

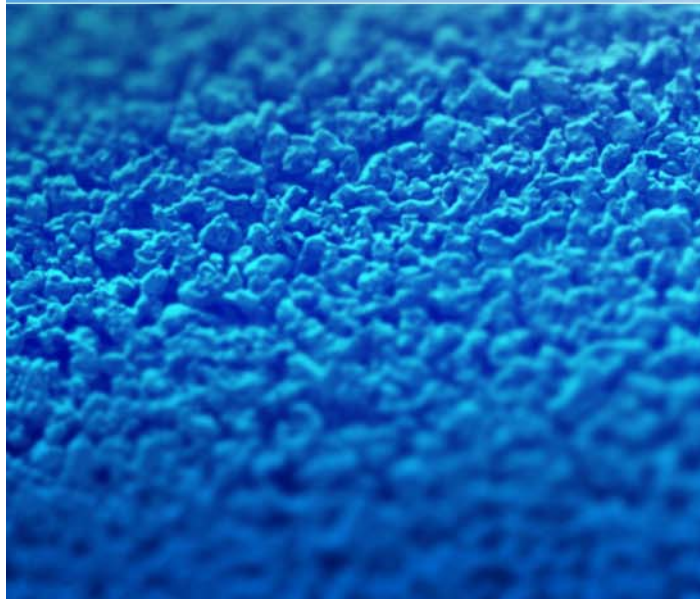


The Benefits of Early Engagement

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Who is Mott Corporation?

Mott Corporation is a high precision filtration and flow control company with 60 years of experience and expertise

Our specialties:

Filtration

Static Flow Control

Gas Diffusion

Gas/Liquid Contacting (Sparging)

Heat Transfer

Fluid Wicking

Flame Arresting

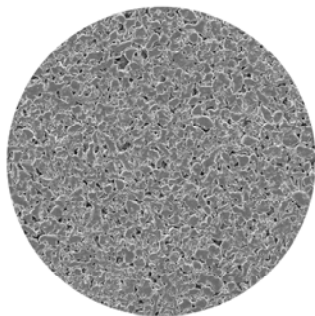
And many other applications



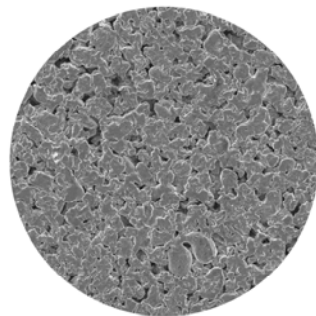
Our products come in various alloys and can be coated with surface treatments or catalyst layers to enhance performance. Each product we make can be customized to meet the mission critical specifications for your highly technical projects.

Our Manufacturing Process

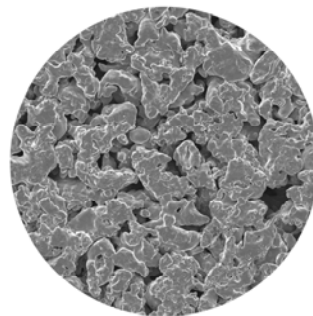
- Raw material
 - Pre-alloyed Metal Powder
 - No binders
- Compaction
 - Proprietary sheet manufacturing process
 - Axial and Isostatic pressing
- Sintering
 - Tightly controlled atmosphere and temperatures



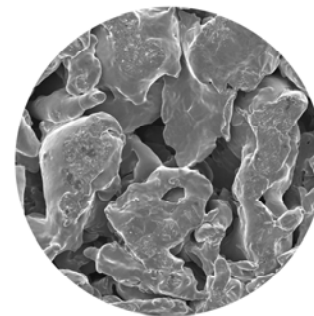
Media Grade 0.2 (x100)



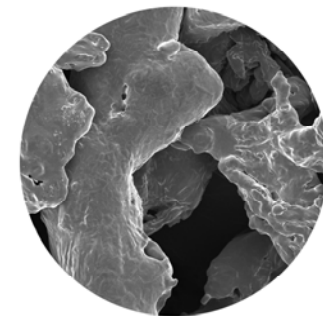
Media Grade 0.5 (x100)



