

Selective Catalytic Reduction (SCR) Systems

- Fast melting of AdBlue - high power when it is cold
- No risk of overheating – automatically switches off
- Energy optimizing – heats only when and where needed
- No regulating electronics
- Handles fast changes in heat load – self regulating to all tank levels
- Thin and flexible

"Conflux unique heating technology assures that your AdBlue system minimizes the emission from diesel engines instantly after starting the engine - even during very cold days."

Background

Adding AdBlue (urea) to the exhaust of diesel engines strongly decreases the emission of nitric oxides (NOx) and reduces the fuel consumption. In many countries AdBlue is mandatory for large diesel driven vehicles. The trend is to include it in personal cars as well. AdBlue is a liquid that freezes at -11°C. At temperatures above +35°C it starts to decompose.

Objective

To properly operate diesel vehicles in cold climates the AdBlue needs to be melted and heated above -11°C quickly when the engine is started. It is also important that the heater does not overheat the AdBlue and causes it to decompose.

Solution

The Conflux' heater is ideal for heating AdBlue. The colder it is the higher the heating power gets, assuring a fast melting of the AdBlue ice. The intrinsic safety temperature of the Conflux heater assures that the AdBlue is never overheated, not even locally, for example at the surface.

The Conflux heater eliminates the need of any regulating electronics or level sensors to heat the AdBlue.

The heater is thin and flexible and can be included in your AdBlue tank or SCR system any way you like. Preferably, it is kept outside of the AdBlue.

Benefits

With a Conflux heater in your SCR system the AdBlue melts soon after the engine is started. It takes no space, requires no control electronics, is flexible and can be formed in any shape.

It will never overheat the AdBlue. It can simultaneously melt AdBlue ice in one part and shut-off to prevent the AdBlue from overheating in another part (e.g. at the surface). It dynamically adjusts itself to compensate for variation in the liquid level e.g. due to inclinations.

We have a desire - heating shall be safe and easy.