

Our Agenda

Feb 2024

Welcome

Who is Mott

A Leader in Specialty Chemical Filtration

Automated, Self-Cleaning Filtration Systems

How We Work: Reduced Risk Process to Ensure Results

Applications

Filter Elements



WHO WE ARE

Solving critical challenges facing society



SEMICONDUCTOR

Our high purity filters help make next-generation technology possible by filtering down to 1 PPB in semiconductor manufacturing.



CLEAN ENERGY

Advanced filtration separates oxygen and hydrogen from water creating clean fuel for transportation, heavy industries and heating



OIL & GAS AND CHEMICAL

Mott Corporation supplies fully integrated filter skid designs for all major process filtration technologies.



CLEAN WATER

Innovators in sectors like agriculture, food, landfills and bioprocessing use super filtration to extract tough-to-treat compounds from their wastewater, making it affordable to reuse the water and recover nutrients and other valuable products



AEROSPACE & DEFENSE

Our specially-designed dust filters helped sustain the mission of the Mars Rover for 15 years.



HEALTHCARE

Our low-dose drug delivery components advance patient treatment by enabling implantable drug delivery devices.

Core expertise and applications

- 1.** 65 year track record of making products used by the most demanding customers such as NASA, Samsung, and Medtronic

- 2.** Largest installed base of porous metal filters/fluid controls in the world across every major industry ranging from the Mars rover to implantable medical devices

- 3.** Most extensive metal alloy selection for the toughest operating conditions such as temps from -437F to 1900F

- 4.** Customer Innovation Center: Hub of industry leading collaboration, with the latest lab equipment and new technologies like additive manufacturing and nanotechnology

New Capabilities

CLEAN ENERGY CENTER OF EXCELLENCE

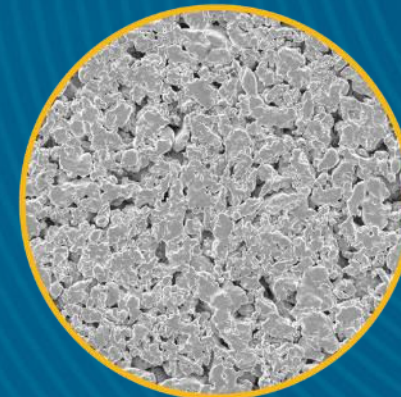
- Opening **65,000 square foot facility** near headquarters in Farmington, Connecticut
- Creating over **100 advanced engineering and manufacturing jobs**
- **Double production capacity** for customized and engineered solutions
- **Dedicated innovation center** for rapid customer prototyping
- **Manufacturing hub** for Mott's titanium Porous Transport Layers (PTLs)
- Innovative solution is the **thinnest in the world**, allowing for the most efficient and cost-effective production of green hydrogen



Scalable manufacturing
creating up to 15 GW
capacity



Customer Innovation Center
for rapid prototyping and
new product development



Advanced laboratory to
improve design and quality
control

Mott Corporation locations



HQ - 75 Spring Lane Farmington CT



8 Viale delle Scienze, Binasco - Italy



84 Spring Lane Farmington CT



1690 New Britain Ave. Farmington CT



14601 Keel St, Plymouth, MI

Precious Metal Catalyst Trends Impact Profitability – Are Your Plants Optimized?

