

BIO-CEL® L+ 1920H

Scope of Supply

The BIO-CEL MBR® 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 L+ 1920H modules.

Find shipment dimensions and container transport information on page 2. BIO-CEL L+ 1920H 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
1000032177	BIO-CEL L+ 1920H	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
1000032178	BIO-CEL L+ 1920H	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

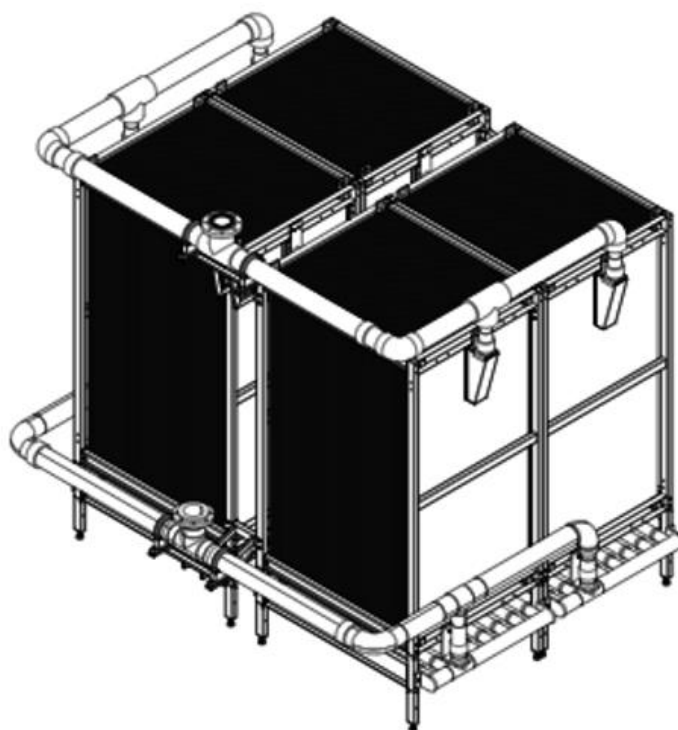


Figure 1. BIO-CEL L+ 1920H scope of supply

BIO-CEL L+ 1920H 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 L+ 1920H 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 L+ 1920H.

Table 2. Wooden crate and piping shipment dimensions

	Length	Width	Height	Weight
BIO-CEL L+ 1920H 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 L+ 1920H 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

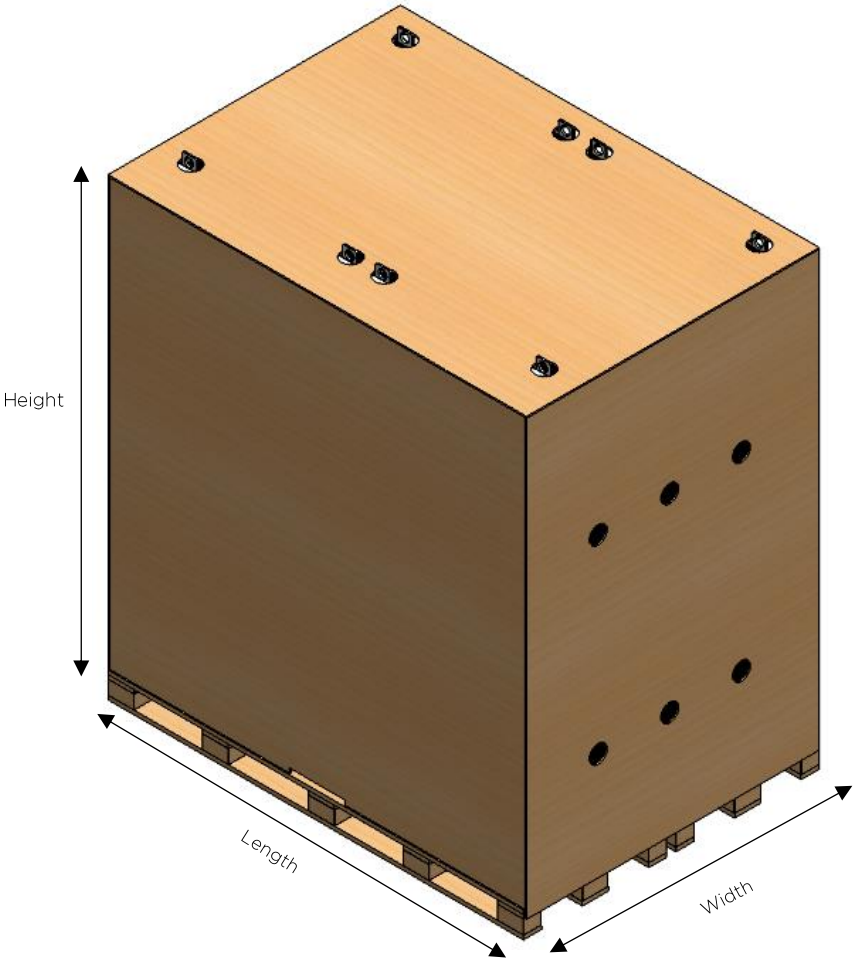


Figure 2. BIO-CEL L+ 1920H sub-unit in transport packaging

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)

