

# PrometheanFoam

## TECHNICAL SPECIFICATIONS

Premium Foam Metal Materials

<b>ISO 9001:2015 Certified</b>	<b>IATF 16949 Compliant</b>
<b>15+ Years Experience</b>	<b>Global Shipping</b>
<b>MOQ: 10 Units</b>	<b>RoHS &amp; REACH Certified</b>

### Contact

30 N Gould St Ste R, Sheridan, WY 82801 USA  
+1 (406) 479-0215 | [sales@prometheanfoam.com](mailto:sales@prometheanfoam.com)  
[www.prometheanfoam.com](http://www.prometheanfoam.com)

# TABLE OF CONTENTS

1. Company Overview
2. Product Portfolio
3. Nickel Foam
4. Copper Foam
5. Iron Foam
6. Aluminum Filters
7. Quality Control
8. Applications
9. Ordering

# 1. COMPANY OVERVIEW

PrometheanFoam is a leading North American manufacturer of premium foam metal materials with 15+ years of experience.

## Capabilities

- Custom manufacturing
- Rapid prototyping (2-4 weeks)
- Volume production (MOQ 10)
- Global shipping
- ISO 9001:2015 & IATF 16949
- In-house QC lab

## Certifications

Certification	Standard	Scope
ISO 9001:2015	Quality Mgmt	All Operations
IATF 16949	Automotive	Auto Products
RoHS	Hazardous	All Materials
REACH	Chemical	EU Compliance

## 2. PRODUCT PORTFOLIO

Product	Applications	Features
Nickel Foam	Batteries, Supercapacitors	High conductivity
Copper Foam	Heat sinks, Thermal mgmt	Superior thermal
Iron Foam	Filtration, Sound absorption	Cost-effective
Aluminum Filters	Molten aluminum	85% inclusion reduction

### 3. NICKEL FOAM

#### Properties

Property	Value
Purity	≥99.5% Ni
Conductivity	1.43×10 <sup>7</sup> S/m
Thermal	90 W/m·K
Porosity	95-98%
PPI	10-130
Temp	-200 to +400°C

## 4. COPPER FOAM

### Properties

Property	Value
Purity	≥99.9% Cu
Thermal	380-400 W/m·K
Conductivity	$5.96 \times 10^7$ S/m
Porosity	95-98%
PPI	10-100
Temp	-200 to +200°C

## 5. IRON FOAM

### Properties

Property	Value
Composition	Pure Fe/alloys
Thermal	80 W/m·K
Porosity	85-95%
PPI	10-80
Temp	-100 to +600°C

## 6. ALUMINUM CASTING FILTERS

### Specifications

Parameter	Spec
Material	Iron-Nickel
PPI	10-20 (15 recommended)
Temp	Up to 1200°C
Sizes	178x178, 229x229, 305x305mm
Efficiency	85-90% removal
Life	50-100 cycles

Benefits: 85% inclusion reduction, 40-60% lower scrap, reusable, cost-effective

## 7. QUALITY CONTROL

Test	Parameters	Frequency
Visual	Surface, defects	100%
Dimensional	Size, thickness	Statistical
Porosity	PPI, distribution	Every batch
Chemical	Composition	Every lot
Mechanical	Strength	Per spec

## 8. APPLICATIONS

Industry	Applications	Products
Energy Storage	Batteries, Fuel cells	Ni, Cu foam
Automotive	Thermal, EMI shielding	Cu, Ni
Electronics	Heat sinks	Cu, Ni
Foundry	Metal filtration	Al filters
HVAC	Heat exchangers	Cu, Fe

## 9. ORDERING

Type	MOQ	Lead Time
Standard	10 units	2-3 weeks
Custom	25 units	4-6 weeks
Samples	1-5 units	1-2 weeks

**Contact:** +1 (406) 479-0215 | [sales@prometheanfoam.com](mailto:sales@prometheanfoam.com) | [www.prometheanfoam.com](http://www.prometheanfoam.com)