

Plastic Constructions & Installations

Industriepark Terbekehof
Moerelei 141-143
B2610 Wilrijk - Antwerpen
Tel. +32 3 828 07 08
Fax +32 3 830 21 60
info@teblick.be



chemical distribution

www.teblick.be

pure and precise

Belgium

AMI Semiconductor Belgium - Oudenaarde
Belgisch Leger - Poelkapelle
Canberra - Olen
Fujifilm Electronic Materials NV- Zwijndrecht
IMEC VZW - Leuven
Philips Innovative Applications NV - Turnhout
Photovolttech - Tienen

The Netherlands

Philips - Eindhoven
Phillips - Nijmegen

Technical features

CDU's Modular construction

- Bottle, canister, or drum connections possible
- DI rinse and N₂ purge between batches
- Buffer tank for dilution and/or mixing
- Bellow transfer pumps
- Filtration (on request)
- Chemical heating (on request)
- Dosing/spiking pumps for chemical blending
 - Spiking accuracy up to 1%
- Load cells for dosing (on request)
- Flow controllers (Vortex, mass, etc., on request)
- Ergonomically designed hopper

Programmable features

- PLC-based system
- Programmable rinse cycles
- Batch lifetime control
- Interfaces for equipment, PC, PLC, etc.
- Fab Alarm Monitoring
- CE conform

Safety features

- Standard chemical distribution units are equipped with a number of safety precautions.
- Closed containment
- Doors are interlocked
- Audiovisual alarm signal
- Exhaust fume extraction
- Leak containment monitored by a leak detector
- Shut-off valves
- DI rinse and N₂ purge facilities
- Double contained connections for chemical transfer piping

fluid management systems: cdu

A chemical distribution unit (CDU) can dilute and blend liquid chemicals in any wanted ratio. From its buffertank it can dispense the chemistry to process equipment or to chemical loops. Through the use of performance polymers, almost any kind of commonly used semiconductor etch or cleaning solution can be transported. The CDU is a safe and easy way to get most aggressive chemicals to the point-of-use.

For the construction of the CDU housing we use polypropylene, while PVC transparent sheets are used for the door (FM approved polymers are on request). Both plastics have good resistance against a wide variety of chemicals. The housing shields the environment from the pressurized chemical distribution system.

The piping, valves, and pumps are made of high purity PFA or PTFE.

Flared couplings with minimal dead spaces connect them. This will reduce the interference with high-purity chemicals to a minimum.

Buffer tanks can be delivered in a wide range of polymers (e.g., PP natural, PVDF, ECTFE (Halar), PFA, etc.) in accordance with the chemicals they have to contain.

DI water connections and piping are usually made out of PVDF standard material.

Use of suited polymers makes it possible to deliver all kinds of chemical blends. Aqueous-based acid and caustic solutions with pH varying from 0 to 14 can be handled (e.g., HCl, H₂SO₄, HF, NH₄OH, H₂O₂ and many more).

Do not hesitate to contact us if our products should meet your additional company standards. We can design tailor-made solutions to your needs.

Other Semicon Applications:

- Manual wet benches
- Slurry distribution units
- Internal and external drum and bottle washers
- Tube cleaners
- Process tanks, containers, and lining
- Connectors and adaptors
- Substrate carriers
- Piping (WNF/BCF, IR-fusion, double contained, etc.)

