper right cont side. The left box contains a 32A/415V/5p connector and a 16A/250 V socket.

The right box contains a switch-board with circuit breakers and controls for the individual circuits of the container's wiring. A grounding point is marked on the box column. All of the container areas are lit.

## Water System Boxes

The upper water system box includes two G2 valves power tanking, and three G1 valves for power water release. There is also a kit shelf.

The lower water system box includes one G1 valve for suction pump tanking, and one G2 valve for tanks draining.

## The Special Container Equipment

The container is equipped with special facilities, tools and safety devices that allow for cleaning and disinfecting of plastic tanks inside.

## Container Dimensions - Outside

Length	6 058 mm
Width	2 438 mm
Height	2 438 mm

## Container Dimensions - Inside

Length	min. 5 856mm
Width	min. 2 176 mm
Height	min. 2 062 mm

Tare	4 900 ± 5 % kg
Maximum gross mass	14 900 kg

## Operational Climatic Conditions

The container is serviceable in macroclimatic zones with climate N 14 (ČSN 03206) at:

- a temperature ranging from - 30°C to + 52°C
- a relative air humidity of up to 90% at a temperature of + 30 °C
- an air flow speed of up to 20 m/s in all wind directions
- a rainfall of 3 mm at an angle of incidence of 30°C in all directions

Maintenance service and repairs of containers

Manufacturer ensures all repairs under guarantee, repairs, container inspections and container's electrical installation inspections.

**AQUASAFE Water System Treatment** In the cases when input water is not microbially safe, the ISO 1C Container is equipped with the **AQUASAFE** Water Treatment System that will ensure the separation of mechanical impurities larger than 1 µm and the subsequent effective water disinfection of water by the **AQUASTERIL®** Technology. The bacteria, viruses and parasites in the treated water are eliminated and the **AQUASTERIL®** System does not negatively affect chemical and sensorial properties of the treated water.

The output of the **AQUASAFE** System is approximately 1 500 l of treated water per hour.

The **AQUASTERIL** System is designated for the preparation of microbially safe water in cases of emergency when there is no water source of safe quality available. It is advisable to select the clearest fresh water from the available sources for the treatment process.

Water treated by **AQUASTERIL** technology can be stored for several months without any deterioration in its quality.