

EXCEPTIONALLY  
**LONG LIFETIME**  
OF SINTEXX PLUS

## REFERENZ

### VILEDON SINTEXX PLUS FILTER CARTRIDGES IN SHIPYARD LASER CUTTING FUME EXTRACTION

The Austrian Shipyard AG (ÖSWAG) repairs and rebuilds river boats. The steel and aluminum dust generated during cutting is extracted via the filter system of our OEM partner. The conventional filters employed suffered irreversibly high pressure losses, especially during the cutting of aluminum. Following a short analysis, Viledon® experts working together with Austrian Viledon® partner FILCOM recommended an optimized filter design to the customer, based on the use of sinTexx Plus filter cartridges.

#### Initial situation

The filter system using the existing filters did not work badly, but it was far from optimal. During the extraction of aluminum dust, filter pressure loss was very high and filter life too short.

#### The Viledon® solution

The use of 12 efficient Viledon® sinTexx Plus cartridges with Twist & Fix flange produced an immediate improvement. The laser cutting table is much cleaner than before. Pressure drop was reduced by almost 75% while volume flow rate

rose from 11,000 m³/h to 14,000 m³/h. ÖSWAG is very satisfied with the result. The entire filter system still delivers a significant increase in performance combined with an exceptionally long lifetime of the Viledon® sinTexx Plus cartridges.



#### TECHNICAL DATA

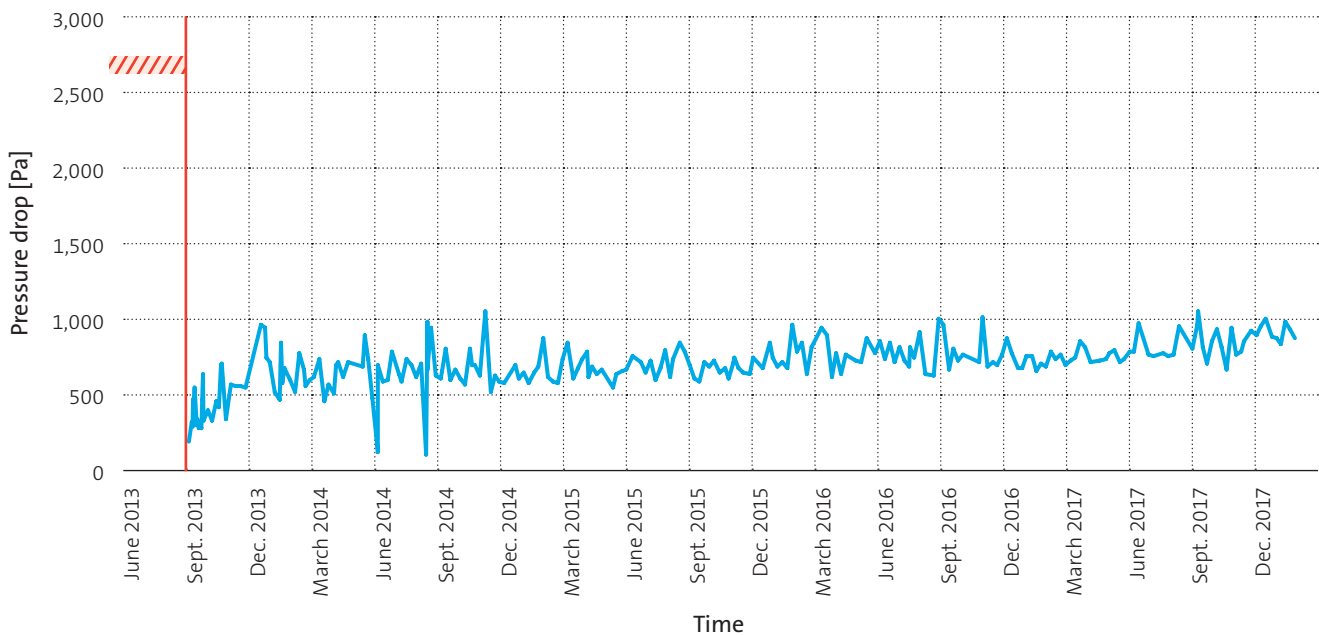
Filter cartridges used	12 × sinTexx Plus with Twist & Fix flange
Total filter area	300 m²
Filter medium	FE 2577
Volume flow rate	14,000 m³/h
Pressure drop	700 Pa
Working hours	5 days / week, 12 hours / day
Dust type	Laser cutting dust from steel + aluminum
Service life	> 4.5 years



Laser cutting plant for the extraction of steel and aluminum dust, which need to be removed during the cutting of ship components.



### Long-term operating characteristics of Viledon® sinTexx Plus



///  $\Delta p$  (LP 324 G-12-A 25-07)  
 $\dot{V} > 11,000 \text{ m}^3/\text{h}$  bis August 2013

—  $\Delta p$  (LP 324 G-12-A 25-77) sinTexx Plus  
 $\dot{V} > 14,000 \text{ m}^3/\text{h}$  ab September 2013

**Your benefits at a glance**

- Cleaner cutting table
- Low pressure drop
- Increased volume flow
- No precoating of the filter required
- Longer lifetime
- Gives the operator an option for improved energy balance

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