



VST / VST-SE upgrade to VST-C / VST-CSE

- Improved pressure and velocity control with decreased noise emissions and decreased wear
- Improved protection to stem/plug against rotational forces induced by steam
- Upgraded seat protection from foreign particles and erosion
- Potential for a flow capacity increase.

General

By upgrading the valve trim of the VST/VST-SE to a VST-C/VST-CSE a number of valve performance improvements are gained. The upgrading of VST/VST-SE to VST-C/VST-CSE is done by exchanging the long cage plug with a new bonnet cage and a new short plug.

Improved pressure and velocity control with decreased noise emissions and decreased wear is created by improving the pressure drop distribution through the valve. The new cage and plug combination can be designed for optimal pressure drop distribution.

Improved protection to stem/plug against rotational forces induced by steam flow. The new bonnet cage acts as a flow distributor that smoothes the steam flow around the valve plug and reduces risk of plug vibrations. Plug vibrations is decreasing valve flow control performance and is giving additional valve actuator wear.

Improved seat protection against foreign particles and erosion. The new bonnet is an external plug protection. The bonnet drilled holes prevent foreign particles from damaging valve seat area. Damaged seat area might result in valve leakage with increased risk of erosion damage.

Potential for a steam flow capacity increase. The new bonnet can be designed with larger total trim drilled hole flow area than the corresponding flow area of the old cage plug. In addition the new plug gives additional available flow area in the valve seat. Increased flow area can increase the valve flow capacity

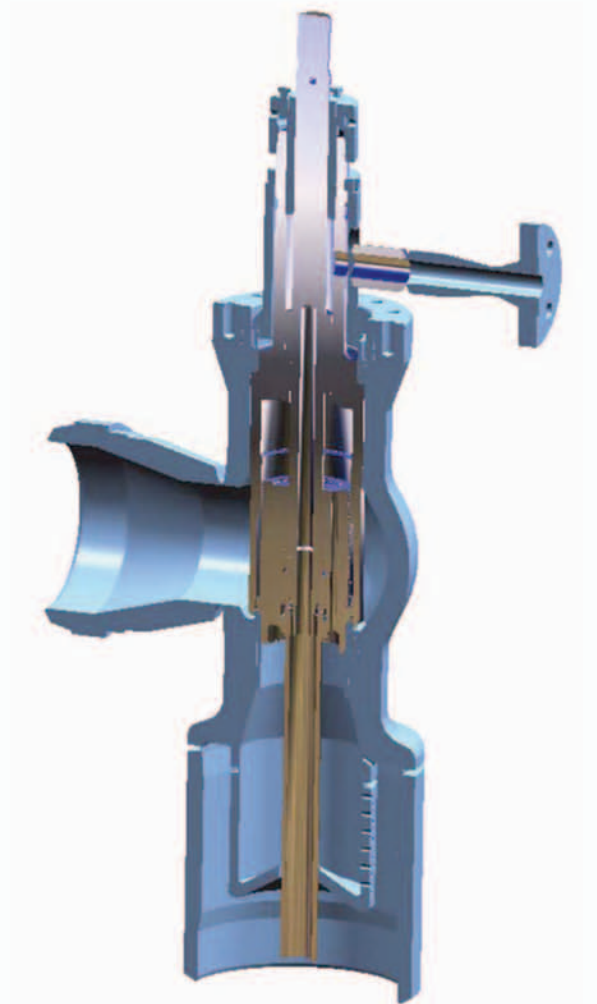


Fig 1 Valve tpe VST-CSE

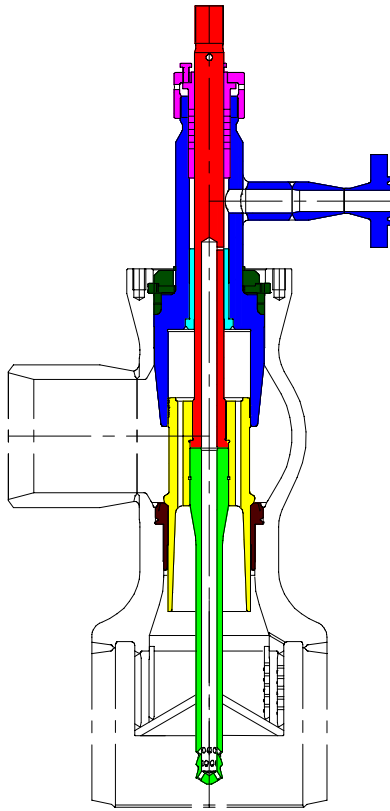


Fig 2 VST Classic

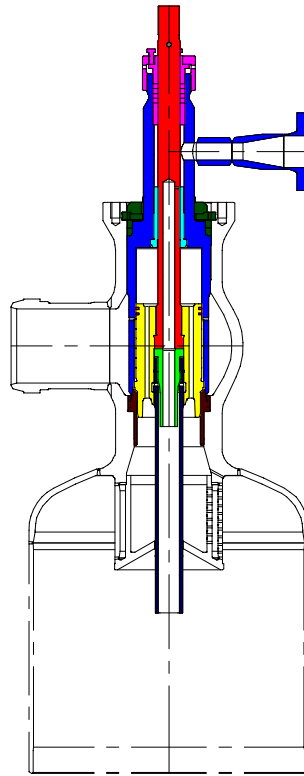


Fig 3 VST/C

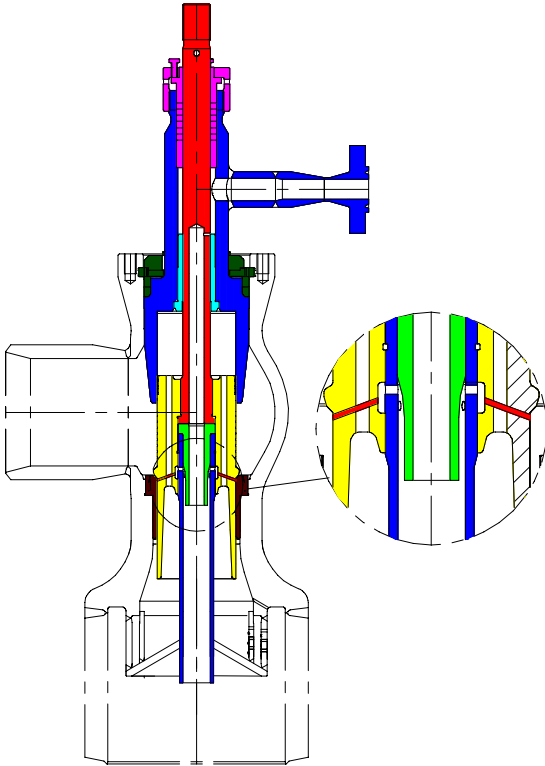


Fig 4 VST-SE