



Müller Containment Valve MCV



1.6



Transferring highly potent or toxic substances with no contamination?

At last a stable and robust split butterfly valve system for emptying and filling your highly potent or toxic media. Light to handle and safe to use. You can rely on the Müller Containment Valve to safeguard the health of your employees even as you maintain the purity of your product and protect the environment.

The disk of the split butterfly valve is in two halves: the active and passive valve. The active valve incorporates the mechanical system for locking both halves together and a manual lever or actuator for opening and closing the valve. The active half of the valve is fitted to the vessel filling or emptying nozzle, and the passive half to the intermediate bulk container. The two halves of the split valve (active and passive valves) must be docked together in order to open the valve. The ruggedly constructed and GMP-compliant locking pins on the active half of the valve ensure accurate location when the two halves are docked. When both halves of the valves are locked together, the system is closed to the atmosphere and the valve can then be opened – manually or automatically, whichever way you prefer.

The valve system can be cleaned quickly and simply, thus reducing production line downtime. A valve disk can be replaced in less than two minutes.

Müller quality – your safety assured

- Quality management to ISO 9001:2008
- Certified to the Pressure Equipment Directive 97/23/EC Module A1; manufacturer approved for AD 2000 Code HP 0 and German TRR 100 metal piping code in conjunction with welding standard EN 729-3
- ATEX-compliant design possible for all components
- Only materials with inspection certificates to EN10204-3.1 are used
- Standard seat and gaskets comply with all FDA requirements



Ingenious details make a perfect whole: the Müller Containment Valve MCV

Whether operated manually or by an actuator, the Müller Containment Valve ensures that your toxic or highly potent products flow safely – from the intermediate bulk container into the process line and back into a container again, exactly how you want it. And all this up to OEB 4, i.e. up to OEL 1–10 $\mu\text{g}/\text{m}^3$. You can choose between valve sizes DN 100, DN 150, DN 200 and DN 250.

User benefits:

- Valve disks locked closed automatically when not docked together
- Cleaning without removing the seat
- Easy-to-wipe flat surfaces
- Pressure- and vacuum-tight version available (-1/+3 bar)
- Valve disks can be exchanged very quickly (< 2 minutes)
- Lean design of valve disk seat \rightarrow inexpensive wear part
- Locating accuracy ± 10 mm
- ‘Hard’ PTFE lining to prevent solids building up and product being trapped around the seat
- Rugged yet lightweight design
- Locking without axial travel
- Proven design, already in continuous use since 2007
- GMP compliant



