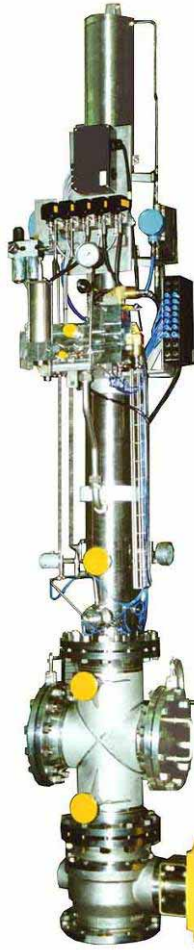


# Aquarex® Cleaning devices

For various differing tank and vessel designs Hammelmann can custom build special cleaning devices. Shown here are typical examples.



Telescopic system in gas and pressure tight design for cleaning autoclaves. The unit is permanently installed at the access point and isolated from the autoclave by a shut off valve when not in use.

The cleaning cycle can be fully integrated into the process plant control.

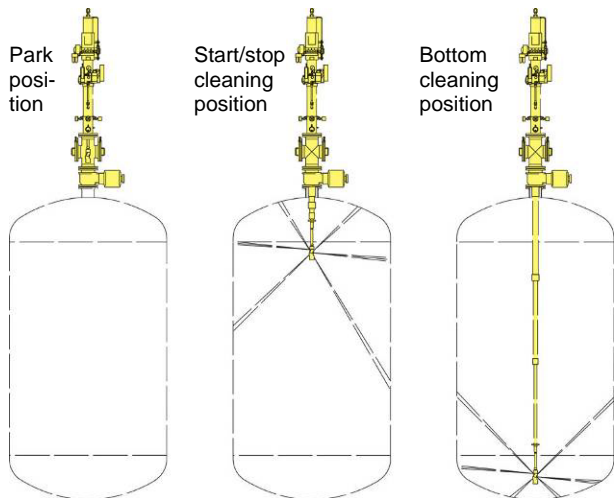


Lance system with integrated ball valve for permanent installation. The automatic tank cleaning head remains in the vessel during production.

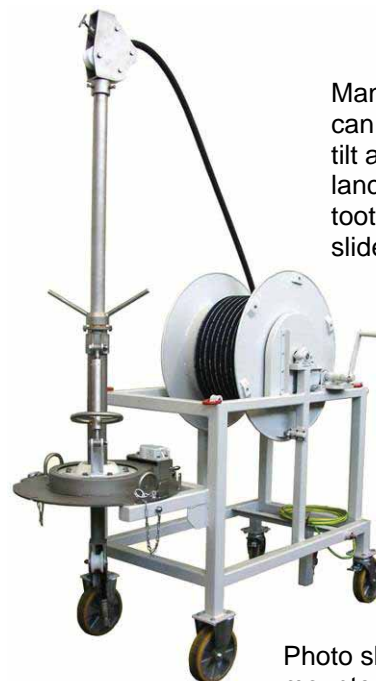


Source: BASF

Hose reel system with park position housing. The sight glass can be opened without tools and facilitates the changing of nozzles, nozzle carriers or tank cleaning head.



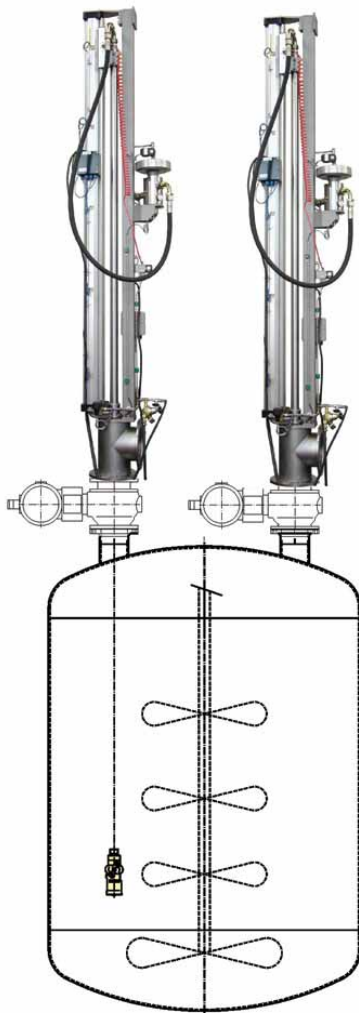
Gastight cleaning system with water driven telescope



Manual lancing systems can turn through 360° and tilt at angles up to 45°. The lance deployment can be toothed gear telescopic or slide type hose guide pipe

Photo shows lance unit mounted on transport trolley complete with manual hose reel

# Aquarex® Cleaning devices

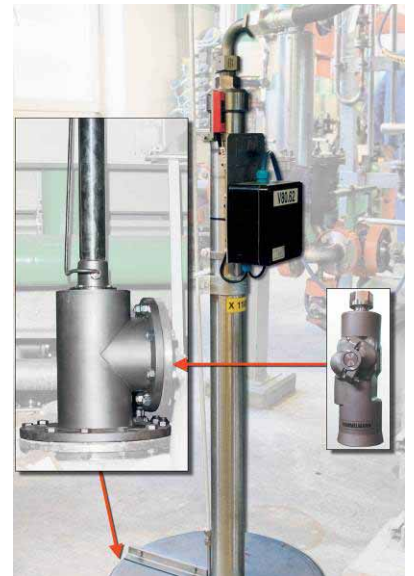


The complete twin lance system is designed to operate in a hazardous zone and is powered by high pressure water and oil free compressed air.



The cleaning positions of the hose reel system are freely programmable and controlled by the process plant controller.

With weatherproof cabinet for external installation as an option.



Source: BASF

Gas-tight cleaning system with water/air driven lance



The control of the operation of the gas-tight hose reel system is by PLC with a frequency converter for the reel electric motor.

This hydraulically powered hose reel device for large vessels cleaning is mounted on a turntable. It is generally mounted centrally on top of the vessel and is rotated to deploy the tank cleaning head via various entry points close to the edge of the vessel roof. The reel is remote controlled to position the tank cleaning head.



Extendable tilting lances