

Customized batch SUB's or SUM's

Tight controlled, customizable, scalable – from 50 ml and up

Keywords: Single-Use-Bioreactor, customized, scalable

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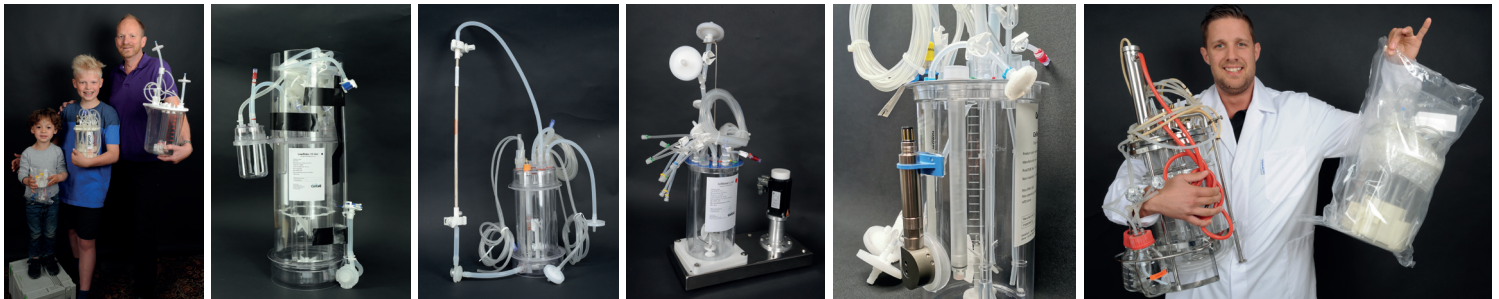
Whichever need you may have: batch Single-Use-Bioreactor (SUB), Single-Use-Fermenter (SUF), Single-Use-Mixer (SUM) you may fancy in the range of 50 ml to 25 liter Working-Volume (WV). Customized means designed and manufactured to your needs, including Single-Use-Sensor's (SUS), assembly with all hose's, connector's, bottle's, etc. Dual film bagged, high precision E-beam irradiated and ready-to-use.



Above various SUBs and SUFs with thermal control by electrical blankets or liquid jackets. Media connections at bottom or head plate. Any impeller or turbine one can imagine.



Various mini-SUBs with as low as 50 ml Working-Volume in a 150 ml Vessel Volume SUB. Several sizes which adapt to any PCS brand in the market most often with Magnetic-Bottom-Drive on a Magnetic-Stirrer-Table (MST) from CerCell adapting to any servo motor. Off course with pre-installed Single-Use-Sensors (SUS) as applicable.



All CerCell's products are scalable ... above shown a 13 and a 3.2 liter LowRider perfusion SUBs with bottom outlet as the perfect choice for centrifugal SUPs. The SUB with Magnetic-Bottom-Drive mounted on Magnetic-Stirrer-Table (MST) protecting the lightweight SUB by isolating the heavy servo motor from the SUB = safety. A 3.2 liter SUB with liquid bottom outlet equipped with the InCyte ARC biomass sensor connected to the pre-installed Hamilton Single-Use-Sensor patch. Kevin illustrates the enormous weight differences of similar Vessel Volume (VV) glass-steel STR and CerCell SUB.



Process-Control-Systems (PCS) come from a range of suppliers. Most common is Sartorius, Applikon, Eppendorf and some 10 smaller manufacturers in Europe. All PCS based on operation principles originating from B.Braun (Melsungen, Germany) in the 70ties. Now typically ONE big box with input for temp, DO, pH and output for agitation, aeration and temperature. Are these PCS's customizable or easy to expand – NO.

Our PCS is fully customizable and as one small unit is for one process task any user can design the simple or advanced PCS for any process. Simple for one purpose or advanced for like a Perfusion-SUB fully handled from A-to-B and supervised by the Lucullus software.