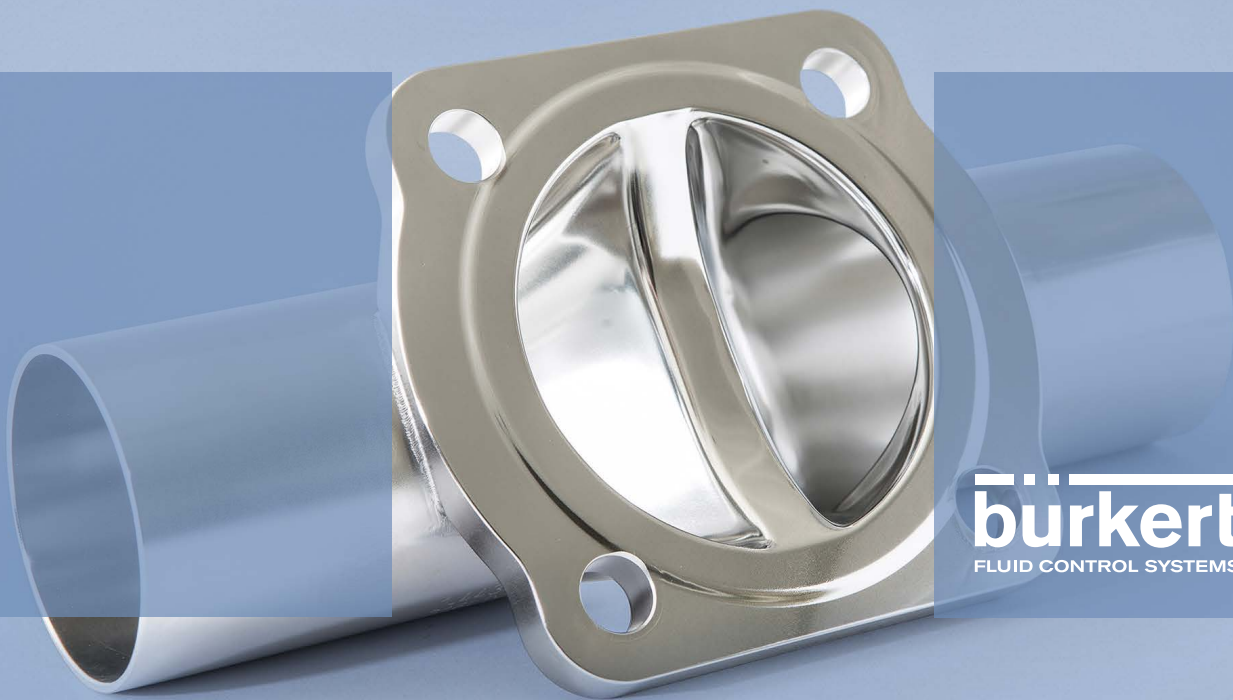


# The New Benchmark of Efficient Hygienic Design

Hydroformed Tube Diaphragm Valve



**bürkert**  
FLUID CONTROL SYSTEMS

# The Hydroformed Tube Diaphragm Valve

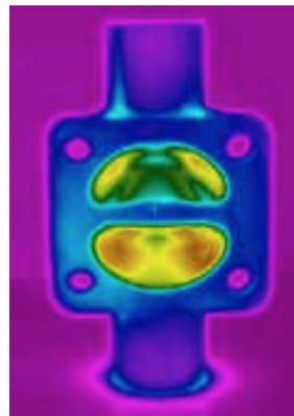
Diaphragm valves are a key component of hygienic system design and play an important role in everything from manufacturing efficiency to product quality to utility demand. Cast and forged body diaphragm valves are the standard options here, both of which introduce their own unique benefits but share a number of common weaknesses including: weight, efficiency, ease of installation, carbon footprint and arguably the most critical, thermal mass. Recognizing these challenges and identifying the need for a solution, Burkert has developed hydroformed tube body diaphragm valves which will revolutionize the diaphragm valve market and in turn change the way the hygienic industry approaches system and plant design.

