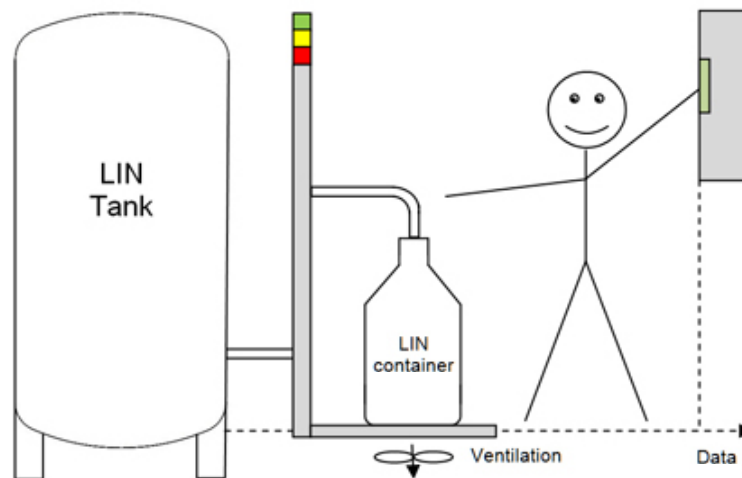


We reserve the rights for this elaboration according to DIN ISO 16016. Any depicted design corresponds to the current state of technology. Alterations to this embodiment will void validity.

Application The CryoFill station is used, if many containers are to be filled by different users with liquid nitrogen and the filling amounts must be allocated for cost calculation. The system is process- and safety-optimized. The user has to be instructed and has to wear face and hand protection during the filling-process.

Structure **Scaling and Fill system** **Cabinet**



Description The user passes through the access control system in the filling area and identifies himself via touch screen on the control cabinet. His identification data will be displayed and the system is activated. In the next step, the user places the container on the scale. The nitrogen container will be identified and the data is forwarded to the cabinet where all container data is stored and the capacity will be calculated. Then, the user lowers the filling lance into the container. After activating the filling process is performed automatically. The emerging fog during filling will be removed through the ventilation system. Touchscreen as well as light signs indicate, when filling process has been completed. Additionally, acoustic operating instructions are issued by the speech module. The user lifts the filling lance back to its initial position and removes the filled container. The filled amount of nitrogen is assigned to the user as well as the container to be processed by cost center management. It can be retrieved and processed electronically. If no other container has to be filled, the filling area has to be left within a defined time span and the door has to be closed. CryoFill station includes a fully programmable control for every conceivable application. The system can be extended with the functions and control devices individually needed for a nitrogen filling station.



CryoFill station

Automatic filling station for liquid nitrogen containers

2/2
Rev. 08/19

General and optional functions

- Person recognition via access control system, up to 50 users
- Electronic container recognition, up to 50 containers
- Personal data protection through the security system
- User guidance speech module
- Operation via touchscreen with emergency filling function
- Monitoring and controlling of the supply tank
- Oxygen monitoring for filling in enclosed areas
- Nitrogen cutoff in case of oxygen deficiency
- Light signal for indicating the operating status
- Almost unlimited log capacity (> 10 years)
- Integrated web server for visualization and operation of the touch screen via internet browser
- Possibility of transmission of log data and administrative data as a csv-file via ftp-browser directly into any spreadsheet or data backup / archiving system
- Potential-free contacts for collective or individual alarms for forwarding signals to external monitoring systems
- Password protected setup with individually programmable passwords

Techn. Data

Floor scale

Platform size	mm	850 x 850
Weighing range / Resolution	kg	300 / 0,1
Material / Protection		stainless steel / IP 68
Calibration		verifiable to Class M III
Weight	kg	about 120

Cabinet

Dimensions L x W x D	mm	760 x 760 x 300
Weight	kg	about 60
Material / Protection		stainless steel / IP 66
Power supply		230 VAC, 16A

Touchscreen

TFT Color-Display		10,4" (ca. 211 x 158 mm)
Resolution/Colours		VGA 640x480 Pixel / 64K Colours
Touch		resistive
Interfaces		Ethernet 10 / 100, USB