

# BIO-CEL<sup>®</sup> XL-2

## Scope of Supply

The BIO-CEL MBR<sup>®</sup> product is ideal for biological wastewater treatment in industrial and municipal applications. This product specification sheet provides details about the standard scope of supply, available accessories, and spare parts of BIO-CEL XL-2 modules.

Find shipment dimensions and container transport information on page 2. BIO-CEL XL-2 modules are shipped in wooden crates along with piping packed in boxes on a pallet. Part numbers in Table 1 are the standard scope of supply. For details about available accessories, please refer to page 4. For spare parts, please refer to page 5.

Table 1. Scope of supply

Part Number	Module Name	Comments
1000003054	BIO-CEL XL-2	1.4301/304 (V2A) Permeate piping in PVC, lapped permeate flange in DN125 PN10, flange orientation variable. Air piping in PP, lapped permeate flange in DN125 PN10, flange orientation variable, incl. adjustable legs with screws and nuts
1000026174	BIO-CEL XL-2 SS316	1.4404/316Ti (V4A) Permeate piping in PVC, lapped permeate flange in DN125 PN10, flange orientation variable. Air piping in PP, lapped permeate flange in DN125 PN10, flange orientation variable, incl. adjustable legs with screws and nuts

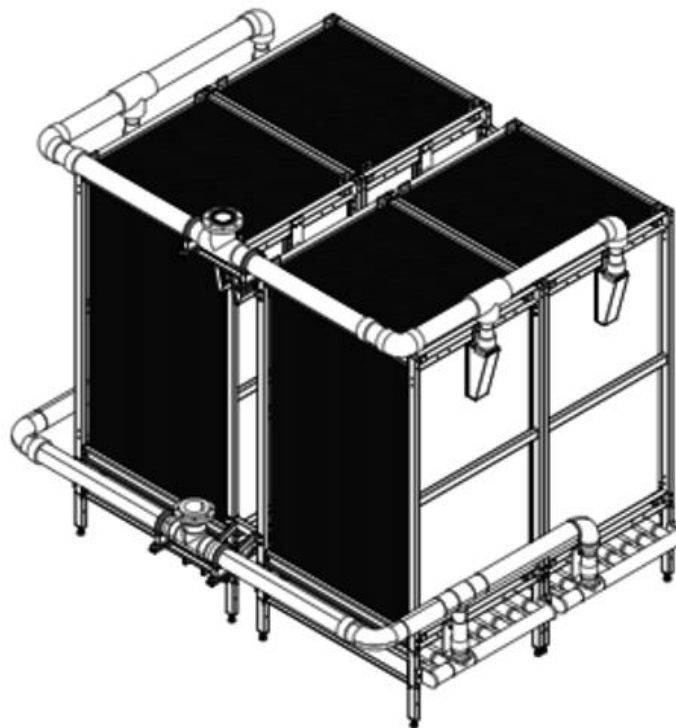


Figure 1. BIO-CEL XL-2 scope of supply

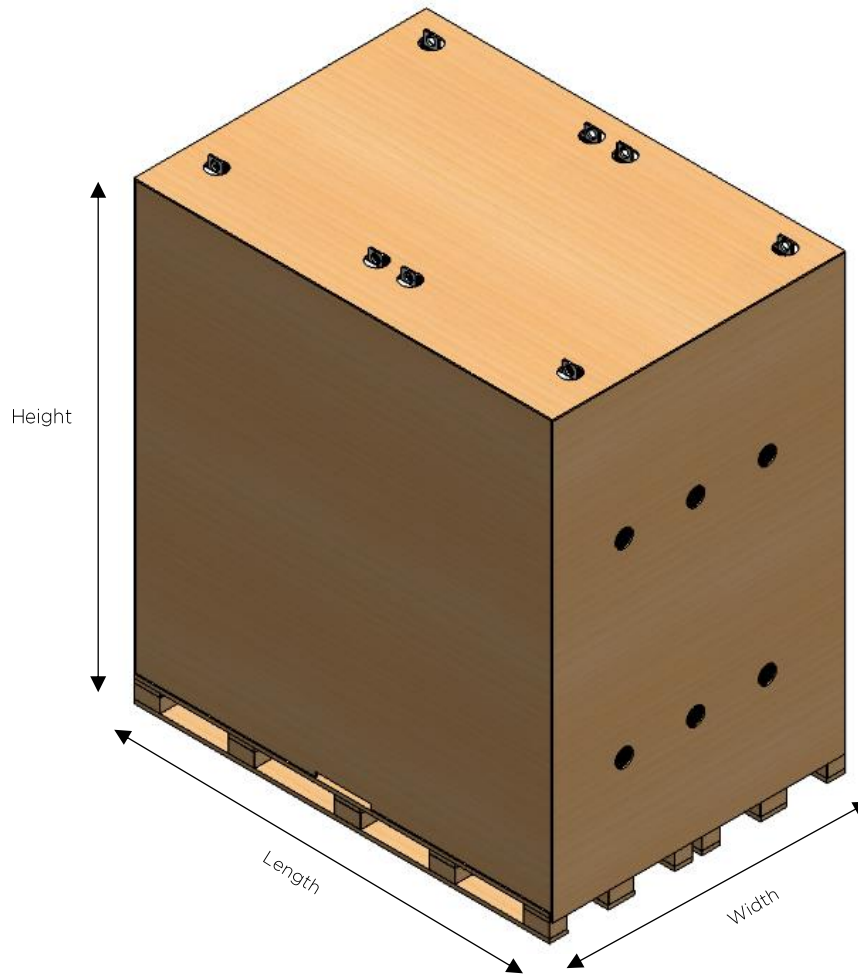
BIO-CEL XL-2 packaging consists of three pieces, two wooden crates as shown in Figure 2 and one pallet with all additional parts like piping, supports, and clamps packed in boxes. Depending on the number of BIO-CEL XL-2 modules ordered, the piping, supports, and clamps for more than just one module might be packed on one pallet project-specific.

