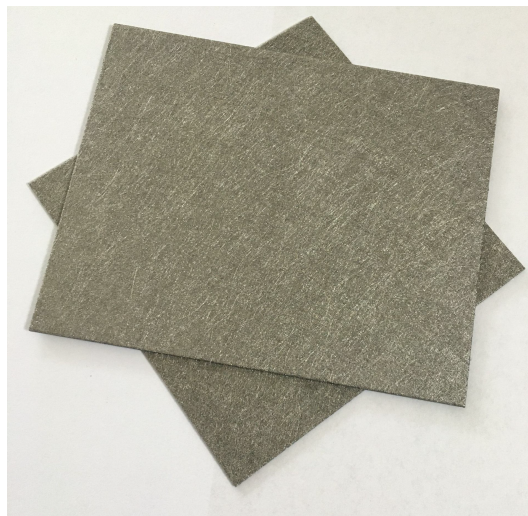


# Nickel Fiber Felt

## Product Description:

Nickel fiber felt is a type of fiber felt made of pure nickel metal, which has continuous three-dimensional mesh holes and can achieve extremely high porosity and aperture.

Compared to diffusion layers made of other materials, nickel fiber felt has better passivation ability on the anode side of AEM, and nickel has strong passivation energy force can quickly generate a very thin passivation film on the surface, which can resist the corrosion of atmosphere, alkali, and certain acids; Compared to nickel metal mesh and nickel fiber the larger specific surface area of the felt and more contact with the anion exchange membrane can reduce contact resistance, thanks to the stability of nickel metal and the connectivity of the fiber felt continuing the three-dimensional structure, nickel fiber felt material is more suitable for use as a diffusion layer in anion exchange membrane (AEM) electrolysis cells.



## Chemical Composition:

Ni	C	Si	Mn	S	Fe	Cu	Sum of other impurities
≥99%	≤0.02%	≤0.35%	≤0.35%	≤0.01%	≤0.40%	≤0.25%	≤0.5%

## Specification:

Thickness	Tolerance	Surface Density	Porosity	Tolerance	Breathability	Tolerance	Roughness
0.15mm	±0.03mm	335~465g/m <sup>2</sup>	70%	±5	≥400L(Min*dm <sup>2</sup> )	±20%	Ra ≤20μm
0.20mm		450~620g/m <sup>2</sup>					
0.25mm		555~775g/m <sup>2</sup>					
0.30mm		670~930g/m <sup>2</sup>					
0.40mm		715~1065g/m <sup>2</sup>					
0.50mm	±0.05mm	890~1335g/m <sup>2</sup>	75%	±5	≥350L(Min*dm <sup>2</sup> )	±20%	Ra ≤20μm
0.60mm		1070~1600g/m <sup>2</sup>					
0.80mm		1430~2130g/m <sup>2</sup>					
1.00mm		1335~2225g/m <sup>2</sup>					
1.20mm		1600~2670g/m <sup>2</sup>					
1.50mm	2000~3340g/m <sup>2</sup>						

## Application:

1. Proton exchange membrane (PEM) electrolyzer.
2. Anion exchange membrane (AEM) electrolyzer.
3. Alkaline (ALK) electrolyzer.