Stainless Steel Filter Element for Hydrogen Processing

SinftHyDrogen

Types

- · Stainless Steel Pleated Filter Element;
- · Stainless Steel Sintered Mesh Filter Element

Filtration Precision

· 1 to 200 microns

Heat Resistance

· Continuous filtration from -200°C up to 600°C

Customizable Connection Types:

Standard interfaces (such as 222, 220, 226), quick-connect fittings, threaded connections, flange connections, tie rod connections, and other custom configurations

Corrosion Resistance:

Resistant to nitric acid, alkali, organic solvents, and chemicals

High Porosity and Excellent Permeability:

Low pressure loss and high flow rate

Features:

Customizable according to your design, or we can provide equivalent replacements based on your samples or drawings.



Fiber Felt



Material

- Pure Titanium (Ti > 99.50%);
- Pure Nickel (Ni ≥ 99.50%);
- · Stainless Steel (316L)

Porosity

.50%~85%

Size

· 1500*1200mm (customizable)

Thickness

· 0.10~1.50mm (customizable)

Innovation

· Titanium fiber felt products with a microporous layer.

Metal Materials

Material

Pure Titanium; Pure Nickel; Stainless Steel Mesh.

Process

Expanded Mesh / Woven Wire Mesh · Sintered Mesh / Nickel Foam ·

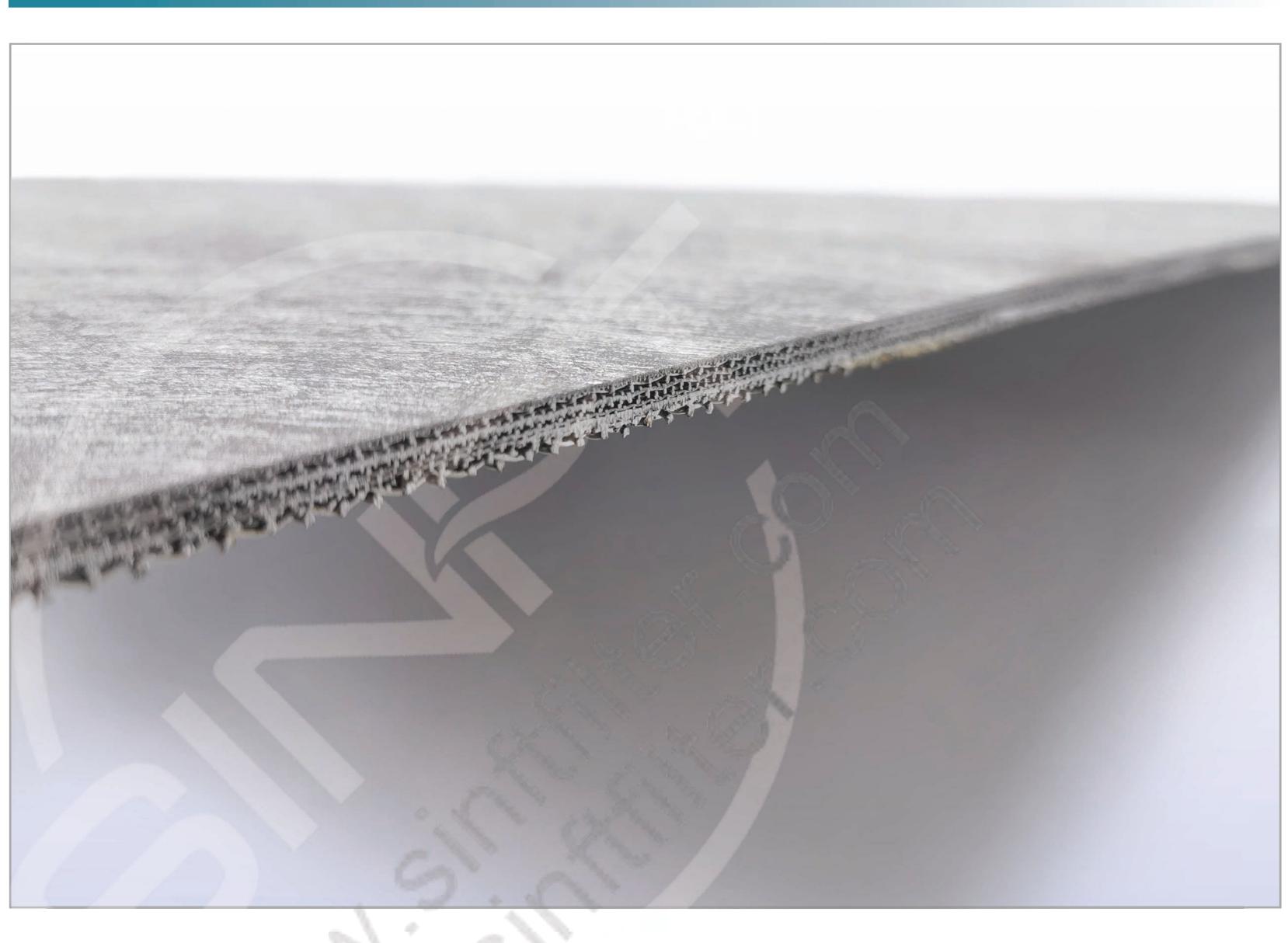
Size

Customizable ·

Innovation

- Customizable. Maximum total thickness of stainless steel sintered mesh is up to 50mm.
 - Maximum thickness of nickel foam can reach 10mm, with a maximum porosity of 98% and a maximum density of 0.45 g/cm³.

Composite Products



Material

· Titanium; Nickel; Stainless Steel

Layers

· 2~15 layers (thickness varies with the number of layers)

Thickness

· 0.80~6.5mm (customizable within this range)

Size

· 1500*1200mm (customizable within this range)

Innovation

· Sintering of fiber felt and metal mesh combinations, with a maximum composite thickness of 6.5mm.



