

Your upgrade for increased safety and purity.
Dispense chemicals more safely and
more efficiently.

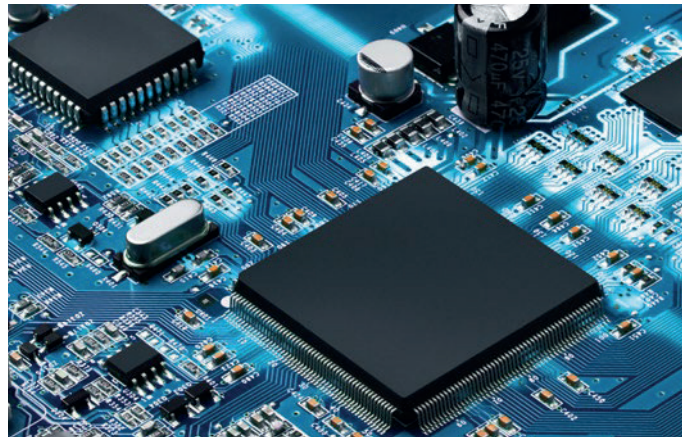


30 years of experience
in the semiconductor
and solar industry

**The clever, complete system for the semiconductor and solar industry.
For better protection and more efficient processes.**

The main focus of the production of semiconductors and solar cells was also the basic premise of AS when developing the QC-System: absolute protection of handlers and the environment from chemicals and, at the same time, the protection of high-purity chemicals from contamination.

It is not without good reason that the AS QC-system has developed into one of the world's leading dispensing systems for high-purity and aggressive chemicals over the decades. A precision tool with over 100,000 variants for highly flexible applications and more efficient processes. Completely metal-free, made entirely from high-purity plastics. And it even comes with a coding system that prevents product mix-ups. A clever, complete system for increased safety and purity in production.



**High-purity plastics.
No metal parts. 100,000 variants.**

The right solution for every application – for dispensing and filling with just one head and a dip tube (QC3) just like in the classic variant (QC2) which has been tried and tested a thousand times over – always protected by a key-code and spill-free.

Smart:
with RFID-CHIP!

Chemicals mixed up?
Container lifetime
expired? Forget it!

The first i4.0 solution
for container handling:

