



## A breakthrough in adherent cell expansion

### - Livit ACE

Livit ACE combines the best of CellRev's proprietary processing technologies with Getinge's bioprocessing expertise and equipment into one integrated cell manufacturing solution.

#### The Livit ACE offers:

- Significantly reduced COGS
- Reduced development timelines and costs
- Reduced capital cost and footprint requirement through improved productivity
- Scalable with improved product reproducibility
- Elimination of the need to adapt naturally adherent cells
- Cost-effective integration of a transferable upstream process

# Continuous bioprocessing with Livit ACE

Livit ACE is a complete package providing a novel bioprocessing solution. It is a cost-effective alternative to expensive process development and complex technology selection.

The Livit ACE solution offering includes standard application development, equipment, technology transfer, commissioning and training.

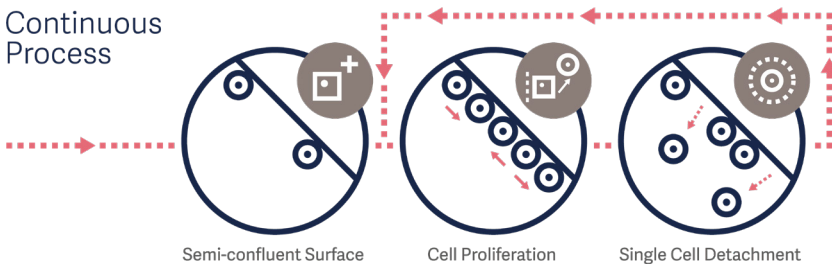
## Cell Growth

Cells are seeded and grown in the bioreactor as per any other cell culture process. The target confluence is established during customer trial work.

## Cell Detachment

CellRev's proprietary reagent Continuase™ is added to the culture at a predefined concentration to trigger the release of cells to facilitate further expansion. This patented method enables the controlled detachment of adherent cells from a variety of surfaces. The rate of cell detachment is maintained equal to growth rate to allow steady state operation at high cell densities.

## Continuous Process



Continuous processing can

- Eliminate manual handling and human error
- Increase quality assurance through online monitoring and control
- Reduce manufacturing time and increase efficiency
- Reduce capital costs by using smaller equipment and less manufacturing space
- Respond efficiently in the event of a supply shortage



Continuase™

## Cell Collection

Cells are collected continuously for cell banking or downstream processing. This reduces the need for large scale batch harvesting and facilitates optimal downstream design.

## Applications

- Cell-based vaccines
- Cell therapies
- Cellular agriculture
- Continuous cultivation
- Process intensification

### Let's connect for more information

Want to know if the Livit ACE can improve your process?  
Scan the QR code.