Locking pin



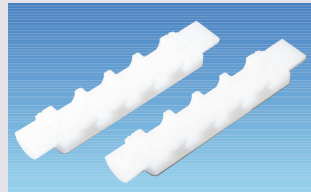
Easy-to-wipe flat surfaces



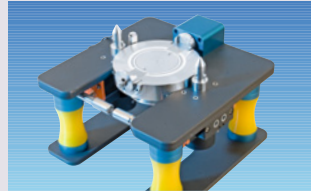
Valve disk



Locking mechanism



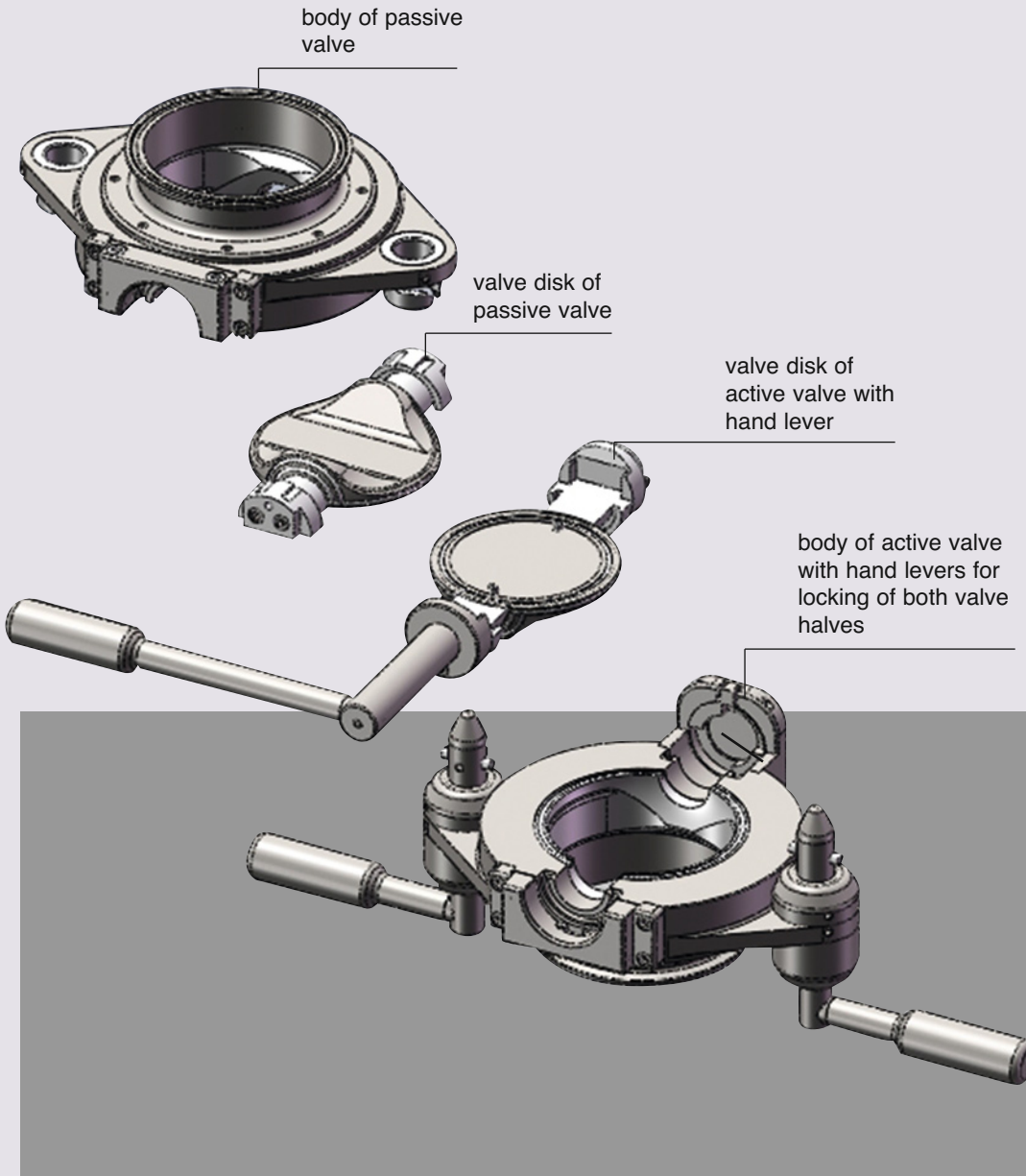
Removing tool for disk



Cassette with Compensators



Cleaning tank with spray lance



Passive disk closing a Müller pharma container.



Silo with active valve – depending on the operation procedure it may be convenient to install the active valve at the vessel and the passive valve at the machine (in this case fixed to a mill).



All tests for determination of OEL/OEB classification acc. to SMEPAC were carried out by an independent laboratory.



Müller also supplies the handling equipment that goes well with the MCV – guaranteeing perfect harmony between all the components



OEB/OEL Level – Classification

Isolators, Split valve systems Total Containment	5	$< 1 \mu\text{g}/\text{m}^3$	$< 0,1 \text{ mg}/\text{day}$	Highly toxic
Split valve systems – Müller Containment Valve MCV	4	$1 - 10 \mu\text{g}/\text{m}^3$	$0,1 - 1 \text{ mg}/\text{day}$	toxic
Split valve systems – Müller Containment Valve MCV	3	$10 - 100 \mu\text{g}/\text{m}^3$	$1 - 10 \text{ mg}/\text{day}$	slightly toxic
Open systems possibly w/exhaustion – Müller Dustfree Systems	2	$100 - 1000 \mu\text{g}/\text{m}^3$	$10 - 100 \text{ mg}/\text{day}$	almost non-toxic
Open systems – Müller Dustfree Systems	1	$1000 - 5000 \mu\text{g}/\text{m}^3$	$> 100 \text{ mg}/\text{day}$	non-toxic
Systems	OEB- Occupational Exposure Band	OEL – Occupational Exposure Limit Maximum Workplace Concentration	Potency	Toxicity