**SUPPLY[®]
LINE[»]**
connect. control. perform.



www.supplyline.as



For maximum safety: For products and processes



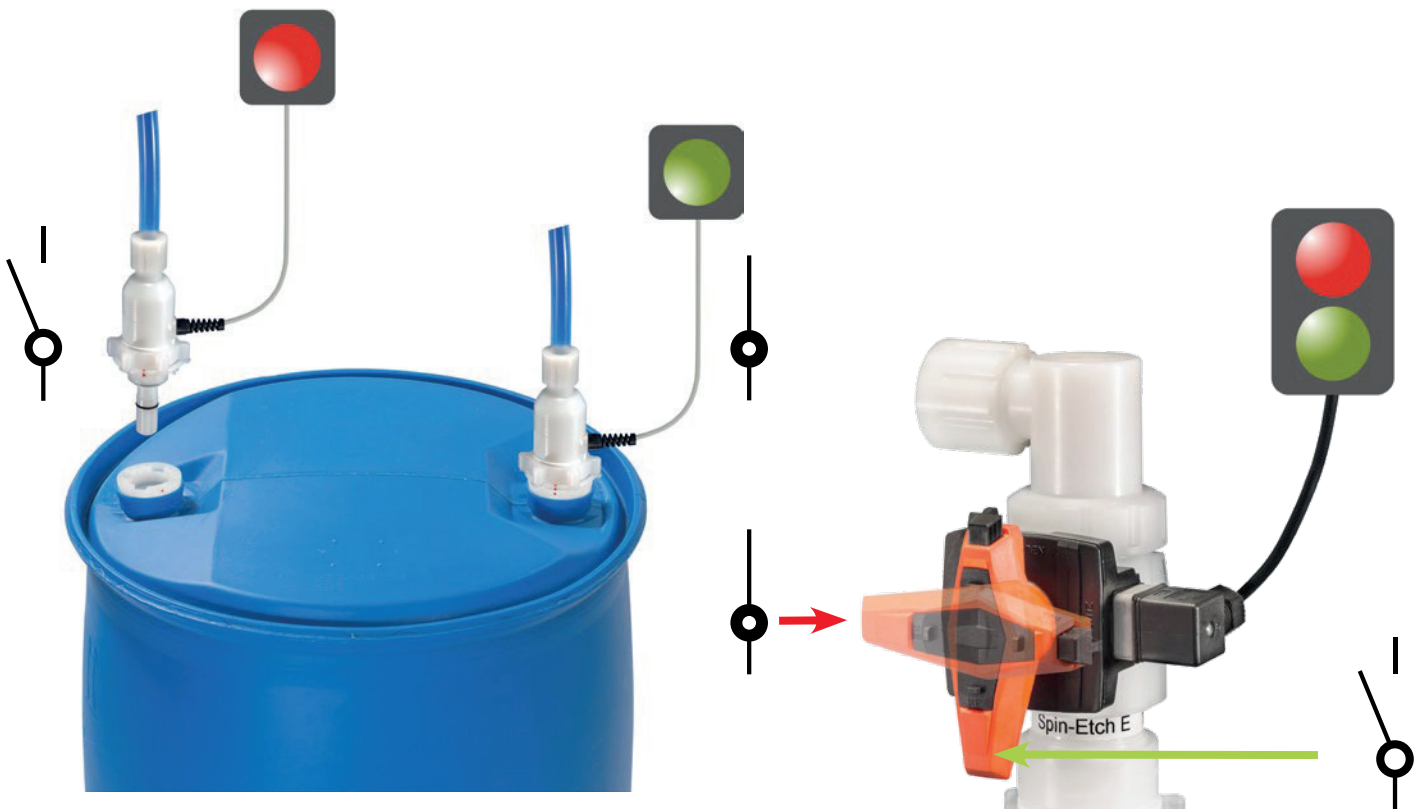
The safety requirements for the handling of corrosive and aggressive chemicals are continuously increasing. This is precisely why the AS QC-System is constantly being enhanced and improved – with ideas that you would struggle to find elsewhere. So that you can not only obtain high-purity products in the safest way possible and free from contamination, but so that you can still get these from A to B easily. This is the only way you can ensure the consistently high quality and quantity of your products. And because in every process, the first link can also be the most crucial, with a clever dispensing system you can also achieve the highest level of process reliability.

■ Dispense heads with limit switches

The AS dispense heads – including those featuring limit switches directly on the head or in the shut-off valve – are available for signalling with a secure connection.

Benefit:

- No spillage caused by incorrect or incomplete mounting
- No electrical components touching the product



Signalling with full connection
to dip tube

Signalling with **shut-off valve**
in proper position

For increased efficiency:

With sophisticated solutions down to the intricate details of the sensor

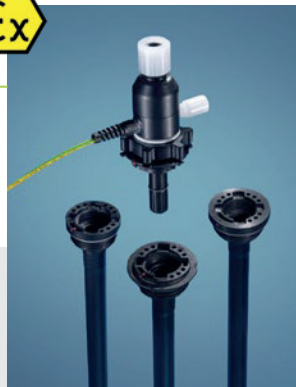
With QC from AS, you can improve your processes and make them more efficient in the long-term. Bit by bit, variant by variant. For example, the solutions illustrated here have been developed for you based on decades of experience in the processes for semiconductor and solar cell production.

■ Safe in hazardous areas

Conductive versions for potentially explosive environments.

Benefit:

- Manufactured entirely from plastic, no metal parts



■ Faster with high-flow version

The G-series dispenses a 1000-litre IBC in just 10 minutes, for example.

Benefit:

- Highly efficient dispensing and filling with flow rates of up to 150 l/min

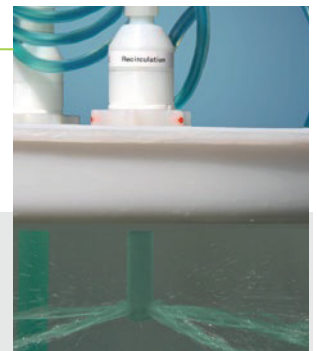


■ Efficient mixing of slurries

Special recirculation heads with mixing nozzles make mixing easier.

