

# SS316 SINTERED POWDER FILTER ELEMENTS

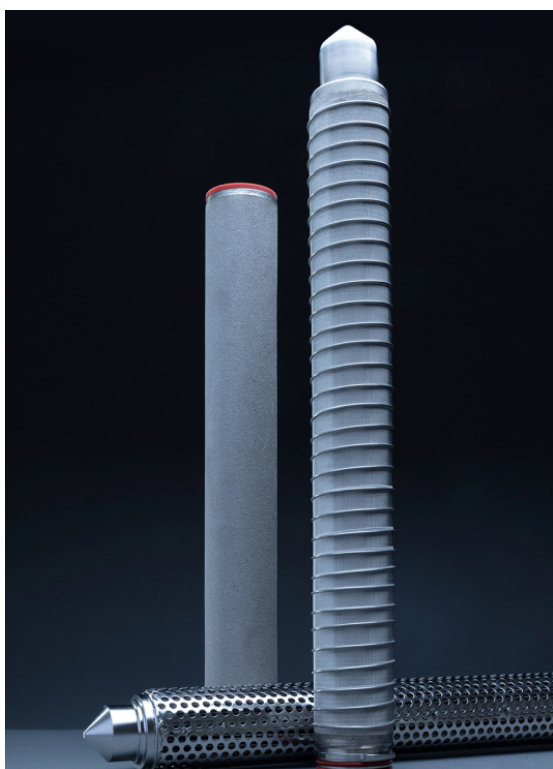
Totally regenerable filter cartridge  
Liquid and gas applications under the harsh conditions  
For high-T° and high corrosion processing application

## SINTEX

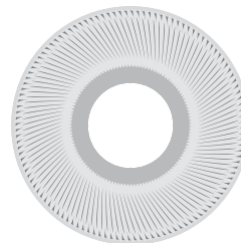
### High mechanical strength in liquid and gases applications

SINTEX steel cartridges consist of a media made from a sintered layer of ultra fine (as small as 2 µm) metal powder, calendered onto a cylindrical support fitted with standard end caps. SINTEX cartridges are also available in other alloys (ICONEL® 600-HASTELLOY® C276-HASTELLOY® X) and in different configurations, making them suitable for even the most demanding applications. Contaminants may be removed by backflushing, with chemical agents together with ultrasound, or by autoclaving in controlled atmosphere, making the elements completely regenerable. The SINTEX filter cartridge is totally inert, and no adhesives or resins are used in its assembly. The powder particles are welded together by a special sintering process, which bonds each grain to the next without compacting them, and preventing any release. The use of carefully selected materials and a precisely controlled sintering procedure ensure outstanding quality standards and consistent, repeatable results.

These filter elements are particularly suitable for the filtration of aggressive and high temperature fluids and gases.



MULTI-PLEATED WIRE CLOTH  
CONSTRUCTION  
**SINTEX**



A safe, versatile and cost-effective surface filtration cartridge

## TECHNICAL SPECIFICATIONS

- Mechanical properties and thermal conductivity
- Rigid structure for good back flush flow and durable performance
- High temperature resistance, up to 930°C
- Pulsed micro-tig welding; heat distortion, oxidation and sensitization are eliminated
- wide chemical compatibility, easily regenerated with strong chemical products, high corrosion resistance
- all materials meet the requirements of FDA CFR Title 21 for food contact
- in compliance with EC Directive for food contact. Regulation (EU) No.10/2011+amendments;1935/2004-1895/2005

## OPERATING CONDITIONS

### In oxidizing atmosphere

**316L and Hastelloy C-276**

750°F@50 psi (400°C@3.5 bar)

**ICONEL 600**

1100°F@50 psi (600°C@ 3.5 bar)

**Hastelloy X**

1450°F@50 psi (800°C@3.5 bar)

### In reductive atmosphere

**316L and Hastelloy C-276**

950°F@50 psi (500°C@3.5 bar)

**ICONEL 600**

1450°F@50 psi (800°C@3.5 bar)

**Hastelloy X**

1700°F@50 psi (930°C@3.5 bar)

## PORE SIZE RATING

**5.0um - 10um - 20um - 30um - 40um -**

1700°F@50 psi (930°C@3.5 bar)

**75um to 750um**

## FLOW RATE

<b>Water Flow 20°C @0.1 bar /10"</b>	5.0um	10um	20um	50um	75um	100 um
<b>Typical Flow Rate (l/min)</b>	30	40	45	45	45	50

Extrapolation for multiple housings and higher pressure drops is acceptable, but as flows increase the pressure drop of the housing becomes more apparent

## FILTRATION AREA

0.05m<sup>2</sup>/10"

## MATERIALS OF CONSTRUCTION

<b>Filtering media</b>	ss316 multi-layer wire mesh
<b>Supports</b>	ss316
<b>Inner sleeve</b>	ss316
<b>Cage</b>	ss316
<b>Gaskets</b>	Silicone (standard), EPDM, Viton, FEP

## DIMENSION

<b>Length</b>	254mm (10")-508mm (20")-762mm (30")-1016mm (40")
<b>Outer diameter</b>	69mm
<b>Inner diameter</b>	26mm