

Urea Industry

LESERs safety valves increase reliability and performance of Urea plants



LESERs solution against corrosion

In the last 10 years LESER, The Safety Valve Company, from Hamburg in Germany has installed more than 1800 safety valves in Urea plants located in almost all countries in the world.

Of these 1800 more than 320 are equipped with LESER steam flushing system assuring no clogged situations of the outlet line and no condensation and erosion corrosion of the seat area.

More than 70 Safety Valves are designed with a standardized block body design 3J4 and the LESER flushing system with the following benefits:

- Material of all medium wetted parts can be in high corrosive resistant composition
- Constant temperature of nozzle higher than condensation temperature of the carbamate solution to avoid negative corrosion effects and material structure effects of sealing surface
- Metal to metal sealing with LESER Nanotightness process for sealing surfaces with roughness and flatness at measuring range of 100 nm
- 360°-flushing of main valve body to avoid any crystallization in case of blow off situation
- One steam supply point needed for the LESER flushing, even if heating jacket is preinstalled to heat outer area of block body with minimized steam consumption

And the synthesis sections of already four lines in urea plants are equipped with the LESER Supplementary Loading System enabling these plants to operate the synthesis pressure very close to the set pressure leading to higher conversion figures and 75% lower emissions in case of a blow off situation.