		NW			
		100	150	200	250
Height	Active valve without connecting flange	35 mm	35 mm	50 mm	50 mm
	Passive valve without connecting flange	35 mm	35 mm	50 mm	50 mm
	Standard TC flange	28 mm	28 mm	35 mm	35 mm
	Active and passive valve built-in and with standard TC connecting flange on both sides	126 mm	126 mm	170 mm	170 mm
Weight	Active valve manual without connecting flange	8,0 kg	10,0 kg	25,5 kg	29,5 kg
	Passive valve manual without connecting flange	4,7 kg	6,7 kg	16,3 kg	20,3 kg
Available versions:					
Standard		•	•	•	•
Pressure- and vacuum-tight version (-1/+3 bar)		•	•	•	•
ATEX-compliant version Zone 0/20		•	•	•	•

Technical details:

- Applications up to OEB 4 (OEL 1–10 $\mu\text{g}/\text{m}^3$)
- OEL in test $< 0.2 \mu\text{g}/\text{m}^3$ to SMEPAC
- Available sizes: DN100, DN150, DN200 and DN250
- Pressure-tight version up to 3 bar
- Vacuum-tight version down to –1 bar
- Explosion-proof to ATEX for Zone 0/20
- AISI 316L stainless steel, Hastelloy available on request
- Valve seat in EPDM, Kalrez available on request
- Product-contacted lining in PTFE
- GMP-compliant design

Presenting the other companies of the Müller Group

Today it is of ever increasing importance to cooperate with trustworthy and competent business partners who know what they are doing. As our customer you can rely on a wholehearted partnership. And you gain the innovation and skills of a world class group of companies in the field of packaging, cleaning solutions, handling, transportation and modular systems.

If you now feel the need to talk to us and ask a few questions, then please do not hesitate.

www.muellerdrums.com

Müller Ltd. Packaging
Tramstrasse 20
CH-4142 Münchenstein
Switzerland

Phone: +41(0)61/4161200
Fax: +41(0)61/4161222
E-Mail: info@muellerdrums.com

www.plastomatic-ag.com

Plastomatic Ltd.
Falkensteinerstrasse 4
CH-4132 Muttenz
Switzerland

Phone: +41(0)61/4679393
Fax: +41(0)61/4679399
E-Mail: info@plastomatic-ag.com

www.leichtfass.com

Leichtfass Ltd.
Bahnhofstrasse 11
CH-4142 Münchenstein
Switzerland

Phone: +41(0)61/4113388
Fax: +41(0)61/4113390
E-Mail: info@leichtfass.com

www.fördertechnik.ch

Fördertechnik Ltd.
Känelmattstrasse 7
CH-4142 Münchenstein
Switzerland

Phone: +41(0)61/4161212
Fax: +41(0)61/4161213
E-Mail: info@foerdertechnik.ch

www.muellercleaning.com

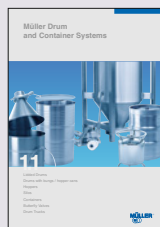
Müller Ltd. Cleaning Solutions
Schützenmattweg 33
CH-5610 Wohlen
Switzerland

Phone: +41(0)56/6184868
Fax: +41(0)56/6184878
E-Mail: info@muellercleaning.com

Just one click opens new horizons

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Experience the potential we offer in your next project. Our world of modular systems is only a click away. Make use of our expertise – packed full of ideas in stainless steel. Each one a Müller original.



www.mueller-gmbh.com

Müller GmbH
Industrieweg 5
D-79618 Rheinfelden
Germany

Phone: +49(0)7623/969-0
Fax: +49(0)7623/969-69
E-Mail: info@mueller-gmbh.com

