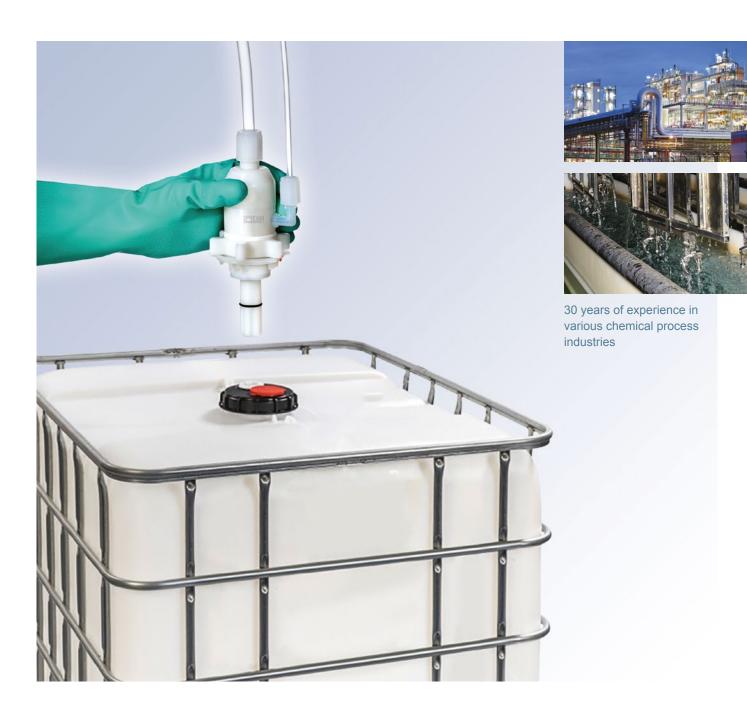




Your upgrade for increased safety and cleanliness. Dispense chemicals more quickly, more safely and more efficiently.





# The clever, complete system for chemical process industries. For better protection and more efficient processes.

The handling of corrosive and aggressive chemicals is a critical part of many production steps in chemical process industries. Therefore, it is necessary to ensure the full protection of operators and the environment from these chemicals – from the first process step onwards.

This first process step is often the challenge, to get the chemicals out of their transport containers into the process or a storage tank. Common dispensing methods often involve open containers and bulky equipment. This leads to outgassing and spills that could potentially harm the operators and surrounding equipment. To solve this challenge, we developed the AS QC-System which enables you to dispense your chemical out of drums, totes or canisters emission-free in a closed loop. Connecting and disconnecting to the containers is spill-free and even mix-ups between different chemicals are prevented.









Smart: with RFID-CHIP!

High-quality 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.

Chemicals mixed up? Container lifetime expired? Forget it!

The first i4.0 solution for container handling:





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 your chemicals in the safest way possible, but so that you can still get these from A to B quickly. 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 **shut-off valve** in proper position

#### For increased efficiency:





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 chemical processes of various industries.

## ■ 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

Also perfect for limewater!



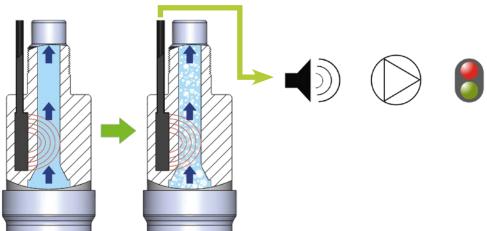
#### Report empty status easily – fully automatically

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.

#### **High-quality 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)















Via check valves, particle filters or highly flexible tubing.







Configure online!

#### ■ 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.



Dispense heads with manual hand or foot pumps



O-rings: Kalrez® FKM, EPDM

Small versions when only low flow rates are required



Integrated compressed air-operated diaphragm pumps



Fill head with injector for N2 blanketing

#### Complete emptying

Customised AS QC dip tubes with bellows.



# Example remaining quantities: Schütz MX1000 IBC up to 1.8 I Varibox 1000 FC IBC up to 0.7 I Werit IBC up to 2.0 I Rikutec IBC up to 2.5 I Müller combi drum up to 0.6 I Mauser drum up to 0.7 I

#### Benefit:

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

#### ■ 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 buttress 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

#### **EUROPE - WORLDWIDE**

AS Strömungstechnik GmbH

Elly-Beinhorn-Str. 7 73760 Ostfildern, Germany

Tel.: +49 (0) 711 220 548-0 Fax: +49 (0) 711 220 548-29

info@asstroemungstechnik.de www.asstroemungstechnik.de

Agencies:

#### **USA**

A.S. Plastics Technology, Inc.

644 Shrewsbury Commons Avenue #246 Shrewsbury, PA 17361 USA

Tel.: +1 (979) 232-2288 sales@as-plastech.com www.as-plastech.com

#### **ASIA - PACIFIC**

DUSEMUND PTE LTD Dr. Claus Dusemund

25 International Business Park #04 – 62 German Centre Singapore 609916

Tel.: +65 6562 7871 Fax: +65 6562 7872 claus@dusemund.com www.dusemund.com



QC – an AS Strömungstechnik GmbH system. Made in Germany. www.asstroemungstechnik.de