Table 3 shows the arrangement in different container sizes for the wooden crates only.  
 Table 4 shows the required amount of containers for 10 and 20 BIO-CEL XL-2.

**Table 2.** Wooden crate and piping shipment dimensions

	<b>Length</b>	<b>Width</b>	<b>Height</b>	<b>Weight</b>
BIO-CEL XL-2 Double sub-unit	2,338 mm (7.7 ft)	1,650 mm (5.4 ft)	2,580mm (8.5 ft)	1,000 kg (2200 lb)
BIO-CEL XL-2 Pippings	2,800 mm (9.2 ft)	1,140 mm (3.7 ft)	1,480 mm (4.8 ft) 2,124 mm (6.9 ft)*	188 kg (414 lb) 356 kg (740 lb)*

\*If two sets of pippings are stacked on one pallet



**Figure 2.** BIO-CEL XL-2 Double sub-unit in transport packaging

Table 3. High cube container inner dimensions

	Length	Width	Height
20 ft container	5,898mm (19.4 ft)	2,350mm (7.7 ft)	2,690mm (8.8 ft)
40 ft container	12,032mm (39.5 ft)	2,350mm (7.7 ft)	2,700mm (8.8 ft)
Door opening	-	2,350mm (7.7 ft)	2,597mm (8.5 ft)

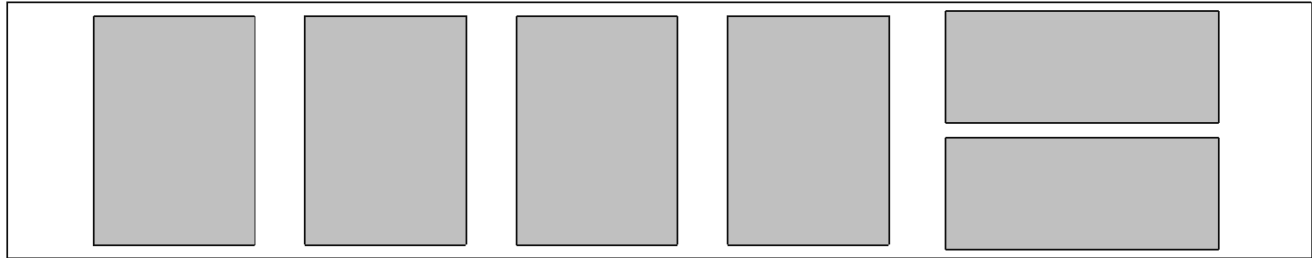


Figure 3. Exemplary arrangement of BIO-CEL XL-2 subunits and pallets of pipings in 40 ft container

Table 4 Amount of High cube container needed for 10 or 20 BIO-CEL XL-2

Amount of BIO-CEL XL-2	Amount of BIO-CEL XL-2 sub-units	Amount of Pallets for BIO-CEL XL-2 Piping	Amount of 40 ft HC container (20 ft HC container)
1	2	1	1
10	20 pcs	5 pcs	4 (9) pcs
20	40 pcs	10 pcs	7 (16) pcs

# BIO-CEL XL-2

## Accessories

To ensure proper installation and operation of BIO-CEL MBR modules, certain accessories may be necessary. Drawings are available on request. Drawings of wall fixation and lifting tool concept can be sent on request.