Benefit:

- Optimum mixing results in the shortest time possible
- No additional mechanical stirrers required
- No moving parts – no generation of particles

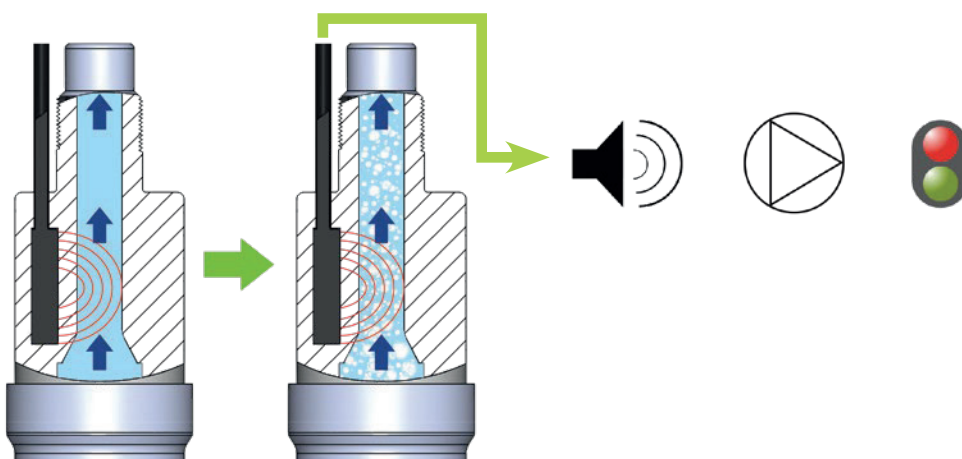


■ Report empty status easily – fully automatically

Dispense heads with integrated bubble sensor enable automatic operation.

Benefit:

- Signalling when the container is completely emptied
- Enables, for example, actuation of the pump, switching between two containers and control of lights or signal horns



For maximum flexibility: For every application, for every special case

You can now choose from over 100,000 variants, whereby some are developed in accordance with customer specifications. If you cannot find the right solution, we will make it for you.

Customised combinations

Combine individually with the modular system within the QC2, QC3 or G-series: Materials, hose connections, valve variants, ventilation types and O-rings. Plus various additional options.



[Configure online!](#)

High-purity plastics:

For example, PE, PVDF and PFA – also available in a conductive version for hazardous areas



Versatile valve types:

Self-closing check valves, pneumatic valves, manual ball valves, etc.



Various connections:

Flare, clamp, thread, hose connector, camlock, etc. (horizontal and vertical)



Various ventilation systems:

Via check valves, particle filters or highly flexible tubing



O-rings: Kalrez®

Use additional options

Use the numerous additional options such as limit switches, mixing nozzles, pumps, etc. for customised solutions.

Our Technical Sales team will be happy to help you.



Robot-compatible, for fully automatic operation



Ultra-pure sampling



Integrated compressed air-operated diaphragm pumps



Fill head with injector for N2 blanketing pumps

Complete emptying

Customised AS QC dip tubes with bellows.

Benefit:

- Best possible complete drainage (see table)
- Adapted to various lengths and threads, they ensure virtually complete drainage even from large containers



Example remaining quantities:

Schütz MX1000 IBC	up to 1.8 l
Rikutec UC 1000 IBC	up to 2.4 l
Varibox 1000 FC IBC	up to 0.7 l
Müller combi drum	up to 0.6 l
Entegris 200 l drum (Asia)	up to 0.6 l

Suitable for all containers

For 5 to 1000 litre container and packaging systems.

Benefit:

- QC is the right solution for IBC, pure plastic drums or metal/plastic combination drums, for every connecting thread (metric or butress thread), for dome covers or for IBC top ends. And it can empty every format more efficiently than you've ever seen before.



QC from AS – a complete system with
over 100,000 options.
Used by leading companies around the world.



The AS QC-System supplies chemical consumers from a wide range of industry sectors:

- | | |
|--------------------|--|
| Electronics | Semiconductors
Solar power & photovoltaics
Flat-screen displays |
| Industry | Electroplating
Chemistry
Printing / Paper
Water treatment
Automotive / Mechanical engineering
Adhesives
Glass
Agriculture |

Pharmaceuticals / Biotechnology / Cosmetics / Foodstuffs

Laboratories / Research institutes / Institutes

QC – an AS Strömungstechnik GmbH system. Made in Germany.
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