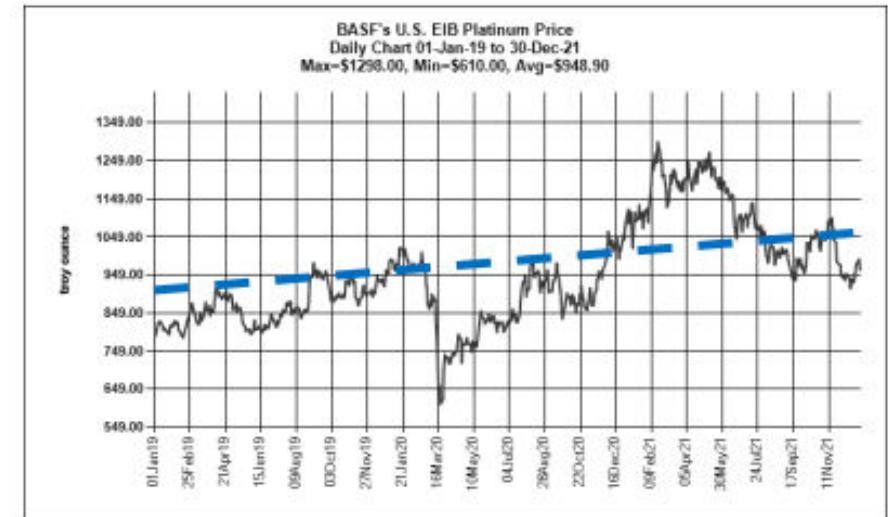
Fluctuating catalyst costs and operating efficiency have a dramatic impact on the profitability of chemical production processes.

With disruptions from emerging technologies like electric vehicles and pandemic-driven supply chain challenges, **managing catalysts and operational efficiency is ever more important.**

See 3-year pricing fluctuation

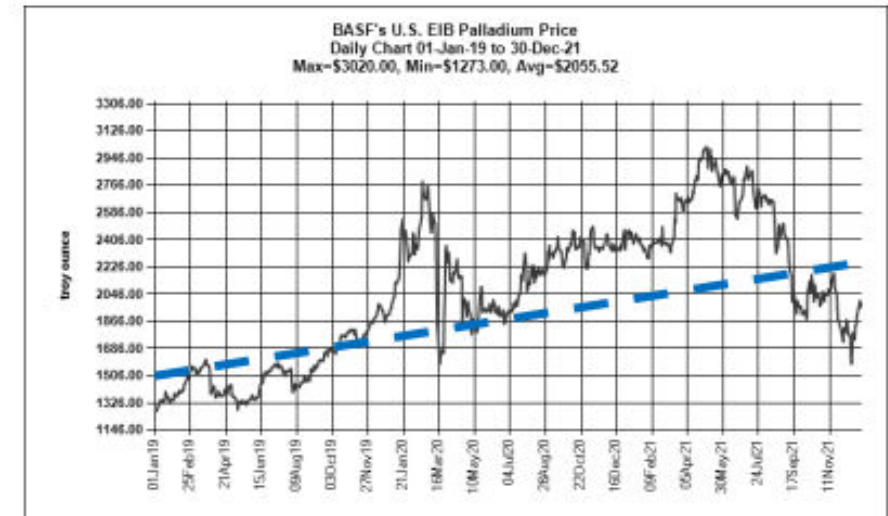
Platinum price per oz

- FY19 = \$785
- FY21 = \$1,118
- $\Delta = +\$333$
- Max 3-yr = \$1,298



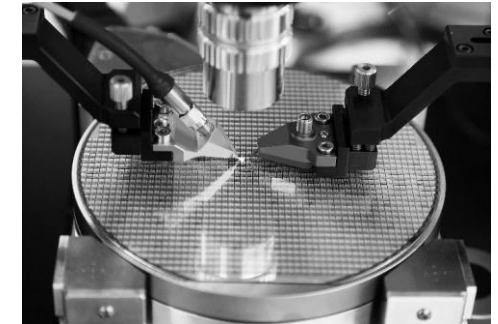
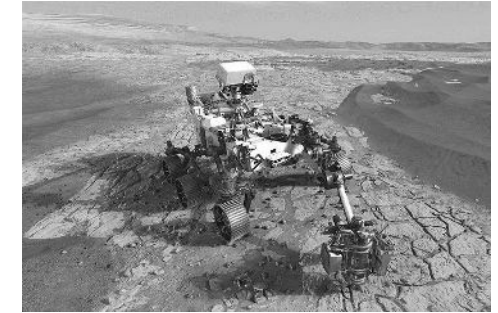
Palladium price per oz

- FY19 = \$1,275
- FY21 = \$2,349
- $\Delta = +\$1,074$
- Max 3-yr = \$3,020



Who is Mott?

