

7.3.5.14 Environmental concerns

Environmental protection and the careful use of resources have become key issues in modern society. Regulations such as the Clean Air Act in the United States or its German equivalent “TA-Luft” aim to restrict emissions produced by industrial plants.

The most effective sealing solution is the metal bellows, a ground breaking invention originally developed by SAMSON. The engineering expertise that goes into the in-house design and manufacture of multi-layered bellows results in bellows seals recognized for their quality.

The sealing quality of SAMSON metal bellows remains unsurpassed over its entire life cycle. For special applications, the bellows can be heated or flushed to prevent deposits from clogging up the bellows. Its friction-free sealing ability can last over a valve’s entire service life even in critical applications without the need for any maintenance and still guarantee absolute zero leakage.

An unsurpassed sealing quality with SAMSON’s metal bellows seal

- Range of application -200 °C to $+450\text{ °C}$
- Maintenance-free
- No hysteresis
- Leakage rate $\leq 10^{-8}$ mbar l/s