Table 5. Accessories

Position	Part Number	Accessory	Material / Comment
A1	1000021089	BIO-CEL L Ground Fixation Set	Set of 4 brackets including screws and nuts, Stainless Steel 1.4404/316Ti
-	1000026575	BIO-CEL L-2 Double Lifting Tool	Stainless Steel 1.4301/304. Lifting of two pre-assembled cassettes possible

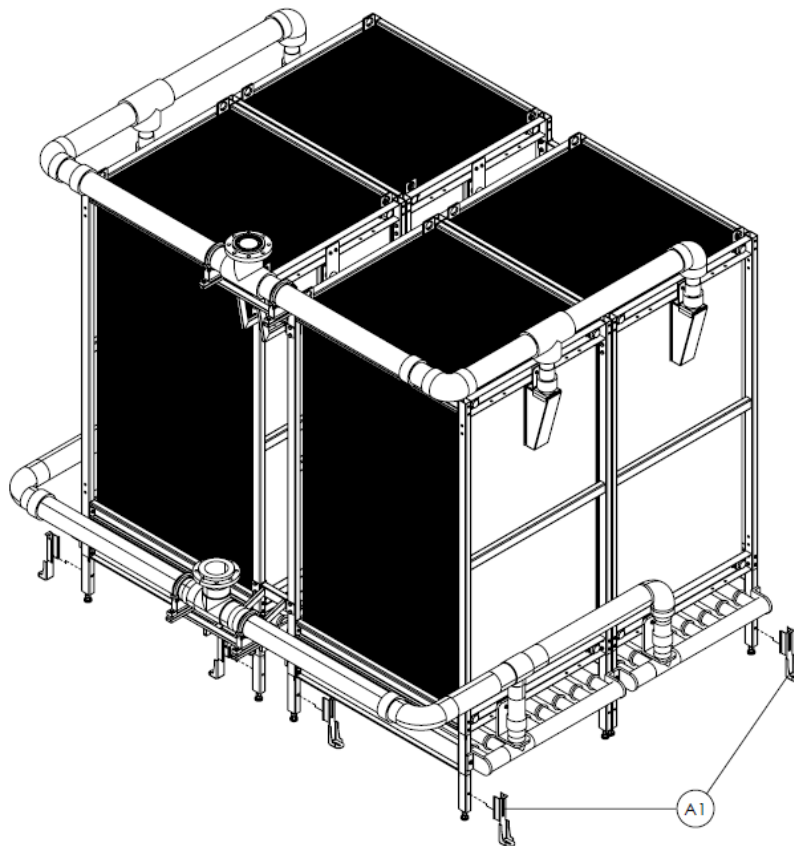


Figure 4. BIO-CEL XL-2 accessories

# BIO-CEL XL-2

## Spare Parts

No spare parts are typically required for BIO-CEL XL-2 modules within the first five years of operation. If spare parts are needed, they may be ordered as per Table 6. For spare parts on single cassettes, please refer to the spare parts list for BIO-CEL L-2.

**Table 6.** Spare parts

Position	Part Number	Spare Part	Remarks
(S1)	1000001435	BIO-CEL L-2 Cassette	Stainless Steel 1.4301/304 (V2A), Single BIO-CEL L-2 cassette
	1000001467	BIO-CEL L-2 Cassette SS316	Stainless Steel 1.4571/316Ti (V4A), Single BIO-CEL L-2 cassette
S1	1000023007	BIO-CEL L-2 Double Cassette	Stainless Steel 1.4301/304 (V2A), two pre-assembled BIO-CEL L-2 cassettes
	1000023008	BIO-CEL L-2 Double Cassette SS316	Stainless Steel 1.4571/316Ti (V4A), two pre-assembled BIO-CEL L-2 cassettes
S2	1000023006	BIO-CEL XL-2 Coupling Set	Set Grip Clamp Couplings made of Stainless Steel 1.4404/316L and EPDM sealing. Needed to connect the pipe sets.
S3	1000023004	BIO-CEL XL-2 Support Set	Support Set made of Stainless Steel 1.4301/304 (V2A) incl. pipe clamp and bolts
	1000023482	BIO-CEL XL-2 Support Set SS316	Support Set made of Stainless Steel 1.4404/316Ti (V4A) incl. pipe clamp and bolts
S4	1000001432	BIO-CEL L Adjustable Legs	Set of 4 legs screws and nuts, Stainless Steel 1.4301/304
	1000001457	BIO-CEL L Adjustable Legs SS316	Set of 4 legs screws and nuts, Stainless Steel 1.4404/316Ti

