

A valve for high pressures and all load conditions

Schroeder Valves has developed a new automatic recirculation valve for high and very high pressures. To ensure the highest degree of quality and functionality, the company is currently constructing a test stand for pressures up to 400 bar.

Schroeder Valves has developed a new automatic recirculation valve for high and extremely high pressures, which also works reliably under highly fluctuating load conditions: the SHP-series automatic recirculation valve. With the innovation, the specialist in pump protection valves is responding to the requirements of its customers, primarily from the field of power plant and plant construction and the offshore industry.

"The SHP takes the general development of higher pressures and temperatures and the increased energy-efficiency requirements into account," explained Axel Mücher, managing partner at Schroeder Valves. "Alongside this, the changing way in which plants work was also taken into consideration in the development of the SHP. Special load sequence power plants, such as modern combined cycle power plants and coal-fired power plants, are operated at partial load for a large proportion of their operating time, on account of the increasing high proportion of



regenerative energy generation and highly fluctuating load conditions."

The SHP is the ideal minimum flow device for these conditions: Thanks to multi-stage pressure release control over the entire minimum quantity range, wear is minimised — even in the case of long-term partial load operation. The particularly wear-critical area near to the bypass closing point in the bypass is automatically overdriven by the control characteristics, without the range of movement of the equipment being limited. The shut-off for the bypass function and the pressure reduction function are clearly separated in terms of location. Furthermore, the shut-off element for the bypass has no throttle function whatsoever. Thus, the seal of the bypass is not affected should limited wear occur to

the pressure-reducing components during operating time. The radiation of the sealing surfaces, which can ultimately lead to the total failure of the sealing function, is safely avoided. Furthermore, the seal seat is located in the direction of flow, upstream from the flow-regulating fittings and thus in the area of high static pressure, and consequently far removed from the cavity-susceptible pressure level at the end of the throttle section.

Schroeder Valves has each valve undergo a 100% pressure and func-

tionality testing prior to delivery. To ensure this also with the SHP, the company is currently adding to their flow test center a test stand for pressures up to 400 bar.

The SHP builds on existing Schroeder Valves technology. The company already has years of operational experience with almost all of the effective principles and as-

semblies used. As such this can be considered 'Proven Equipment'. The individual system components have simply been modified and innovatively combined, as such that they enhance the dependable and low-wear area of application of the existing technology to meet the increased requirements. Thus, the new SHP-series automatic recirculation valve enables and promotes the energy-efficient operation of modern power plant facilities.

● www.schroeder-valves.com

● *Achema: Hall 9.0, E59*

Δp INFO-PLUS

The Schroeder High Pressure Valve (SHP) is an automatic recirculation valve for high and extremely high pressures, which also works reliably under highly fluctuating load conditions. See more details in this video.

