



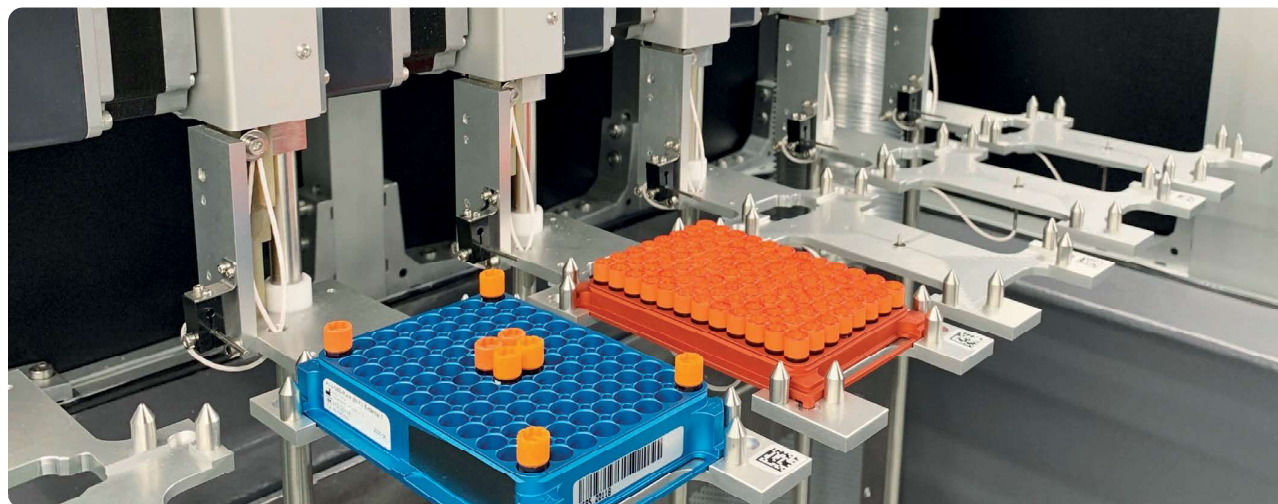
- 1 Large Touch Panel PC to control entire device
- 2 Manual I/O unit for warm sample
- 3 Up to 6 independent working freezers for control rate freezing
- 4 I/O unit for frozen samples (either for standalone device (shown) or for fully implemented)
- 5 Cryogenic working and parking area to handle frozen samples at  $-130^{\circ}\text{C}$  and below
- 6 Robotic system to handle single vials and SBS Rack in warm and cold environment, combined with gripper changing module
- 7 Integrated camera for remote control

## ASKION C-line® AWB

Based on the ASKION C-line® workbenches WB220/230 ASKION developed the new automated workbench AWB to meet the growing customers' requirements as automated sample handling, increased sample throughput as well as more precise monitoring and documentation.

The ASKION C-line® AWB provides all advantages of the well-established ASKION C-line® workbench family and comes furthermore with new features as for example automated SBS rack handling, single sample gripper, integrated rack scanners or the connection to the ASKION C-line® external automation (rail system).

- automated SBS rack handling at down to  $-130^{\circ}\text{C}$
- automated single sample handling at down to  $-130^{\circ}\text{C}$
- fully automated freezing
- multiple, independently performable freezing processes
- uninterrupted cooling chain, monitored and automatically documented
- integrated SBS rack scanners to identify samples in cryogenic environment down to  $-130^{\circ}\text{C}$
- independent from sample format
- interface to external devices, e.g. pipetting platforms
- connection to ASKION C-line® external automation (rail system) for fully automated transport of frozen samples into the biobank possible
- compatible to all ASKION C-line® components



control rate freezer with samples

## Specifications

|                                     |  |
|-------------------------------------|--|
| Dimensions (width x depth x height) | 291 x 115 x 245 cm (+/-15)   |
| Weight                              | 800 kg   |
| Barcode scanner                     | two 2D ASKION ColdEye scanners integrated, SBS rack scan in cryogenic environment down to -130°C |
| Freezers                            | 6 lift freezers, fully automated, independently working from each other                          |

## Temperatures

|                                   |   |
|-----------------------------------|---|
| Temperature range working area    | adjustable, down to -130°C                            |
| Temperatur range freezer area     | +20°C down to -160°C                                  |
| Time to reach working Temperature | 30 min to -100°C (depends on the LN2 supply pressure) |
| Temperature resolution            | 0.1 °C  |
| Cooling gradient freezer          | 0.1 - 50 K/min  |

## Control

|                        |   |
|------------------------|---|
| Display                | 17" LCD-Touchscreen-PC                              |
| Connection to LIMS/HIS | available by ASKION C-Line® control interface (CCI) |

## Storage of samples

|            |   |
|------------|---|
| monitoring | integrated temperature control system, external alarm interface |
|------------|---|

## Electrical connections

|                        |                          |
|------------------------|--------------------------|
| Electrical connections | 110/230 V, 50/60 Hz, 16A |
|------------------------|--------------------------|

## Coolant

|                          |  |
|--------------------------|--|
| Coolant                  | LIN, liquid nitrogen                             |
| Pressure LIN supply      | 1 - 2 bar  |
| Environmental conditions | 15 to 25°C, 15 to 60 % humidity (non condensing) |