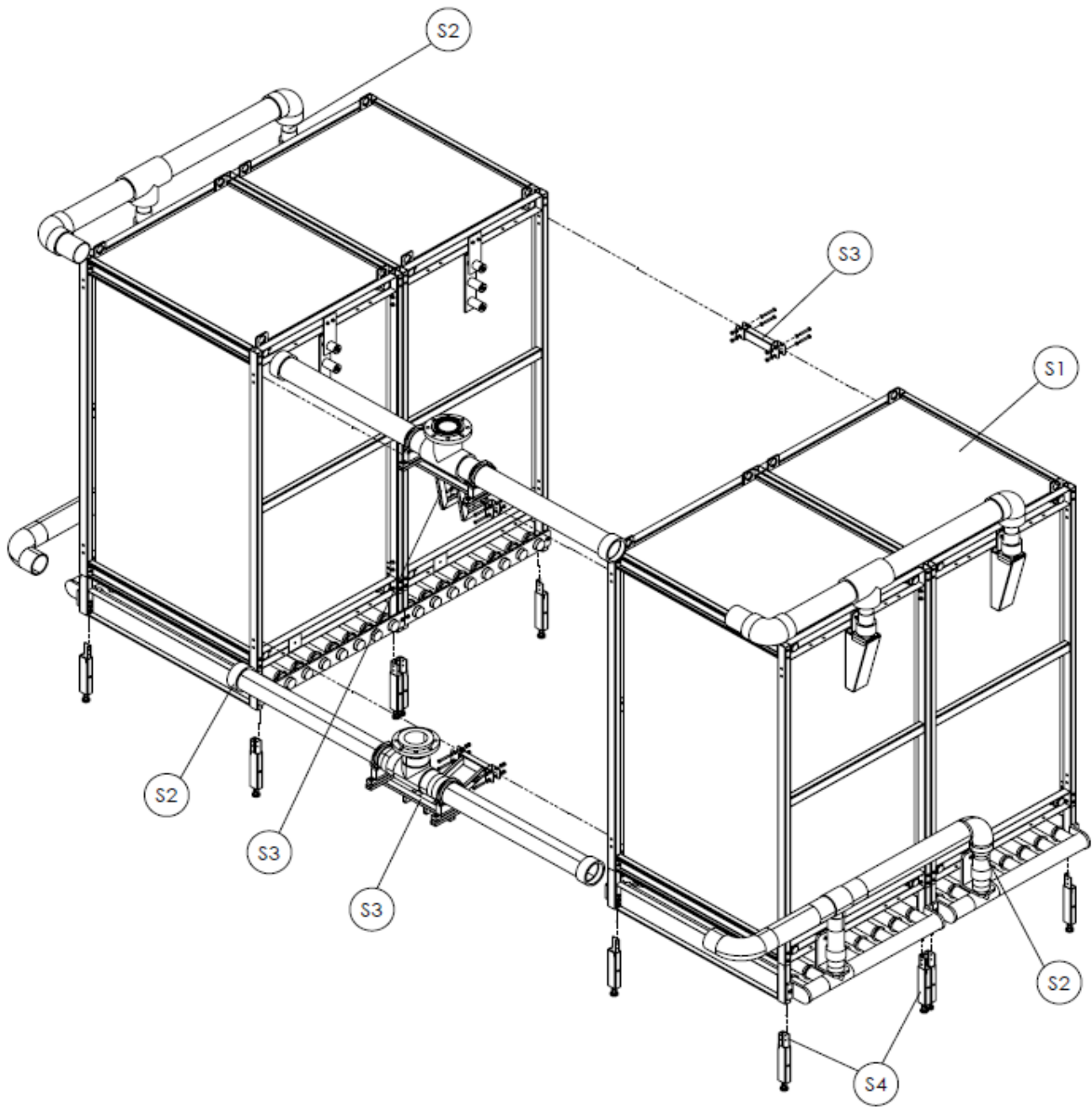


Figure 5. BIO-CEL XL-2 spare parts

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