Train Toilet Cabin and System

Toilet with Shower





Product description

Train toilet modules are state-of-the-art solutions that are delivered to a customer as a ready-to-install module. All necessary assembly work is completed in Joptek's factory, including automation and electrics, sewage and water supply systems. These modules can be manufactured either from sandwich structures or composites.

Laminating these modules to a mould means different shapes can be designed for the module, without reducing functionality. If compared to traditional materials, composite allows more efficient use of space in very tight surroundings, because technical equipment has been inserted into the structure of the module.

Key benefits of choosing our module:

- Universal Toilets TSI-PRM compliance
- Lightweight structure
- Long lifecycle
- Easy to maintain and clean
- Several options
 - o design,
 - o materials,
 - o colours and patterns.
 - Shower
 - Floor Heating
- Tested and ready to install





Technical characteristics

Requirements and Standards

Manufacturing and and assembly under supervising of ISO 9001 and ISO 14001 and IRIS quality standards.



Adhesive Bonding process according to DIN 6701-2 Class A2 standard

ISO 3834-2 and EN15085 standards are followed in welding process.



ISO 3834-2

Toilet cabin fullfills mechanical requirements of UIC 566 standards

DIN 5510-2:2009-05 and CEN TS 45545 standards compliance for fire protection

Delivery contents

- Complete tested Toilet cabin including
- Sanitary system
- Tanks
- Electrical systems
- Controls and Push buttons
- Door
- Hatches
- Furnishing
- Lightning
- Ventilation
- Fixing to the carbody
- Testings and product samples
- Documentation
- Packing and delivery



Dimensions

Typically L 2300–2500 mm, W 1500 –1700 mm, H 2200 Various options for dimensions and layout

Weight

Typically weight of complete cabin and system integration is approx. 400 kg. Weight will be optimized together with chosen dimensions, furnishing and equipment.

Strenght

Structure fulfills requirement of UIC 566 standards

Water proofness

Seamless / carefully designed seams

Surfaces

Easy to clean and durable Visible surfaces typically HPL – GRP laminates Various options of surfaces and colors Visually attractive

Fire resistance

DIN 5510-2:2009-05 and CEN TS 45545 standards compliance for fire protection Tested according to UIC-, DIN- and UNE-standards. National special requirements are taken account in projects.

Noise isolation

15-40dB (to be specified in design phase)

Heat insulation

To be designed according to requirements

Life time

Special attention is focused to durability. Structure is designed for 40 years life time.



Terms

Price

Products will be offered based on request.

Delivery time

To be agreed based on request

Prototypes

FAI's delivered according to customer's need.

Assembly

Assembly service can be agreed to be part of delivery.

Training

Training on customer's site can be agreed to be part of delivery.

Technical support

Technical support is provided during whole build up time and warranty time.

Documentation

Product, project and testing documentation available

Spare parts

Spareparts available

For more information

JOPTEK OY COMPOSITES
KERANTIE 7 81720 LIEKSA, FINLAND
Tel. +358 20 7439150
Fax +358 13 523 710
info@joptek.fi
www.joptek.fi

