

Shipment Handling Instruction

BIO-CEL® 52 (SS314) / BIO-CEL® 104 (SS314)
PART NUMBER: 1000002844 (-1416)/ 1000002845 (-1417)

The following are recommendations for safe storage and transport of BIO-CEL® MBR modules prior to installation. The second part covers transport and handling on site by forklift and crane. Please make sure that the required materials are available on site.





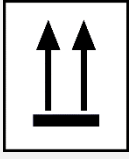
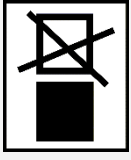

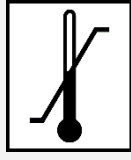

For questions or additional information, please contact MANN+HUMMEL WFS Technical Service.

Caution: Transport with complete packaging only.

- Keep module in original packaging for further storage and transportation purposes and to move module to location of installation.
- Leave module on pallet until beginning of installation.

SAFETY INSTRUCTIONS – LISTED ON PACKAGING

To transport and temporarily store the module before installation, please consider the safety instructions listed below. These instructions are also listed on the packaging.

 <p>Transport with forklift only.</p>	 <p>Do not damage outer packaging.</p>	 <p>Handle the product with care.</p>	 <p>Packaging is top-heavy.</p>	 <p>Store packaging upright with arrows directed upwards.</p>
 <p>Do not stack the modules.</p>	 <p>Protect from direct sunlight.</p>	 <p>Store preserved modules in the following temperature range only: 5°C - 40°C (41°F - 104°F).</p>	 <p>Protect from moisture (< 70 % ambient humidity).</p>	

SAFETY PRECAUTIONS

Please consider local safety requirements.

TRANSPORTATION BY FORKLIFT

To move the module, please consider the below instructions and use appropriate safety equipment during transportation. More detailed information about the dimensions of the module can be found in the Scope of Supply Sheet: "TDS-WW002_BIO-CEL 52_Scope of supply-Accessories-Spare parts" and "TDS-WW003_BIO-CEL 104_Scope of supply-Accessories-Spare parts".

Choose a suitable forklift to transport the module:

- Maximum dimension (H/W/D) including packaging:
 BIO-CEL® 52 1713 x 745 x 1024 mm (5.6 x 2.4 x 3.4 ft)
 BIO-CEL® 104 1713 x 745 x 1600 mm (5.6 x 2.4 x 5.2 ft)

- Weight of product:
 BIO-CEL® 52 150 kg (331 lbs)
 BIO-CEL® 104 260 kg (574 lbs)

- Floor load
 BIO-CEL® 52 197 kg/m² (40 psf)
 BIO-CEL® 104 218 kg/m² (45 psf)

- Required depth of fork:
 BIO-CEL® 52 1400 mm (4.6 ft)
 BIO-CEL® 104 1400 mm (4.6 ft)

Caution: Danger of tipping over

The module is top-heavy; incorrect handling may result in tipping over.

For correct positioning of the forks, you will find mass focus signs on the packaging.



UNPACKING & INSTALLATION

Please read the BIO-CEL® MBR Operation and Maintenance Manual before unpacking and installing the module; the manual explains each installation step in full detail.

The assembly instructions for optional accessories are supplied directly with the accessory parts or can be requested from MANN+HUMMEL WFS Technical Service.

TRANSPORTATION BY CRANE

- A crane may be used to lift the completed modules to a desired location.
- The load-carrying cables should be positioned onto the steel bars directly at the cassette walls as shown in Figure 1.
- Avoid sliding the module across the floor during the transportation process. Lift the module completely off the ground.
- Max weight for lifting is:
 - BIO-CEL® 52 450 kg (993 lbs) (wet module).
 - BIO-CEL® 104 850 kg (1874 lbs) (wet module).

In the case that the module must be transported and installed using a crane, please read the relevant chapters (1.7 and 6) in the BIO-CEL® MBR Operation and Maintenance Manual beforehand.

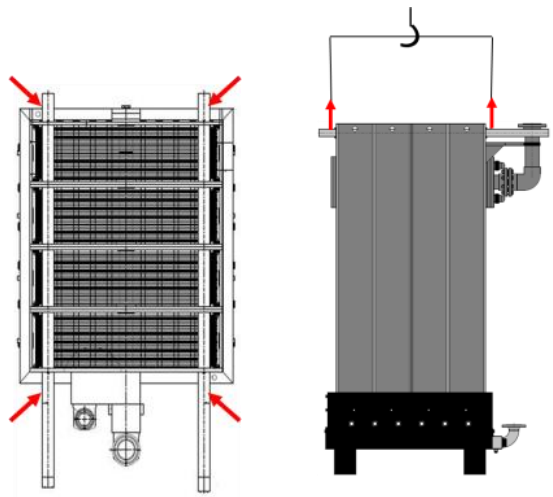


Figure 1: Proper attachment location and lifting technique for module transportation with a crane

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