

Chand Eisenmann Metallurgical

Quality Engineered Porous Metal Products



- The #1 Source for all your Porous Metal Needs
- Experienced "Partners in Progress"
- The Highest Standards of Quality

- Wide Variety of Alloys and Shapes
- Innovative and Cost Effective Solutions
- Reliable, Long Life Performance

Chand Eisenmann Porous Metal Media

So many, in fact, that Chand Eisenmann Porous Metal Media has become a truly versatile and respected engineering medium. Design Engineers around the world continuously develop new engineering solutions to technical challenges by incorporating the unique physical and operational characteristics of sintered metal media into their products.

In comparison to other materials, the superior strength, uniformity, temperature and corrosion resistance, plus our wide selection of media make Chand Eisenmann Porous Metal the first choice for reliability and long life.



"Partners in Progress"

Chand Eisenmann Metallurgical has been producing quality porous metal products for more than 20 years. Backed by a staff that includes Metallurgists, Engineers, and experienced Toolmakers, our manufacturing facility is fully equipped and capable of producing a large variety of porous metal components for an even larger variety of applications. Through the "Partners in Progress" program our Engineers and Technicians work closely with our customers to push the limits of porous metal technology. Our goal is to help you to get your product to market quickly and cost effectively. Whatever your application, Chand Eisenmann is right there with you to develop the best solution to your technical challenges.

Close Process Control

Porous metal begins as fine metal powders specifically chosen to meet tough quality standards. Each lot of powder is carefully sieved into the exact particle size distributions needed to produce the various porous metal grades.

To create quality porous components, powder is pre-compressed in specially designed tooling to form close tolerance, repeatable "green" parts. Pre-compression conditions, such as tool fill and pressure, are carefully monitored to ensure maximum strength and uniform porosity in the finished parts.

Green parts are sintered in a closely monitored, atmospherically controlled furnace at temperatures that result in a fusion of the metal particles into a porous monolithic structure. Constant monitoring and control of the furnace temperature, atmosphere, and processing time, minimizes surface oxidation while maximizing the strength and corrosion properties of the finished components.



Design Freedom

Materials -- Chand Eisenmann Porous Metal is most commonly made from 316L Stainless Steel. For more demanding applications, we offer a wide variety of temperature and corrosion resistant alloys. Some of these include:

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• 304L Stainless	Steel	• Monel*	 Bronze 	 Nickel
• Inconel* • Hastelloy* C, X & B		 Titanium 		

Pore Size -- The unique structure of porous metal does not lend itself to direct pore size measurement. A more useful method for qualifying the media is to measure a nominal pore size through the application of standardized bubble point test. This non-destructive test can then be correlated to performance requirements specific to your application.

Standard Nominal Porosity of Chand Porous Metal Media:							
• 0.2	• 0.5	• 1	• 2	• 5	• 10		
• 20	• 40	• 60	• 100 N	licron Grac	les		

*Hastelloy is a registered trademark of Haynes International Inc. Monel and Inconel are registered trademarks of International Nickel Co., Inc.



Basic Shapes And Unique Designs

Porous Metal is manufactured in many different configurations. There are some basic shapes that have found use in a great many applications.

Basic Shapes:

Discs -- Porous Metal Discs are used as filters, frits, snubbers, aerators, or as base components for assemblies. Available in diameters from as small as .030 inches to over 8 inches with a wide range of thickness.

Cups -- Widely used in filter assemblies, flame arrestors, and sensor protectors, cups can be manufactured in sizes up to several inches in both diameter and length.

Bushings -- Seamless, bushings for applications including filters assemblies, air rolls, aerators and lubricators are available in diameters up to 5 inches with lengths of up to 3 inches.

Tubes -- Seamless tubes provide an excellent starting point for building por assemblies such as filter cartridges, aerators, air rolls, and applicators.

Custom Shapes -- What configuration best fits your application? Let Chand Eisenmann Engineers help you find the right solution for all your porous product needs.





Providing Innovative Solutions

With high strength, corrosion resistance, temperature resistance, and cleanability, porous metal is a filter media that can provide the most reliable, long life performance, even in extreme conditions.

Primary Applications:

Flow Control / Flow Restrictors -- High strength, fouling resistant, and wear resistant flow media provides a reliable and cost effective alternative to valves and orifice devices.

Aeration / Diffusion -- Adding a gas to a liquid can be done efficiently and cost effectively if when porous metal is used as the diffusion media.

Sensor Protection -- Corrosion and heat resistant sensor covers let sample gasses in and keep the particles out.

Pressure Snubbers -- Simple, cost effective protection for gauges and instruments.

Other Applications:		
 Breathers 	 Vents 	 Applicator Rolls
• Air Film Rolls	 Flame Arrestors 	• Wicks
 Instrument Filters 	 Fluidizers 	 Supports
• Chromatography Frits		

Cost Effective Engineered Assemblies

As a recognized world leader in the machining and processing of high-tech materials, Chand Eisenmann possess significant capabilities in the secondary operations necessary to incorporate porous metal components into high quality, finished assemblies. Porous Metal Components can be readily altered through secondary operations such as forming, machining, and welding techniques to create an almost unlimited range of end products.

Whether your application requires a simple shape, such as a disc or cup, or some unique assembly, Chand Eisenmann Metallurgical has the experience, capability and creativity to meet your needs.

Chand Eisenmann is the One Source

Call Chand Eisenmann today to see how our "Partners in Progress" can help you to get your new products to the market faster.