Hebei Sinft Filter Co., Ltd.

- Founded In: 2007
- Number of Wmployees: 118
- Company covers an area of 15,900 square meters, and the new plant area under construction is 26,658 square meters.

SinftHyProgen

Company Introduction

- We are deeply involved in the field of industrial filtration, and we have been active in Europe, North America, Singapore and Korea for more than 10 years.
- Thanks to our customers for giving us the opportunity to get in touch with this industry.
- Thanks to the trust of our customers, let us provide PTL processing solutions for their electrolyzers, in their guidance and requirements again and again, different selection of materials, thickness matching and debugging, combined with a variety of different wire mesh production processes, we continue to test, and finally deliver qualified products.
- We recognized that this was a future and a promising thing, so we started this project, SINFTHYDROGEN, with the aim of delivering more customized products that met the requirements.

SINFT believes in hydrogen powering the future, with technology driving environmental sustainability.



Our vision is to become the leading provider of custom Porous Transport Layer (PTL) and Gas Diffusion Layer (GDL) solutions, serving Alkali (ALK), Proton Exchange Membrane (PEM), and Anion Exchange Membrane (AEM) water electrolysis hydrogen technologies. We specialize in combining metal mesh products with fiber felt materials, offering OEM services tailored to meet the diverse needs of various electrolyzers.

Our competitive advantages

- ► Comprehensive selection of high-quality materials
- ► Close collaboration to deliver tailored solutions
- Customizable thickness and size options
- Various production methods





We are committed to providing innovative and efficient solutions to support the evolving needs of the electrolyzer industry.

