



Ammonia Filtration

System Improvement, Central Europe

Customer:	Central European nitric acid and fertilizer producer
Application:	Ammonia filtration, Chemical Process
Products:	Sinterflo® F, sintered metal fibre pleated media and stainless steel filter vessels
Primary Motive:	System Improvement
Location:	Central Europe
Project Date:	2020
Division:	New Milton, UK



Customer Overview:

A Central European producer of industrial fertilisers, focusing predominantly on the production and sale of nitrogen and multiple ingredient fertilizers, both in solid and liquid forms.

Customer's Problem:

The filters were installed at the plant in 2003 when the production line of nitric acid was built and commissioned.

Installed within the manufacturing process, the elements and vessels were designed to filter gaseous ammonia, weak nitric acid and to purify the air.

Porvair Solution:

Porvair was selected as the product specification met the demanding criteria of the end user, for quality and performance.

The vessels and Sinterflo® F filter elements were produced at Porvair's plant in New Milton in UK.

Project Overview:

Elements for air and gaseous ammonia filtration, each weighing over 5kg, were manufactured from Stainless Steel AISI 316L.

These robust elements are made from sintered metal fibre pleated media, with a fine filtration rating (3µm), they are installed outdoors, 20m above ground, inside the Porvair vessel.

The vessels and elements have been removing fine particles since 2003.

In 2020, the customer quoted "These filters ensure very fine filtration, but they are robust and very durable. Filter elements have been treated only by air pressure during the regular overhauls once every 4 months. No performance decrease nor mechanical defect has occurred in their 17 years of continuous operation. We have been very satisfied with a quality and filter performance of Porvair's products."

Product and System Information:

Sinterflo® F fibre filter elements

Stainless steel filter vessels

Other Opportunities:

All chemical plants where fine filtration of air, gaseous and liquid chemicals is required. Extensive range of Nitric acid and Ammonia plant references proved the superb performance and production qualities of the vessels and elements.