BUCK® CONTAINMENT SOLUTIONS.

Contained active transfer solutions for highly potent pharmaceutical applications.

GEA Engineering for a better world.

GEA.com

BUCK® VALVES

Is there a safe way to transfer highly active substances?

BUCK® Valves: High containment valves for the pharmaceutical industry
GEA is the market-leading supplier of split butterfly valves and contained docking systems for the transfer of powders. The GEA range of containment products includes the BUCK® high-containment valves for solid container use and the unique Hicoflex® disposable containment system.

As pioneers of the split butterfly valve, GEA has been actively involved in many powder containment Communities of Practice, particularly in the development of ISPE's SMEPAC guidelines for evaluating containment equipment and in the risk-based approach to the selection of containment equipment. The BUCK® MC (Modular Containment) split butterfly valve builds on the proven design principles of the first generation of split butterfly valves and offers a number of key additional features and benefits.

Competitively priced, BUCK® valves are fully GMP-compliant, offer robust, free-oriented docking, a dust- and contamination-free interface, and quick and easy maintenance. The portfolio includes a wide range of smart standard products, ranging from manually operated mobile systems up to fully automatic pneumatic assemblies, all of which can be configured by the company's engineers to meet specific requirements.

Smaller sizes can be ready for dispatch in 4 weeks, whereas larger standard sizes require slightly longer lead times (10 weeks), depending on configuration and number of valves.

Extending its portfolio even further, the BUCK® AC (Active Compound) Valve from GEA builds on the functionality and performance of the tried-and-tested MC version. The AC has been built to operate at high temperature conditions (up to 150 °C) at up to 6 bar — in both open and closed positions — for use in a wide range of physically demanding environments. Cost-compatible with the trusted MC valve, and with sustainable sourcing and use in mind, the AC adds high-pressure, high temperature, solvent-resistant performance to almost any campaign and any concept.

Features of the BUCK® MC Split Butterfly Valve.

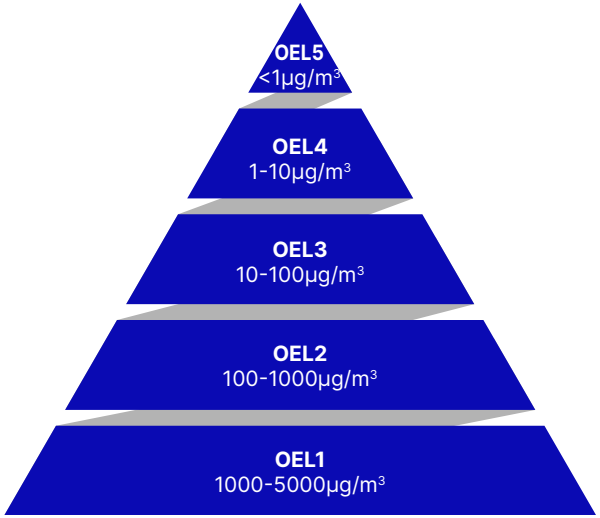
- Unique passive-to-passive valve design with a centralized actuation ring; the passive valves freely orientate, reducing operator docking error
- Modular containment: with a 1–10 µg/m³ (OEL4) containment level offered as standard, the system is also available with an advanced air cleaning actuator to further improve containment levels down to <1 µg/m³ (OEL5)
- Simple maintenance: the passive-to-passive design means fewer component parts and more identical ones, reducing spare part inventory
- WIP, CIP and COP as standard
- Contained quick changeover of the contaminated valve core with working parts remaining on the station, allowing for extremely fast product changeover, fully complements the MODUL tablet press ECM containment concept!
- Robust docking: the central actuation ring design and compensator device overcomes potential misalignment of the container and docking station.

System Integration with Containment Interfaces (Loading/Unloading)

Our distinctive specialization lies in the integration of BUCK® containment technology into complete solutions for pharmaceutical solid dosage form facilities. With an emphasis on quality and good manufacturing practice (GMP) standards, we are committed to working together with our customers to deliver first-class tailored solutions for projects of all sizes and complexity. With worldwide experience, GEA has developed an outstanding reputation for quality and service.

Also available, the BUCK® MC Lite DN100/150 is the lightest split butterfly valve for the contained transfer of highly potent solid dosage products and is compatible with existing BUCK® MC half valves. GEA has succeeded in making the actuator ring even more compact and lightweight (just 3.3 kg), which makes the entire unit easier to handle and implement.

Offering free orientation during docking and fast product changeovers, the MC Lite is designed to be portable and can be effortlessly moved from station to station. It is also simple to operate, disassemble and maintain.



OEL: Occupational Exposure Level

BUCK® CONTAINMENT SOLUTIONS — LITE SOLUTION.

With the new BUCK® MC Lite DN100/DN150, GEA has successfully reduced the weight of its portable BUCK® MC unit by more than 60%.

Lite Solution
The BUCK® MC Lite DN100/DN150 are the lightest split butterfly valves for the contained transfer of highly potent solid dosage products and are compatible with existing BUCK® MC half valves.

Flexible Production
Portable and convenient, the unit benefits from an adjustable hand lever.

Cost-Effective
As well as being competitively priced, only one BUCK® MC Lite actuator ring is needed for several docking points, reducing overall investment costs.

Lightweight Operation
To improve operator handling, the weight of the portable BUCK® MC unit has been reduced by more than 60%.

