Alfa Laval DuroShell plate-and-shell heat exchangers

5 reasons why Alfa Laval DuroShell is a unique plate-and-shell heat exchanger

Plate-and-shell heat exchangers have become well established in industry as a compact alternative to bulky shell-and-tubes. However, conventional plate-and-shells are notoriously prone to fatigue that can lead to down-time in operation. This and other design limitations greatly impacts their effectiveness in production.

DuroShell, a new type of plate-and-shell heat exchanger from Alfa Laval, has been engineered specifically to overcome these challenges. If your operation is considering switching from shell-and-tubes or replacing your existing plate-and-shells, here are five reasons why DuroShell makes today the right time for change:

1 **Durability for increased uptime**
DuroShell consists of distribution tubes running through a laser-welded plate pack. This unique internal design provides excellent resistance against the fatigue problems that plague conventional plate-and-shell heat exchangers. As a result, DuroShell can offer a longer service life with maximized uptime.

2 **Robust versatility**
DuroShell has been designed to fit a wide range of processes, including some of the most demanding applications in industry. The robust, unique construction handles higher operating pressures than conventional plate-and-shell designs. In fact, DuroShell can perform in duties with pressures up to 100 barg (1450 psig) or temperatures as high as 450 °C (842 °F).

3 **Designed for reliability**
A number of plate-and-shell designs are marketed as openable technology, which perhaps seems like an advantage. But by opening a heat exchanger, you risk creating significant problems for long-term operation and reliability. DuroShell's closed, fully welded design ensures greater lifetime durability and improved pressure performance.

4 **Even greater thermal efficiency**
The patented roller coaster pattern of DuroShell's cut-wing plates maximizes turbulence to minimize the risk of fouling. This allows for 15-20% higher thermal efficiency than other plate-and-shells, greatly reducing energy consumption over the course of the equipment's lifecycle.

5 **Opportunity for bigger savings**
DuroShell offers savings on installation thanks to an even more compact and lightweight design than conventional plate-and-shell heat exchangers. This is on top of reduced energy demands and cost-effective maintenance solutions, which in turn ensure a noticeably lower total cost of ownership.

These reasons and more have made DuroShell a suitable choice for a wide variety of demanding positions, particularly in the power and petrochemical industries. Visit **www.alfalaval.com/duroshell** to discover how a number of customers have already seen benefits by making the switch to DuroShell.

Robust, fully welded and highly resistant to fatigue, Alfa Laval DuroShell withstands variations in temperature and pressure.

DuroShell RollerCoaster
Robust and efficient performance.

DuroShell PowerPack
Optimized flow distribution and fatigue resistance.

Learn more at **www.alfalaval.com/duroshell**

Extending performance
with the Alfa Laval 360° Service Portfolio

Our extensive service portfolio offers all the services you need to ensure top performance, maximum uptime and operating efficiency from your Alfa Laval equipment throughout its life cycle. Our committed team's expertise and the availability of parts bring you peace of mind.

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.

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