

Stricter emissions protection enshrined in law GEMÜ valves comply with the requirements of the new version of „TA Luft“

The amendment to the German Technical Instructions on Air Quality Control, or „TA Luft“, has given rise to heated discussion among experts. More than 50,000 plants are awaiting approval, but now that the revised regulation has been passed, the legal and planning certainty this brings means that things can move forward. GEMÜ details which valves from its range meet the new measurement, testing and qualification standards.

The TA Luft (full name “Technische Anleitung zur Reinhaltung der Luft”, meaning “Technical Instructions on Air Quality Control”) is a central German regulation that sets out the mandatory national requirements for plants that are subject to approval. It includes general emissions requirements for certain air pollutants. Plants that are subject to approval must not exceed the limits specified in the TA Luft. The new TA Luft focuses on the emission and immission of air pollutants such as fine particulates and nitrogen oxides. The amendment brings the old version (which is almost 20 years old) up to date and considerably tightens the rules that apply to technical plants. At the same time, a number of requirements have been copied over from EU law to become national law. The German Federal Cabinet passed the amendment to the TA Luft back in June 2021, and it is due to come into force on 1st December 2021. Plants affected by the changes include industrial chemical plants, plants that produce metals and construction materials, food and beverage industry plants and waste management plants such as biogas plants. The challenge that plant operators and manufacturers now face is how to implement the administrative regulation that now applies at such short notice.

TA Luft for industrial valves

In accordance with the updated TA Luft, shut-off and control valves must comply with the leakage classes specified in DIN EN ISO 15848-1. They must be type-tested in a laboratory to make sure that they are compliant. GEMÜ has had its valves independently tested against the new criteria by TÜV Süd. The results were excellent across the board. All of GEMÜ's complete valves that were tested with helium complied with leakage class BH. For the majority of the valves, the sum of the leak rate as per VDI 2440 was less than 0.00005 mbar*l/s. This corresponds to leak rate category 1x10⁻⁵. The leakage in this category is also

described as petrol- and oil-tight and corresponds to a loss of 1 cm³ of gas per day. To put this into perspective: At this leak rate, it would take a whole month to fill a golf ball. The values that were measured for a small number of GEMÜ's valves deviated from this ever so slightly, but at 0.0004 mbar*l/s, were still within the permissible values for leakage class BH. The leak rate category 1x10⁻⁴ is also described as bacteria-tight.

GEMÜ valves that are TA Luft-compliant include diaphragm valves made from metal and plastic, globe valves, ball valves and shut-off valves that are suitable for a wide range of applications. By ensuring a fast turnaround time for the testing and approval of valves, GEMÜ supports plant manufacturers and operators in their efforts to ensure that their plants are TA Luft-compliant.

