

CellScrew®

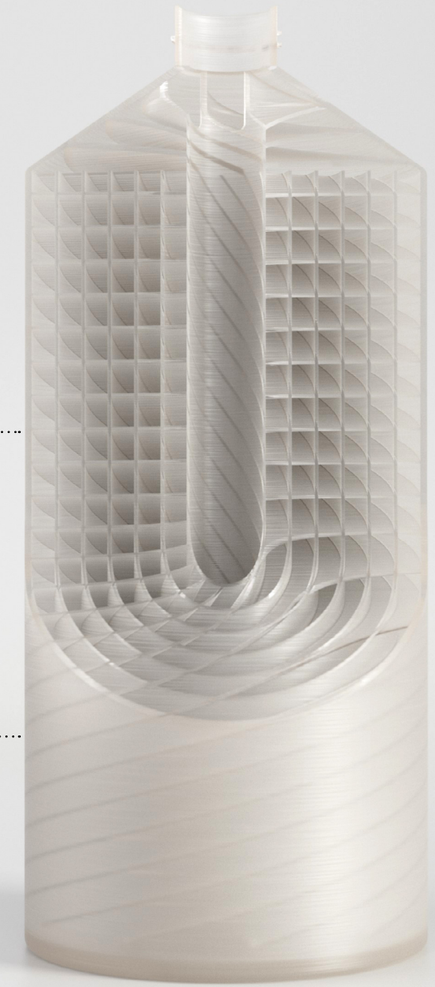
Scaling your adherent cell yields in minimal space



Designed for the future of adherent cell cultivation

Large cell culture area formed by concentric cylinders

Excellent mixing and gas exchange facilitated by Archimedes' screws





Available as closed system

Size range offers extensive scalability options

Easy handling through compact size

Space efficient design through high surface-to-volume ratio

Made from sustainable, plant-based polylactic acid (PLA)

Your team for scaling



The **CellScrew®** is available in three complementary sizes suitable from process development scale to production. Up- and downscale your cell cultivation process according to your needs – without the burden of complex and costly process adjustments.

	CellScrew® mini	CellScrew® 6K	CellScrew® 10K
			
Growth area	850 cm^2	6,000 cm^2	10,000 cm^2
Medium area	50 - 120 mL	250 - 800 mL	450 - 1,300 mL
Recommended media volume	85 mL	600 mL	1,000 mL
Height	16.78 cm	19.19 cm	28.39 cm
Diameter	5.3 cm	12.1 cm	12.1 cm
Weight	120 g	550 g	860 g
Recommended speed	0.2 - 2 rpm		
Mixing times (@0.5 rpm)	< 8 min	< 9 min	< 27 min
kLa (@0.5 rpm)	N/A	1.95 h^{-1}	1.95 h^{-1}

Every CellScrew® comes with a vented cap, sterilized and TC-treated.

Your advantages with the CellScrew®

Grow big but stay lean

There's no need to deal with bulky stack systems: The **CellScrew®** enables extensive cultivation of adherent cells on a small footprint.

12x
lower contamination risk compared to roller bottles

The **CellScrew®** 10K unites your adherent cell cultivation in just one bottle, reducing contamination and batch variances, and preventing you from costly setbacks.

133
times less vessels to handle compared to T75-flasks

The large growth area of one **CellScrew®** 10K simplifies adherent cell culture by reducing lab and paper work.

Say yes to scaling without complicated process development

Cultivating adherent cells in the **CellScrew®** allows for linear scalability without changing the cell's environment, ultimately streamlining your cultivation process.

How it works

STEP 1



Inoculate the **CellScrew®** with cells and media.

STEP 2



Incubate: Placed on a roller device in a 10-15° angle, the Archimedes' screws inside the **CellScrew®** distribute cells, medium and gas evenly through the bottle.

STEP 3

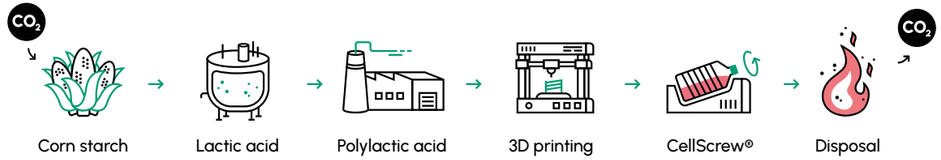


Harvest the cells from the **CellScrew®** after trypsinization.

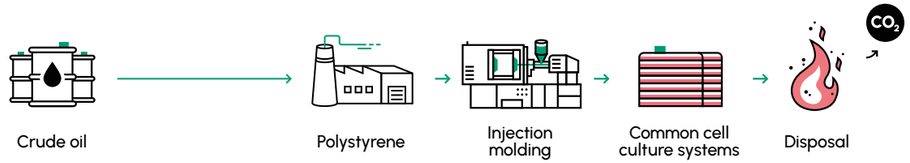
The world's most sustainable cell culture system made from plant-based PLA

plant-based · plant-based ·

CellScrew®

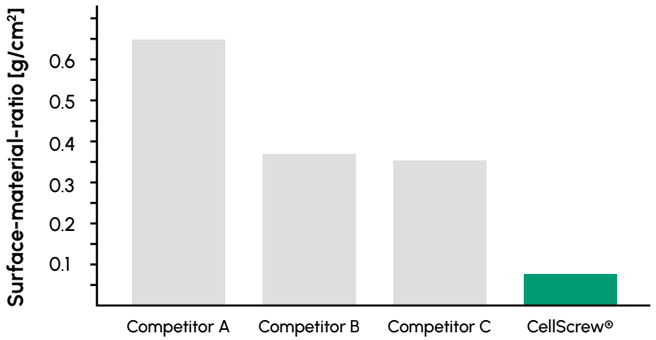


Common systems



90% less carbon emissions!

Additive manufacturing allows for the creation of a **large growth surface** with **reduced material usage**. Combined with the use of plant-based PLA, the CellScrew® has a 90% lower carbon footprint than other cell culture systems.



Discover our bundles



CellScrew® 6K starter bundle

- 3 **CellScrew® 6K** with a bundle discount
- detailed onboarding with our application specialists
- expert support from R&D



CellScrew® mini bundle

- **3 CellScrew® mini**
- adapter to cultivate **3 CellScrew®** simultaneously included in first order

Contact our Sales team → ✉ → sales@greenebt.com

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