- **65+ year track record** of making products used by the most demanding customers, such as NASA and dozens of fortune 100 companies.
- **Largest installed base** of porous metal filters/fluid controls in the world across a variety of applications ranging from the **Mars rover** to implantable medical devices
- **Most extensive metal alloy selection** from **polypropylene cartridges to porous metal Hastelloy® X**, for the toughest operating conditions such as temps from **-437°F to 1900°F (-260°C to 1037°C)**
- **Customer Innovation Center** becoming a hub for industry leading innovation, with the latest lab equipment and new technologies like **additive porous manufacturing**



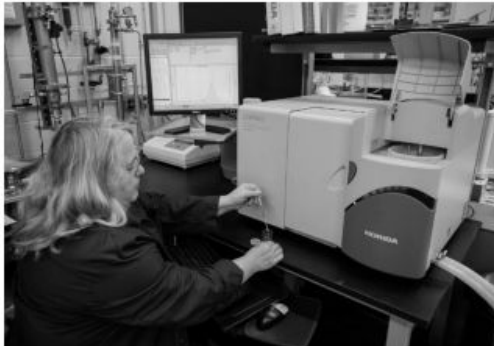
Mott Corporation – A Leader in **Specialty Chemical** Filtration and Flow Control

With over 60 years of filtration experience, we work with the world's top chemical companies in improving filtration efficiency and capacity improvement.

50

Experienced Technical Project Team

Mott's team of 50+ Project Managers, Project Engineers, Application Scientists and Principal Scientist PhDs have hundreds of years of filtration and process design experience combined, with many serving the industry for decades.



Filtrate Quality



700

Installed Base Across Diverse Industries

Mott has 700+ process scale filtration solutions, a portion of which were supplied as turnkey filtration systems, across 6 continents in a variety of end-user applications. Select filtration system past installs:

| Country | Startup | Liquid | Catalyst | Vessel Diameter (Inches) |
|----------|---------|----------------------------------|-------------|--------------------------|
| USA | 2018 | Resins | Nickel | 25 |
| USA | 2017 | Biowax | Platinum | 36 |
| Mexico | 2014 | Organic Solution | Palladium | 20 |
| USA | 2014 | Active Pharmaceutical Ingredient | Platinum | 24 |
| USA | 2013 | Organic Solution | Nickel | 24 |
| Canada | 2013 | Organic Solution | Palladium | 16 |
| Brazil | 2013 | Organic Solution | Palladium | 16 |
| USA | 2012 | Nitrile Solution | Nickel | 20 |
| Thailand | 2010 | Washing Water | Palladium | 24 |
| China | 2008 | THF Solvent | Ruthenium | 20 |
| Belgium | 2005 | Water/Acetate | Proprietary | 24 |
| USA | 2004 | Organic Solution | Nickel | 36 |
| Canada | 2004 | Organic Solution | Palladium | 16 |
| USA | 2003 | Organic Solution | Nickel | 24 |
| USA | 2002 | Organic Solution | Palladium | 30 |
| USA | 2001 | Methanol/Water | Palladium | 16 |
| Canada | 2001 | Polyolephin Oil | Palladium | 24 |
| Japan | 2001 | Hydrogenated Oil | Nickel | 16 |
| USA | 2000 | Polyol/Amine/Water | Nickel | 36 |
| USA | 2000 | Fermentation Slurry | Palladium | 16 |
| Brazil | 2000 | Organic Solution | Platinum | 30 |
| USA | 1999 | Isopropanol | Nickel | 20 |
| USA | 1999 | Dichloroaniline | Platinum | 16 |
| USA | 1998 | Amines | Nickel | 36 |
| USA | 1998 | Butanol | Nickel | 36 |
| USA | 1998 | Hydrogenated Chemical | Platinum | 40 |

100%

Guaranteed – Our Brand Promise

Much like when purchasing a Mott filter or flow control device, Mott's Project Teams set the same expectation – delivering what we say we will deliver when we say we will. Our ironclad reliability and execution transfer beyond just our manufactured components as an ISO9001 certified company.