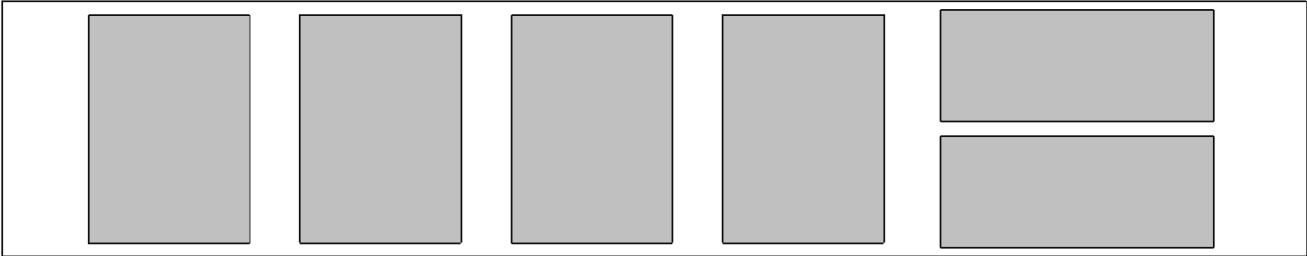


Figure 3. Exemplary arrangement of BIO-CEL L+ 1920H subunits and pallets of piping in 40 ft container

Table 4 Amount of High cube container needed for 10 or 20 BIO-CEL L+ 1920 H

Amount of BIO-CEL L+ 1920H	Amount of BIO-CEL L+1920H sub-units	Amount of Pallets for BIO-CEL L+ 1920H 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

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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
-	1000032324	BIO-CEL L+ 960H Lifting Tool	Stainless Steel 1.4301/304

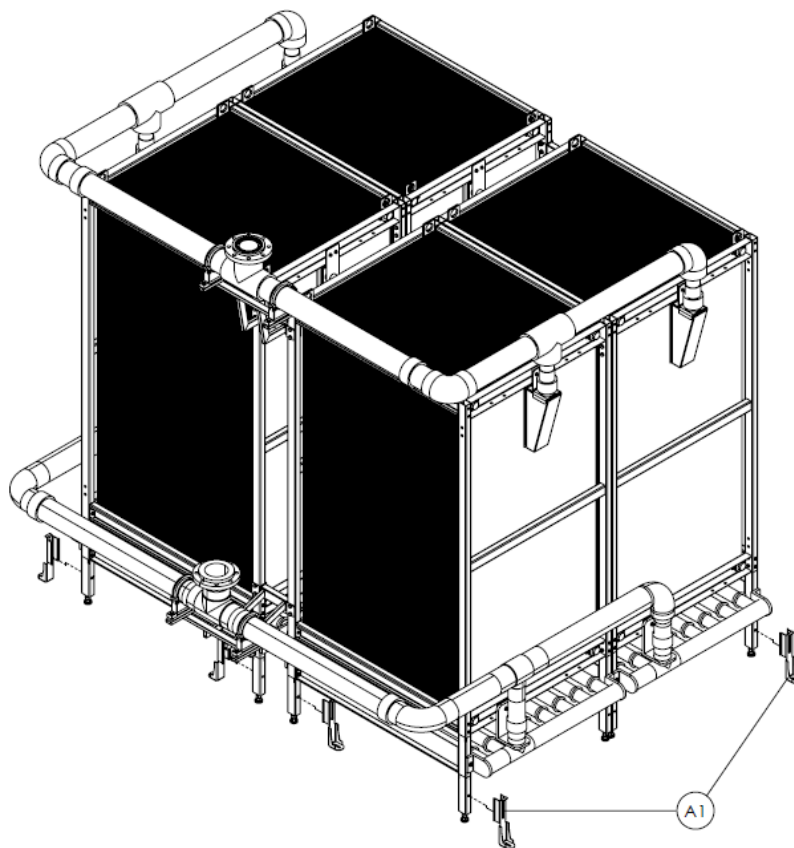


Figure 4. BIO-CEL L+ 1920H accessories

BIO-CEL L+ 1920H

Spare Parts

No spare parts are typically required for BIO-CEL L+ 1920H 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+ 480.