Easy to Clean
Designed for rapid disassembly, which simplifies and improves cleaning.

BUCK® CONTAINMENT SOLUTIONS — LITE SOLUTION.

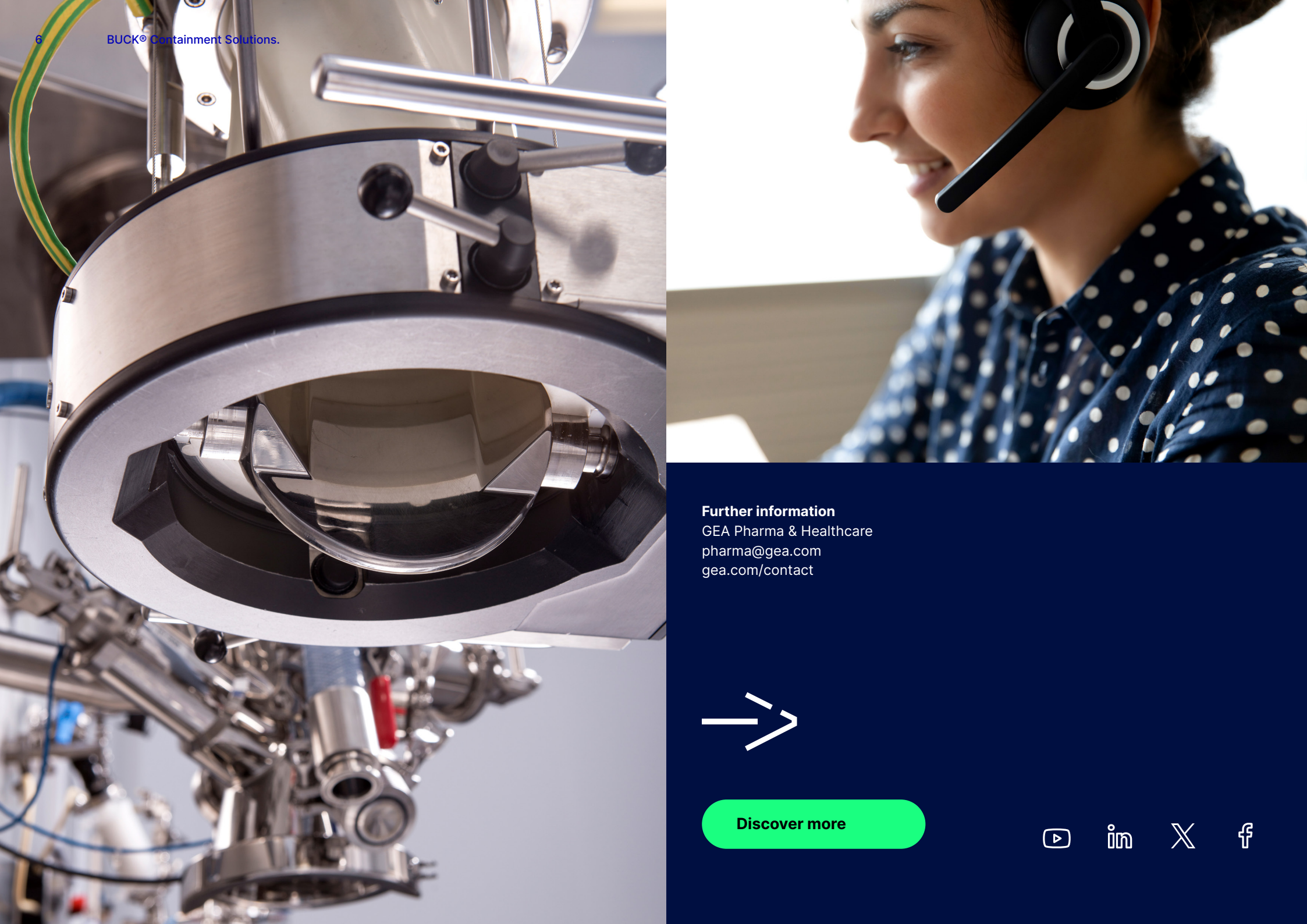
Lightweight Operation
Offering the same functionality as the previous version and reducing the weight to 3.3 kg, GEA has the health and welfare of your operators in mind, not to mention process optimization and productivity.

Easy to Maintain
Primarily constructed of lightweight polyamide and competitively priced, the unit also benefits from an improved design: fewer parts means easier maintenance.

Flexible Production
The new BUCK® MC Lite portable actuator ring offers free orientation during docking, fast product changeovers and simple operation, and is designed for rapid disassembly. In addition, the same unit can be used to dock several different processes. On request, the hand lever can be configured in 45° increments to avoid interference with other equipment.

Top Containment Performance
With a more intense focus on health and safety, avoiding both operator exposure and preventing cross-contamination is critical, particularly when working with oncology drugs, hormonal products and/or other highly potent compounds. The BUCK® MC Lite offers containment levels of 1–10 µg/m^3 (OEL4).

Comprehensive Containment
Offering standard and customized solutions, GEA's split butterfly valve portfolio includes both manual and automated BUCK® MC valves (DN100–250) with optional assemblies (weighing, raising/lowering and compensator devices), suction for high containment applications (<1 µg/m^3) and total containment (TC) valve technologies. In addition, the Hicoflex® disposable bag and interface system allows visible product transfer and is designed to handle highly potent solids at volumes of 1–50 L.



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Discover more

Engineering for a better world.

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