What We Do: Automated, Self-Cleaning Precious Metal Catalyst Filtration Systems

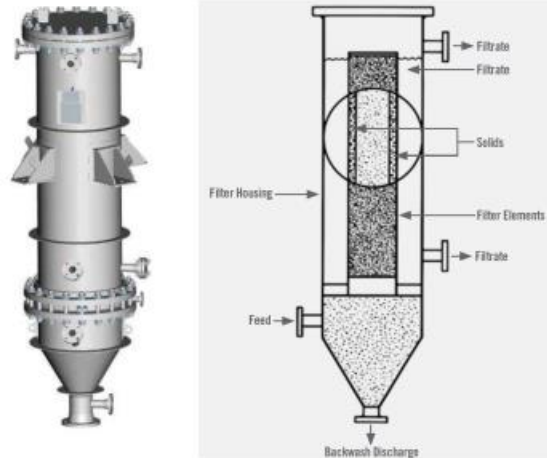
Reduce operating expenses by up to 20% over existing catalyst recovery technology

Reduce operating expenses by up to 20% over existing catalyst recovery technologies with 99%+ efficient self-cleaning, fully automated closed loop filtration system. See our case studies:

| Variables | Case 1 | Case 2 |
|--------------------------------|------------------|------------------|
| Catalyst Used | 5% Pd/C | 5% Pt/C |
| Catalyst Cost per kg | \$5,000 | \$3,500 |
| Catalyst kg's used annually | 1,400 | 1,800 |
| Total annual catalyst expense | \$7,000,000 | \$6,300,000 |
| Capture % prior to install | 90% | 85% |
| Capture % after install | 99% | 99% |
| Annualized cost savings | \$630,000 | \$882,000 |
| Expected ROI | 29 Months | 21 Months |

Key Features & Benefits:

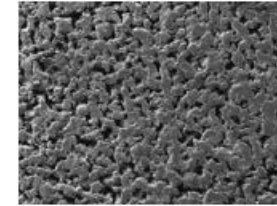
- Capture 99%+ of your expensive catalyst
- Closed-loop & automated system
- Single pass clarity
- Tailored to your process
- Quick and efficient backwash
- No catalyst breakthrough
- No rotating parts



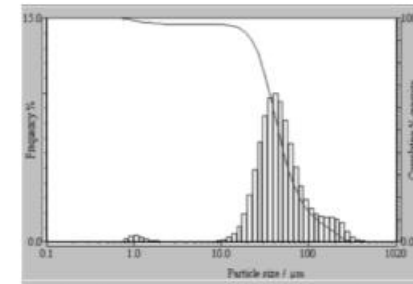
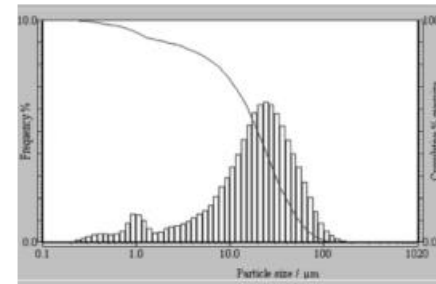
Ex. Mott HyPulse LSI Filtration System

How we recover more catalyst:

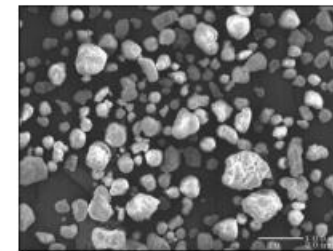
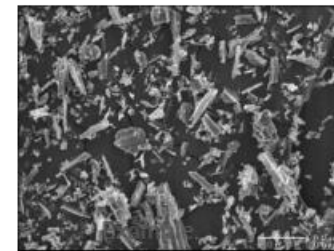
Utilizing our proprietary membrane and particle sizing process & technology, we maximize the range of catalyst capture exactly to the particle size distribution in your feed stream while ensuring compatible materials for your process.