Table 6. Spare parts

Position	Part Number	Spare Part	Remarks
(S1)	1000032166	BIO-CEL L+ 480 Cassette	Stainless Steel 1.4301/304 (V2A), Single BIO-CEL L+ 480 cassette
	1000032168	BIO-CEL L+ 480 Cassette SS316	Stainless Steel 1.4571/316Ti (V4A), Single BIO-CEL L+ 480 cassette
S1	1000032169	BIO-CEL L+ 960H Cassette	Stainless Steel 1.4301/304 (V2A), two pre-assembled BIO-CEL L+ 480 cassettes
	1000032180	BIO-CEL L+ 960H Cassette SS316	Stainless Steel 1.4571/316Ti (V4A), two pre-assembled BIO-CEL L+ 480 cassettes
S2	1000032353	BIO-CEL L+ 1920H Coupling Set SS316	Set Grip Clamp Couplings made of Stainless Steel 1.4404/316L and EPDM sealing. Needed to connect the pipe sets.
S3	1000032351	BIO-CEL L+ 1920H Support Set	Support Set made of Stainless Steel 1.4301/304 (V2A) incl. pipe clamp and bolts
	1000032352	BIO-CEL L+ 1920H 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

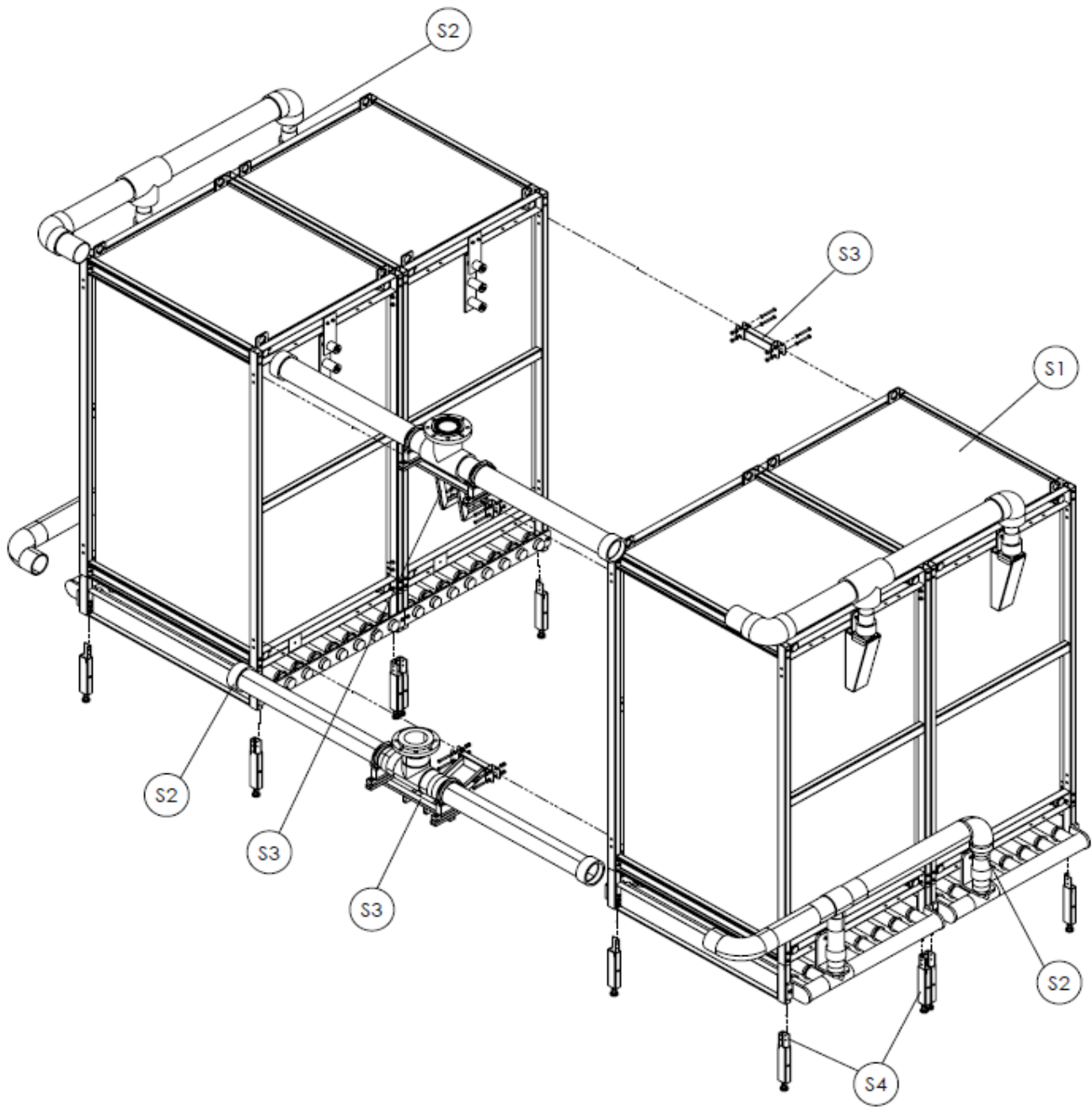


Figure 5. BIO-CEL L+ 1920H spare parts

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