### WHAT DOES A MODERN LAB DESIRE

- · Drag and drop programming
- Multi-dispensing functions
- · Level sensing with clear tips
- · Multi-functional plate usage
- · Interchangeable heads
- Multiple language software

### ADVANCED SOFTWARE FEATURES

- Normalisation feature, automatic calculations
- · Preparation of multiple mixes
- · Copy/paste functionality
- Plate dependent activation of liquid level sensing
- Setup of reserved areas
- Recognition of missing tips
- Serial dilutions, automatic calculations
- Tube switching for multiple mixes or reagents
- Plate dependent activation of multi-dispensing
- Fluid transfer of remaining mixes or reagents
- · Recognition of missing fluids
- Comprehensive error warnings
- Detection and documentation of missing sample.



PIRO®- Your Personal Pipetting Robot

## PIRO®

### **High Performance Pipetting**



## PIRO'S BIG FIVE

#### LET'S FIT TO THE NEEDS OF A MODERN LAB

- Full connectivity to middleware solutions
- As versatile as possible
- Improved precision leads to perfect results
- Why not combining efficiency with flexibility
- Small in size but big in space



- 600 x 515 x 470 mm
- 16 deck positions for 12 SBS plates and 4 tube racks
- 50 μl, 200 μl, and 1000 μl tips expand to a wide and precise volume range.
- 100 mm depth achievable for deep well plates and tubes
- 384-well plate setup without running out of tips
- A large variety of racks, plates and tubes are available.



- Interchangeable pipetting heads
- Various functions can be assigned to one plate.
- · Interchangeable deck positions
- · User adopted waste handling
- Fully controlled pipetting status during the whole pipetting procedure
- · Adjustable pipetting speed
- The software is designed to be used in many languages.





## VERSATILE PIRO APPLICATIONS

- Sample normalisation
- Serial dilutions
- Rearranging plate formats
- Cherry picking from various plates and formats
- Plate duplications
- · Various mixes for the same run.

# TOTAL TRACEABILITY

- · Fully controlled data tracking
- Combining the pipettor with any kind of LIMS-System
- Intelligent pipetting from database
- · Starting a run from an excel worklist
- Feeding down-stream instruments by one mouse-klick.

# HIGHEST PRECISION



PIRO Liquid Handling System provides highest precision in the x-,y, and z-axis positions.

This is due to the stepper motors implemented allowing for steps of 0.0065 mm enabling accurate pipetting for all plates and tubes handled by the PIRO.

The remarkable precision of the PIRO system also enforces the pipetting performance within the whole volume range.

#### Coefficient of variation (CV)

- CV < 1 %, 6 180  $\mu I$
- CV < 5%,  $3 5\mu$ l
- CV < 10 %, 1 2 µl