



Unbreakable solutions through innovative design

Alfa Laval Olmi primary quench exchangers (PQE)



Designed to overcome problems within conventional solutions Alfa Laval Olmi PQEs offer safer operation, longer continuous uptime and maximized product life. Nearly indestructible, Alfa Laval Olmi PQEs ensure trouble-free performance with optimal lifetime capacity.

Reliable solutions for tremendous cost savings

PQEs play a vital role in the ethylene production process and it is crucial that they are reliable. Every failure or stop means large losses of production and tremendous financial loss so securing maximum uptime is imperative for good

profitability. With Alfa Laval Olmi PQEs you are assured an optimized performance, saving both time and money.

Patented innovative design

In the ethylene production process the PQE is one of the dominant solutions for quickly cooling of gas after cracking. Alfa Laval Olmi's patented design concept is an innovative solution that ensures reliable operation and trouble-free performance.

Alfa Laval Olmi PQEs solve the problems of traditional solutions and answer to their weaknesses. A common problem has been presence of thermal sleeve



Hot end of Olmi patented solution.



causing coke migration and growth, plus large thermal stresses and strains due to high temperatures at the sleeve-to-cone connection. This leads to poor creep resistance and creep fatigue failure mode.

Designed not to break

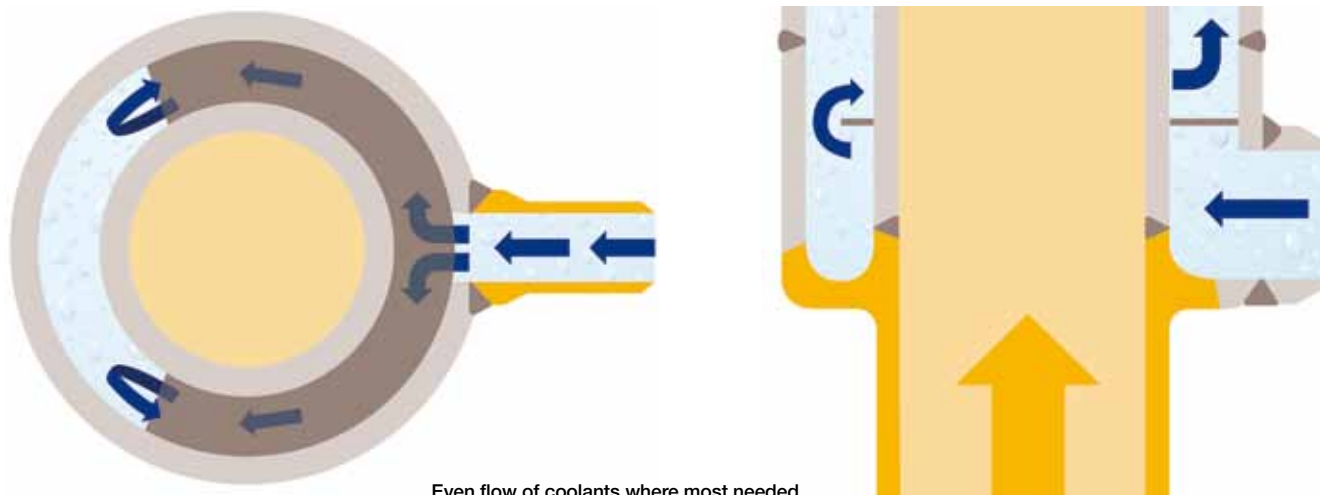
In the Alfa Laval Olmi PQE, the critical areas have been addressed and weak spots erased. The absence of a thermal sleeve means there is no interstitial gap

for coke to grow. The highest stress areas are placed in contact with the boiling water. Securing undisturbed high velocity water circulation and flow leads to optimal cooling and self-cleaning.

To summarize: these Alfa Laval Olmi PQE innovations overcome the structural problems of fast quenching of cracked gas. This ensures a maximum lifetime for the PQE with continuous reliable operation year after year.

The unique Alfa Laval Olmi PQE benefits

- Reliable operation with no breakage
- Longer lifetime
- Continuous operations



Even flow of coolants where most needed.

Alfa Laval Olmi PQE advantages:

- Long term reliability (no creep-fatigue failure mode) and absence of thermal sleeve/ interstitial gap for coke to grow.
- Material selection to minimize differential thermal growth of the inner/outer pipes.
- Reduced temperature severity through "thin tubesheet" and boiling water as cooling medium.
- Reduced fouling on water side due to increased water circulation.



Alfa Laval Olmi solutions have been tried, tested and praised on almost 300 sites across the world.

How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com.