Ex. Optimized Filtration Membrane



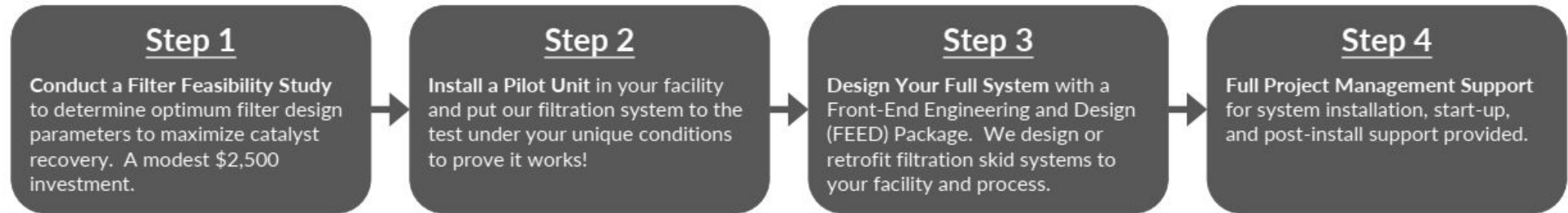
Ex. Particle size distribution charts of 5% Pd-on-C (left) and 2% Pd-on-Al (right)



Ex. SEM image of captured 5% Pd-on-C (left) and 2% Pd-on-Al (right)

How We Work: Reduced Risk Process to Ensure Results

For new applications, small and medium-scale testing helps demonstrate successful filter operation before large capital investment.



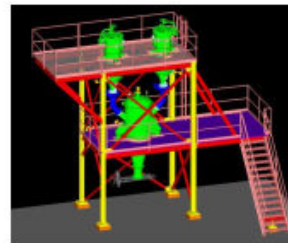
Pouring filtrate sample into test filtration media

Collaborate with Mott's engineers as they test your sample in our state-of-the-art Customer Innovation Center, to determine the optimal filter media and sizes for your unique application.



Pilot system with precision elements in your process

With training by Mott Field Engineers, lease or lease to own one of our tailored pilot systems to test your process at a smaller scale under actual process conditions for extended periods.



Filtration skid system design

Rely on our engineering expertise amassed from over 700 installed filtration systems with entire filtration skid systems or retrofitted filtration vessels.



Installed filtration skid system at your site

Depend on our engineers to work with your installation professionals during the implementation of your custom Mott filtration system.

Turn to our experts to address any questions or issues that may arise anytime following installation.

Applications

Mott delivers industry-leading solutions to multiple markets and industry sectors.



**Bag Filters
Basket Filters
Sanitary Cartridge Filters**



Polyol/Resin Filtration Systems
Mott liquid filters for polyol/resin manufacturing processes



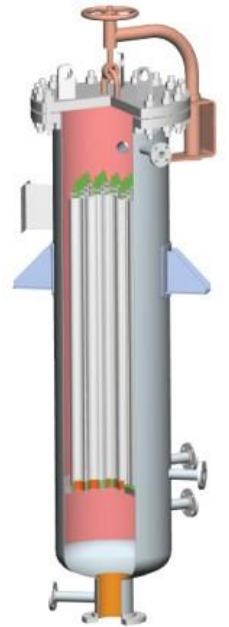
Extreme Temperature Specialty Chemical Filtration Systems
Mott filter systems for chemical processing production lines with extremely elevated operating temperatures



Crude & Purified Terephthalic Acid (PTA) Filtration Systems
Mott Filtration Systems for Terephthalic Acid manufacturing



Precious Metal Catalyst Recovery Filtration Systems
Mott filtration systems for catalyst recovery applications, such as platinum, palladium, rhodium, and nickel



Food & Oil Intermediates Filtration Systems
Mott filters for food & oil intermediate chemical processing

Filter Elements

Material: Polypropylene, Polyester, Nylon, Fiber Glass, Cotton

Applications: Desalination, Water Treatment, Fine Chemical, Petrochemical, Food & Beverage, Pharmaceutical, Microelectronic



Hybrid Pleated Depth



String Wound

Melt Blown



Wire Mesh



Coalescer



Pleated



Sintered Powder

Thank you for attending

Questions?

Stop by our booth 612

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