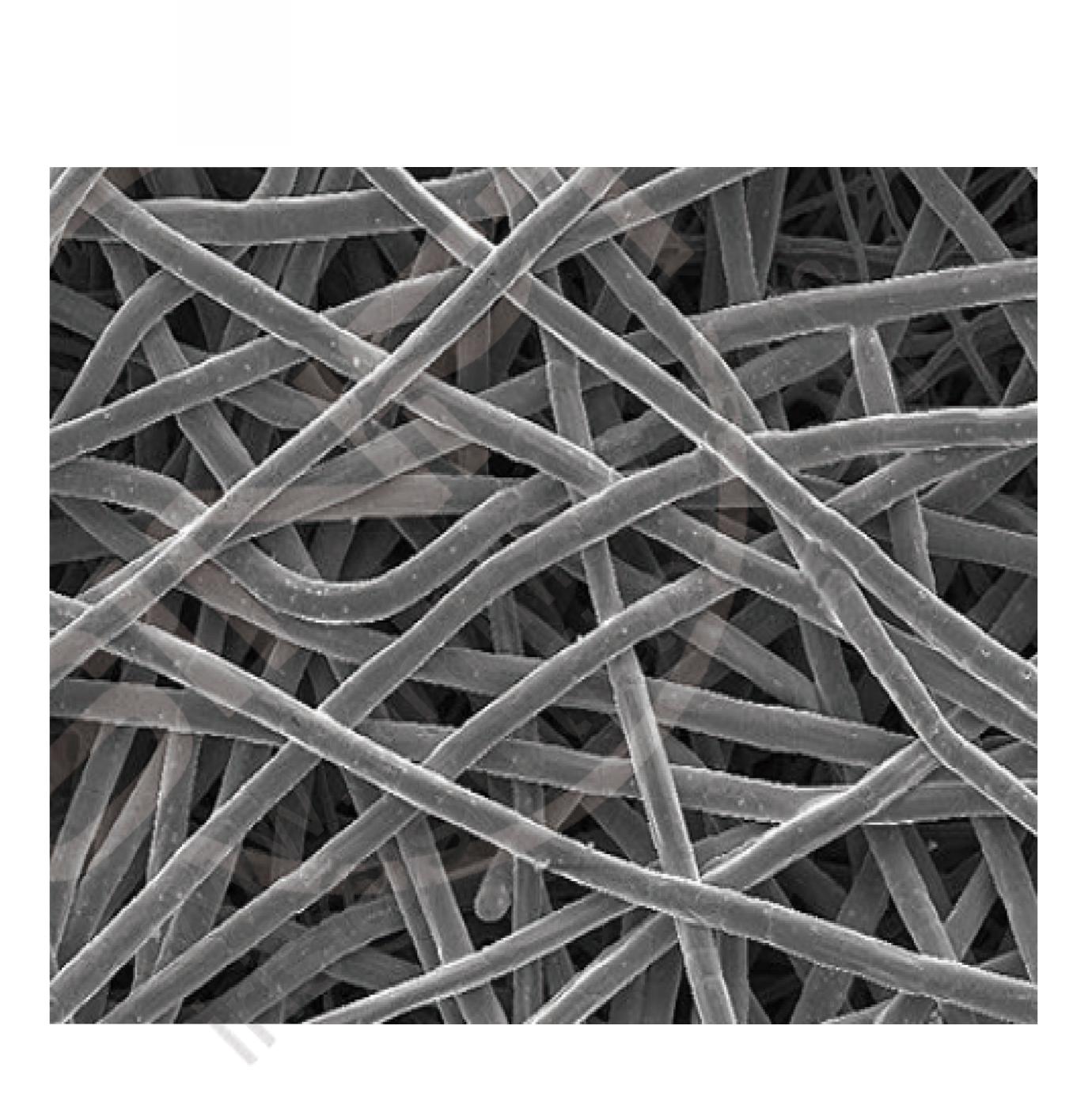


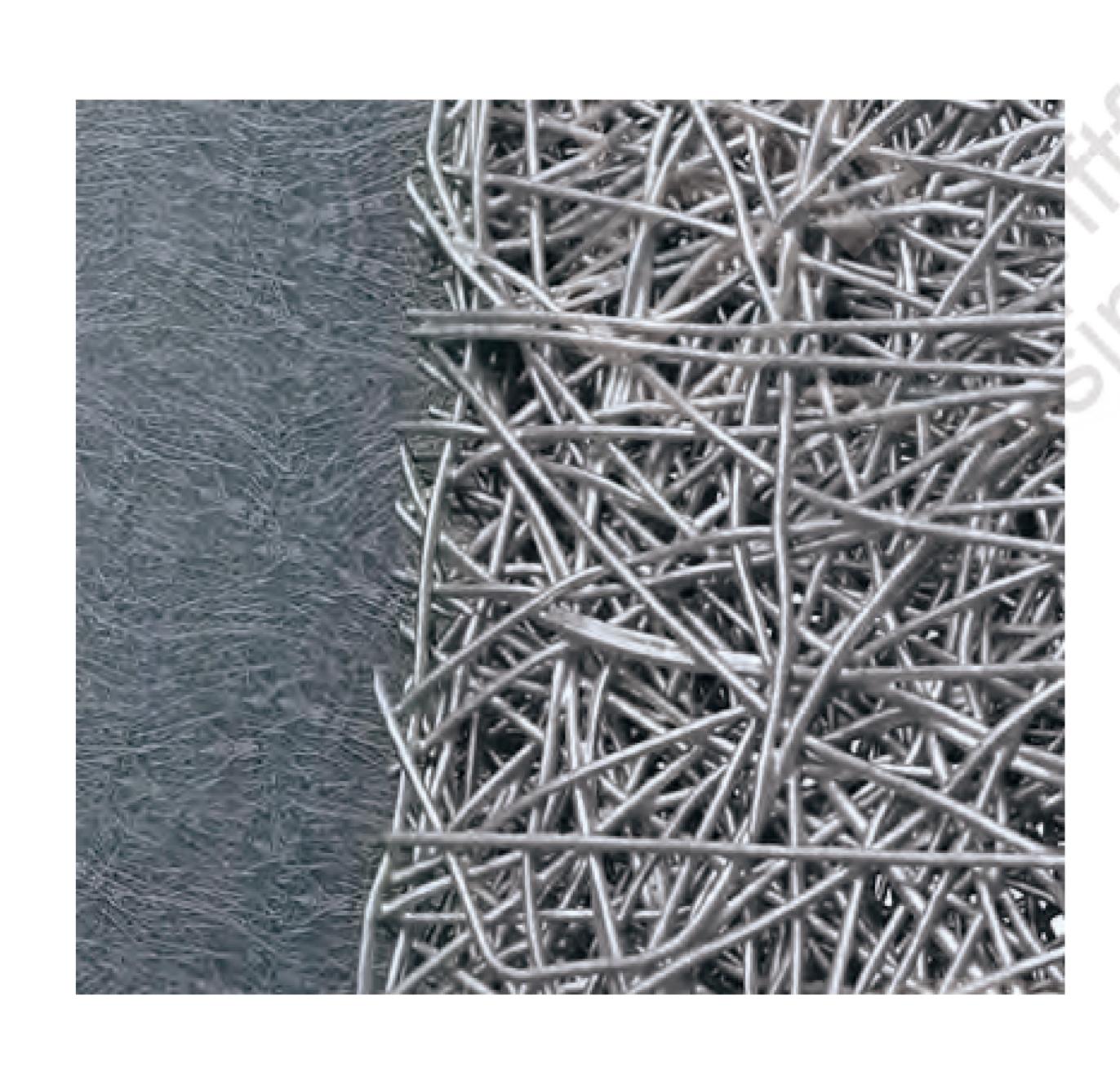
Pil and GDL

(Porous Transport Layer) and (Gas Diffusion Layer)

for ALK、AEM、PEM Water Electrolysis Hydrogen Technologies

- High conductivity
- · Excellent gas permeability
- · Corrosion resistance
- · Mechanical strength and stability
- · Uniform pore structure





- · Low resistance
- · Customized thickness
- · Thermal stability
- · Hydrophilic/hydrophobic balance
- · Customized solution

> SinftHydrogen.com