Media Grade 5 (x100)



Media Grade 20 (x100)

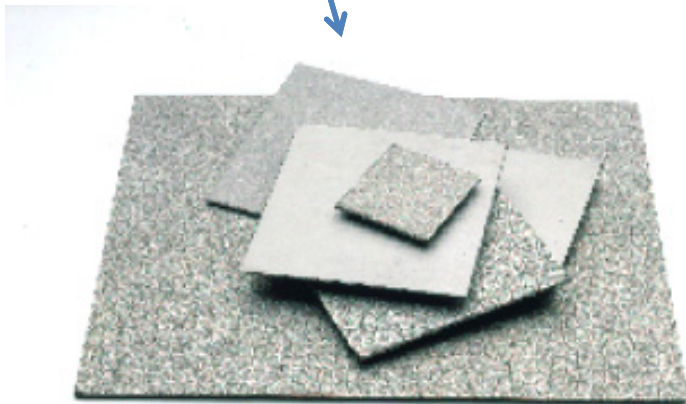


Media Grade 100 (x100)

The Result

Tightly controlled porous components in three basic geometries

- Seamless Tubes
- Discs, Cups & Bushings
- Sheet



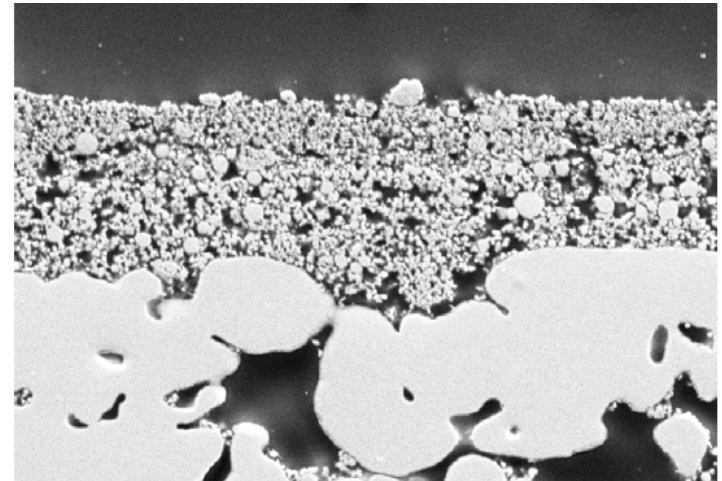
How Does It Solve Your Problem?

- Highly uniform porosity provides even distribution of gas or liquid flow
- Broad selection of corrosion resistant materials
- Low thickness variation to ensure full contact with mating components
- Broad range of thickness and porosity
 - 0.25mm to 3mm thick
 - 16 to 50% porosity



Benefits continued...

- High strength for high differential pressure applications.
- Ductile and machinable to provide for custom features.
- Maintains porosity under very high compression
- Electrically Conductive
- Very smooth surface that is coatable / plateable to provide for a strong catalyst substrate / support



Early Engagement

- The Hard Way...
 - Send in a print and say “Make this out of porous metal”
 - It can be done, but often takes time, can be expensive and may result in unpredictable characteristics
 - So what is the alternative?



The Easy Way

- Engage with Mott during the Inception Phase
- We can help solve the problem, not just provide a part
- So what does that gain you?
- Options



The Benefits of Early Engagement

- Design for Manufacture
 - Lay the ground work for an easier and cheaper production part
 - Intelligently plan for inspection and testing of true CTQs
- Avoid unnecessary process steps
 - Can cause delays
 - Can require costly vendor qualification
 - Drives up the pricetag
- Gather valuable data during early development
 - CFD, DoE, Lab Testing, Etc.
 - Can be highly advantageous

Thank you for your time

Q&A