

ECTFE (HALAR[®]) versus GLASS LINED

Glass fibre lined valve bodies are well extended over the international process industry as it was a major development for extreme corrosion nearly three decades ago. The Glass fibre was the answer to those corrosive services that could not be efficiently handled with conventional Polymer solutions, however, it was not exempted from serious hurdles both at manufacturing and plant maintenance levels.

At manufacturing level, the number of rejections was very high due to the extreme care to be taken when glass lined bodies stood for the cooling down process. The thermal stress and minimal changes in environment temperatures caused cracks on the valve body surface. These cracks were visible by a slightly paler tone in the affected area.

At plant level, valve bodies had to be carefully stored to avoid contact to the careful surface to prevent scratches. However, extreme environmental thermal changes causing typical metal expansion / compression led again to glass breakage.

With the development of engineered Fluoropolymer materials some decades later, the use of Glass Line was set as a conventional option in front of the new innovative solutions offered by Fluoropolymer materials.

Materials such as ECTFE (HALAR[®]) became an option to glass line and could handle virtually all duties while removing the hurdles involved with Glass. Maximal Working Temperature is in the region of 10°C less to HALAR[®] what minimises use restrictions to the very minimum. Other benefits can be also found in the minimal percentage of rejections, lesser storage precautions and the availability due to the shorter manufacturing and curing time.

More information and recommendations on the use of HALAR may be obtained through your nearest DIAVAL agent.

