

AMMO LASER Leak Detection System

The #1 Safety Measure for Urea Plants with a Guaranteed Pay Back

Question 2: When does one need a proper Leak Detection System ?

High pressure urea equipment consist of a carbon steel pressure bearing wall, which is protected against corrosion by a protective stainless or duplex steel layer. This protective layer can be an overlay welding or a loose liner. Refer to Figure 1 showing the installation of a stainless steel loose liner in a urea reactor.

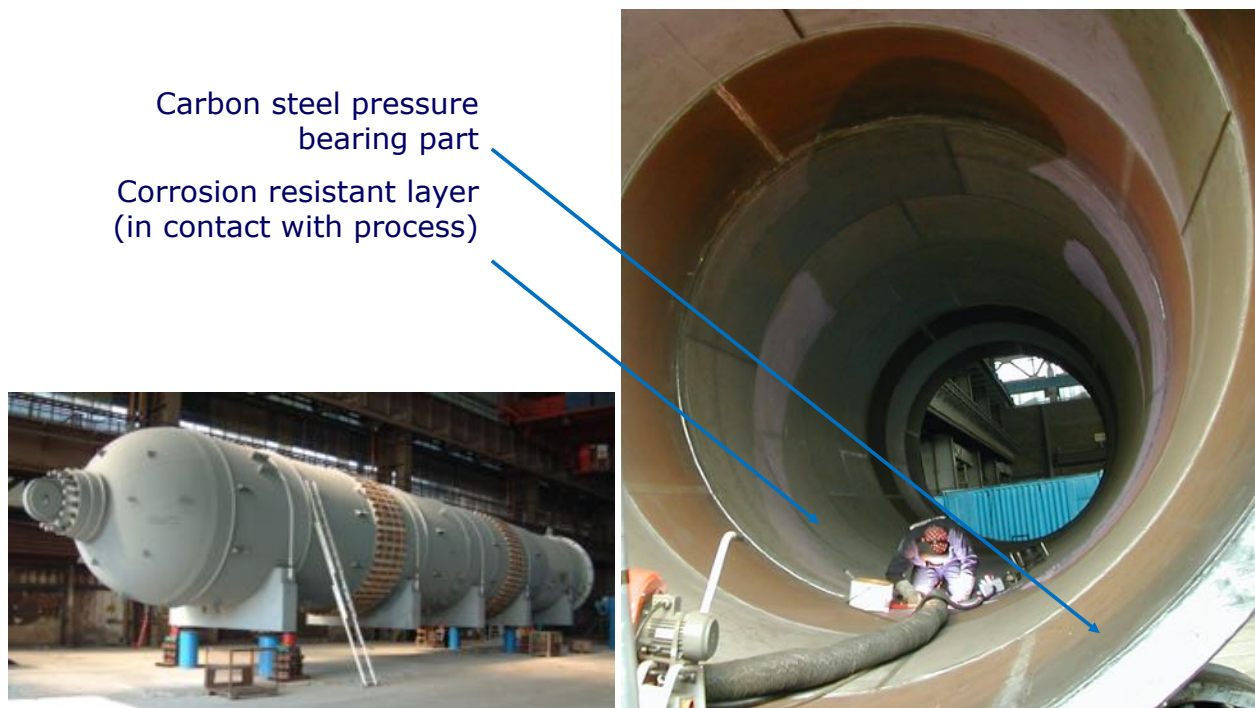


Figure 1: The installation of a stainless steel loose liner in a urea reactor

On all locations where a gap exists between the stainless steel or duplex alloy protection and the carbon steel pressure bearing parts, one needs a proper Leak Detection System. A very high risk for a catastrophic failure (rupture of the vessel) is a reality following a break before leak scenario.

Examples:

- ✓ Behind loose liners
- ✓ Behind an overlay welded or explosive cladded on a multi-wall or multi-layer pressure wall
- ✓ High pressure heat exchanger tubes and tube-tubesheet connections
- ✓ Behind sleeves in nozzles (lined nozzles)
- ✓ In case there is a solid flange face ring welded in