## Complete Efficiency

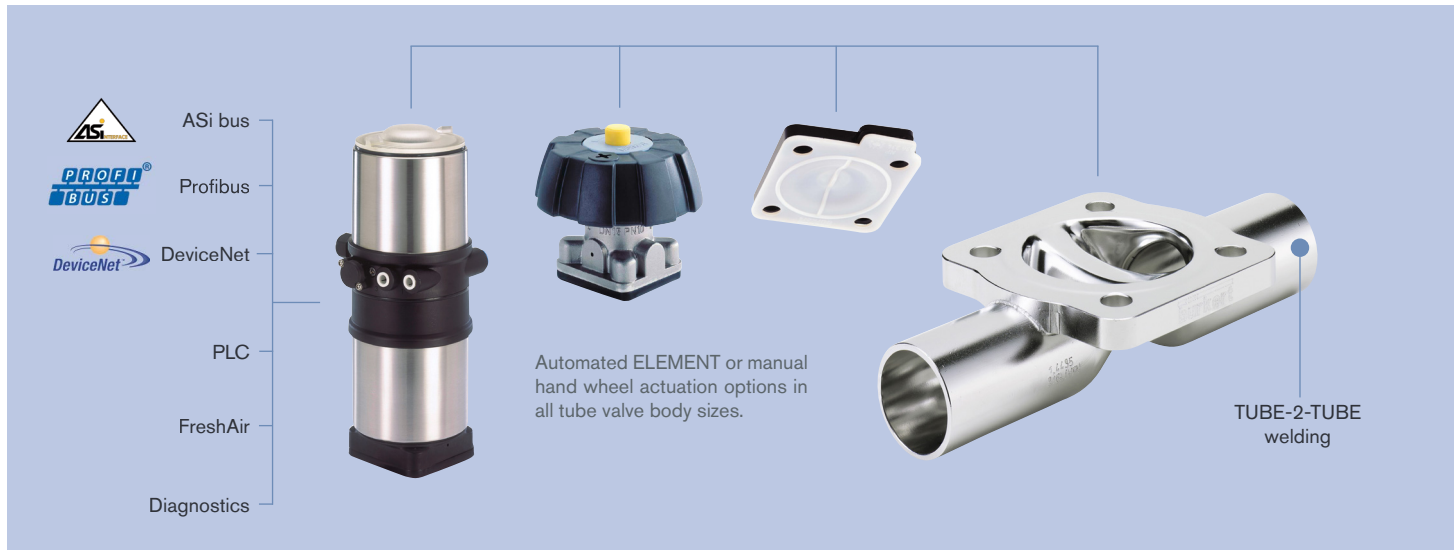
Our tube valve body is more efficient and environmentally friendly than any other diaphragm valve technology from time of manufacture through to disposal. Minimization of raw material mass combined with Burkert's patented eco-friendly hydroform manufacturing technology, greatly diminishes your overall carbon footprint of production. Reduced thermal mass of up to 75% significantly shortens heating and cooling times of CIP and SIP cycles yielding higher batch production and overall system throughput. Laboratory testing demonstrates steam savings of up to 53.8% in SIP cycles translating to substantial energy savings.

## Operational Ease

As with any system component, upon design there are many factors taken into account including total cost of ownership, modularity and spare part planning. The OD tube body creates a cost reduction in both initial investment as well as spares by allowing an equivalent Kv at a valve one size down from standard cast or forged body valves. This reduced sizing allowance results in further reduced system weight and reduced investment in stock of critical point spares. Flexibility of the MT86 body mount flange allows for quick assembly of various pneumatic or manual actuation options resulting in simple local assembly and modular component spare stocking.



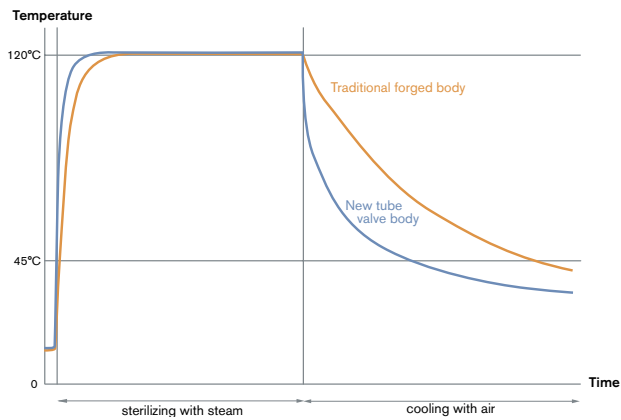
The tube valve body helps to design lighter, more efficient processes by minimizing heating and cooling cycle time, shortening production cycles and therefore increasing efficiency and overall plant throughput.



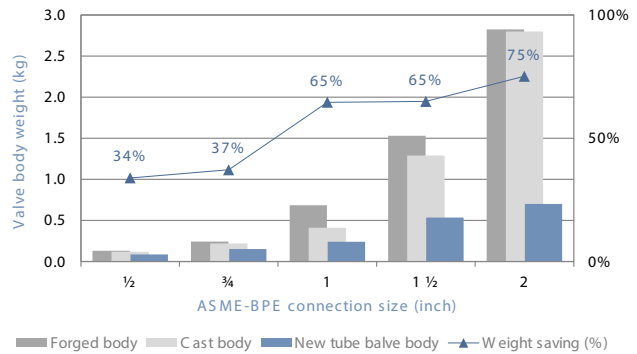
### A Beautiful Body

Your plant is a showcase for your brand and a physical projection of your commitment to product quality and uncompromising hygienic manufacturing processes. The hydroformed tube valve truly is a beautiful body which was designed to enhance your manufacturing processes in every way while looking good doing so. Finish and functionality perfectly compliment Burkert's ELEMENT series of control heads and positioners delivering an even higher level of flexibility, aesthetic consistency and functionality than anything else on the market. True fit-for-purpose design results in the absolute minimization of wetted parts, which

consist of nothing beyond certified pharmaceutical grade stainless steel tube and the appropriate EPDM or PTFE diaphragm. Hydroform tube construction completely eliminates the risk of cast impurity contamination while delivering the most stable and hygienic process installation possible: TUBE-2-TUBE welding. Any material point of process contact is fully certified, traceable and documented in order to meet strict industry compliance requirements and to provide you with absolute confidence and piece of mind.



Laboratory test curve of SIP heat/cool cycle



Weight reduction illustration from 1/2" to 2"



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