



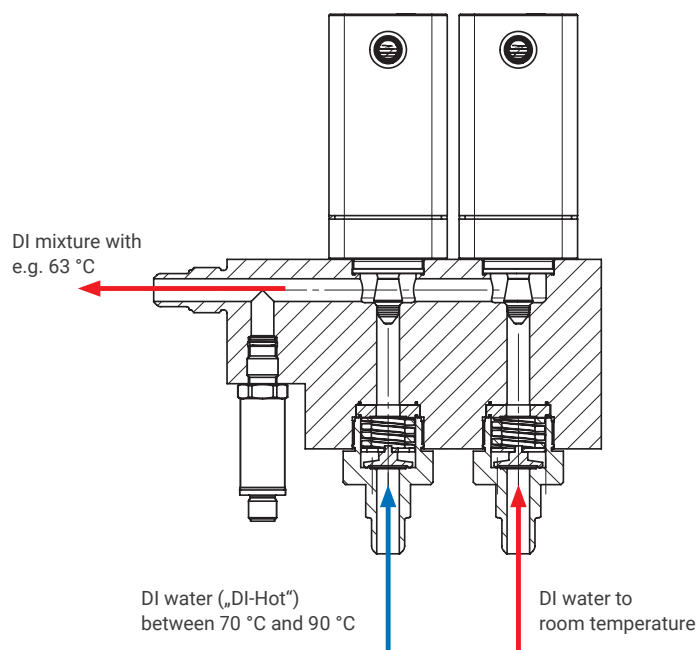
## Efficient temperature mixing for semiconductor applications

### Process description

In order to make manufacturing processes efficient and precise, it is necessary to bring media to an exact temperature and to keep this constant. In particular, high temperatures are required in cleaning processes. The repeatability of a process largely depends on the media temperature remaining stable during the entire process. This is ensured by upstream temperature monitoring.

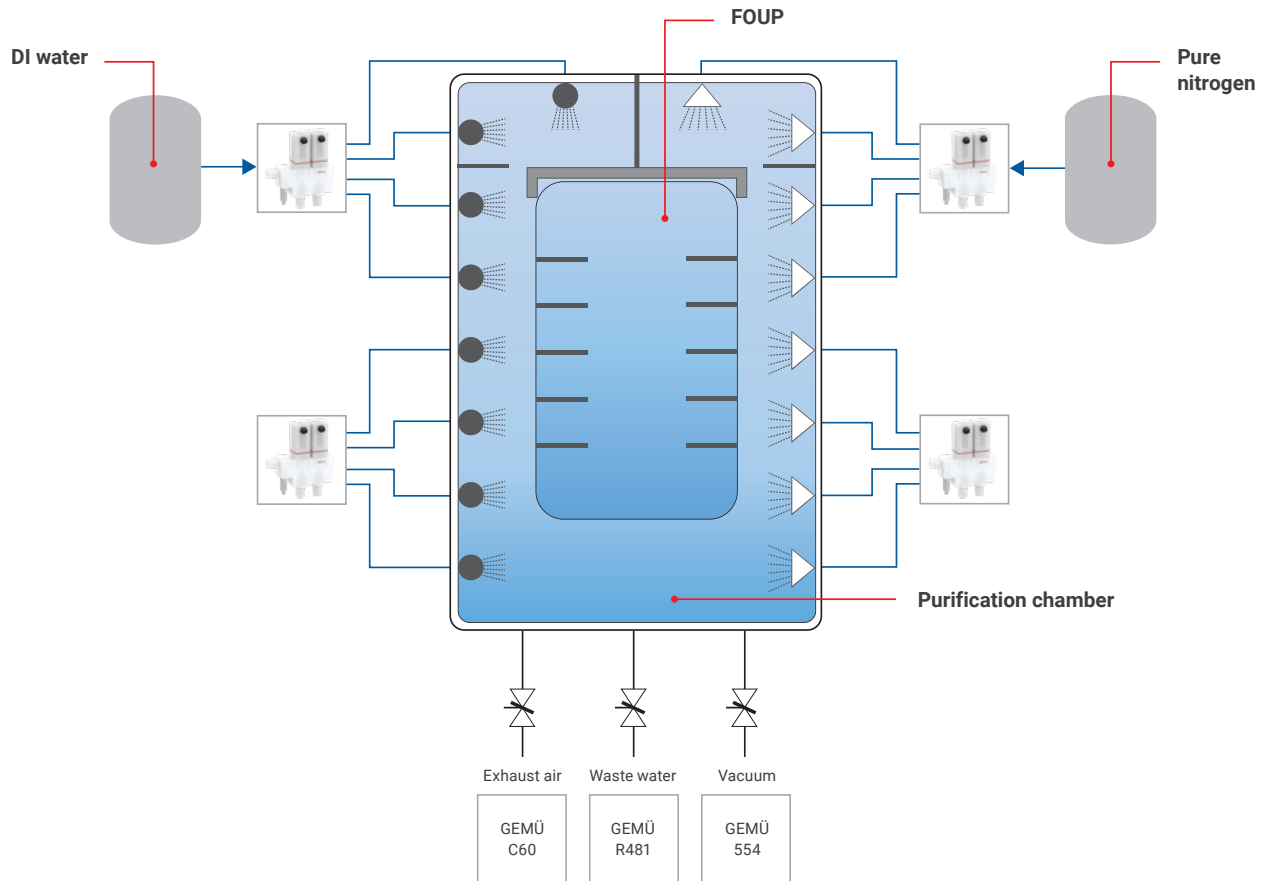
### The task

When cleaning FOUF boxes and EUV mask boxes, it is usual to work at elevated temperatures, in order to speed up the cleaning process. The design shown enables very precise control of the warm water flow. The challenge here is very precisely mixing and controlling the plant supply's prevailing room temperature and hot DI supply. To this end, GEMÜ also offers, in addition to simple distribution blocks, a special solution for mixing applications.



## GEMÜ solutions for complex mixing tasks

Example application: FOUN cleaning



## Suitable GEMÜ products

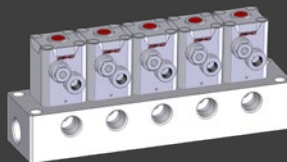
### GEMÜ PC50 iComLine M-block



Motorized diaphragm globe valve



Pneumatically operated diaphragm globe valve



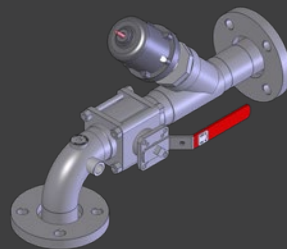
iComLine distribution block



GEMÜ R481 butterfly valve



GEMÜ C60 CleanStar pneumatically operated diaphragm valve



GEMÜ 554 stainless steel globe valve

### Advantages at a glance

- Customized engineering  
Tailor-made solutions in close collaboration with customers
- Fully-integrated system solutions (valve functions, fittings, sensor system, check valves, tank/housing walls, etc.)
- Compact design
- Materials are media-specific, matched to requirements and cost-effective
- Quicker installation time, few connection points
- Cleanroom manufacturing, SEMI F57