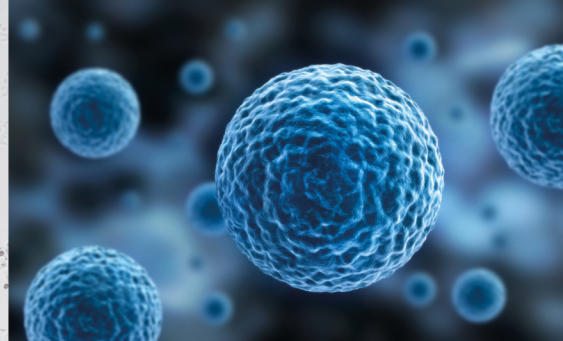




CELL CULTURE SYSTEMS

of CellOvation GmbH & CO KG

1 Complete (c)GMP-compliance by means of

- monitoring and logging of all relevant parameters (temp., rel. Humidity, CO₂-concentration, automatic data- and image-processing)
- redundant points of measurement and multi-level error handling
- complete documentation of all user interactions
- standard time stamp to achieve fraud proof time documentation throughout the whole system (DCF77 radio controlled clock)

2 Fully automated cell culturing

- all handling steps of cell cultures and any further steps completely integrated
- whole system inside of self-contained class 2 laminar flow chamber for product and staff safety
- flexible, open concept of the system
- integration of further modules (e.g. cappers / decappers, centrifuges, 384 well dispensers, etc.) easily possible
- gradient freezing of cell suspensions down to -120°C

3 Free of contaminations / cross contaminations

- repeated automatic sterilization and cleaning processes
- no risk of cross contamination
- uncomplicated integration of mycoplasma testing

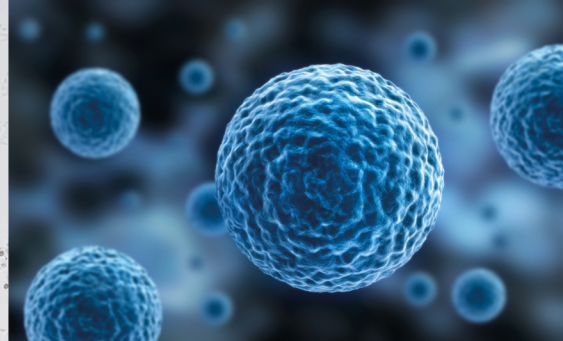
4 High reliability of hard- and software

- use of robust industrial components
- total database architecture of the software
- UPS
- remote monitoring / -access

5 High to extremely high throughput

- multi-channel liquid-handling system to achieve parallel aspiration and dispense of liquids.
- Our 3-channel-probe system requires less than 60 seconds for working off up to 16 roboflasks:
 - remove old media
 - add PBS
 - agitate
 - remove PBS
 - add Trypsin
 - agitate

6 Modular system which can be upgraded at any time



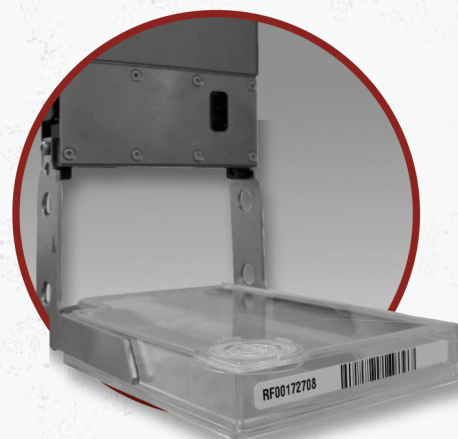
- Open
 - Flexible
 - Upgradeable
 - Contamination-Free
 - GMP-Compliant
 - Fully Automated
- Cell Culturing Systems
with High Throughput
and Extraordinary Reliability**



**Fully Automated
Sterilization and Cleaning**



**Self-Contained Clean
Room Cabinet**



Gripper



**Cross-Contamination Free
3-Channel Probe System**



**Fast Automatic
Cell Counting**