

# Our Agenda

February 20, 2025

Welcome

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Who is Mott

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A Leader in Specialty Chemical Filtration

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Automated, Self-Cleaning Filtration Systems

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How We Work: Reduced Risk Process to Ensure Results

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Applications

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Filter Elements



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# 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

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- 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

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

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- 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

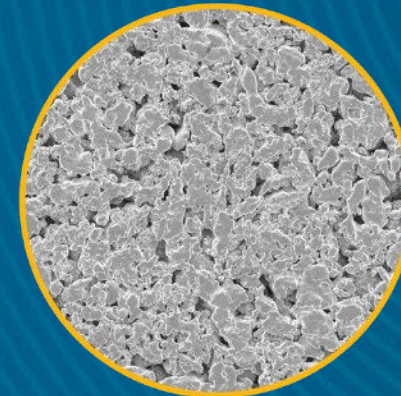
- New **65,000 square foot facility** near headquarters in Farmington, Connecticut
- **Double production capacity** for customized and engineered solutions
- **Dedicated innovation center** for rapid customer prototyping
- **Manufacturing hub** for Mott's titanium Porous Transport Layers (PTLs)
- Innovative 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?

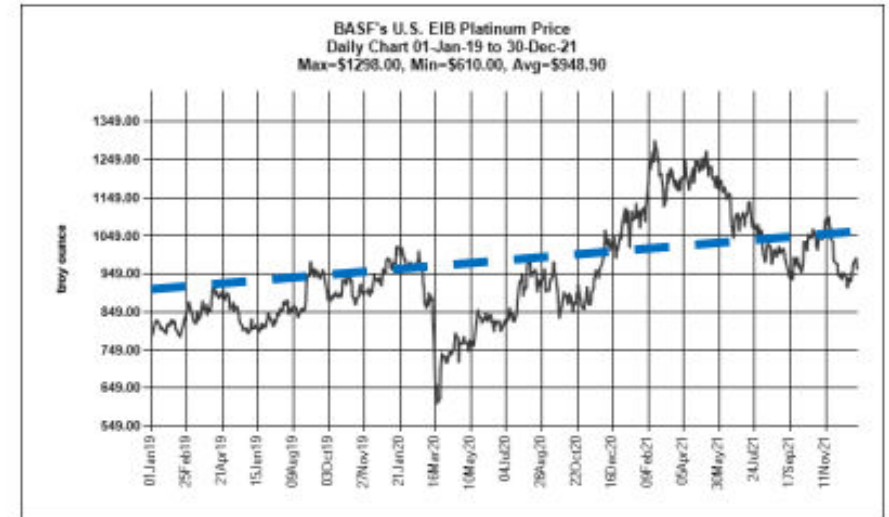
Fluctuating catalyst costs and operating efficiency have a dramatic impact on the profitability of chemical production processes.

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

Example pricing fluctuation shown

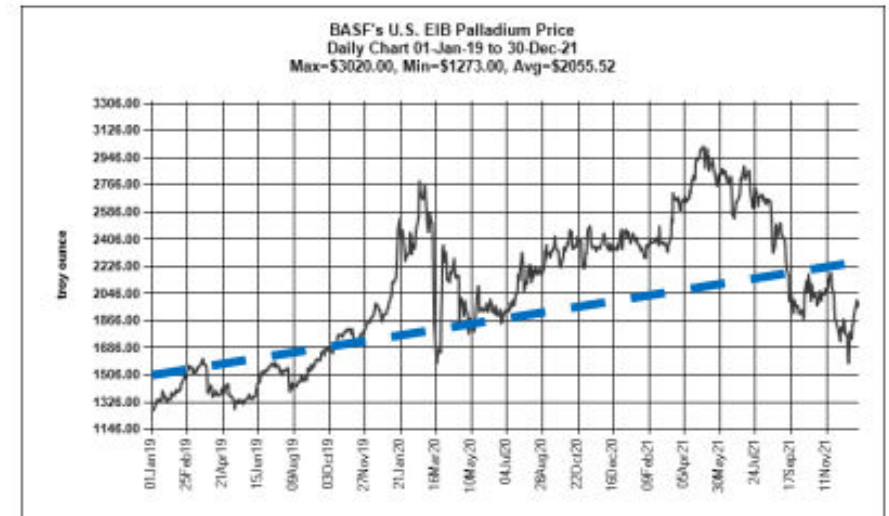
## Platinum price per oz

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



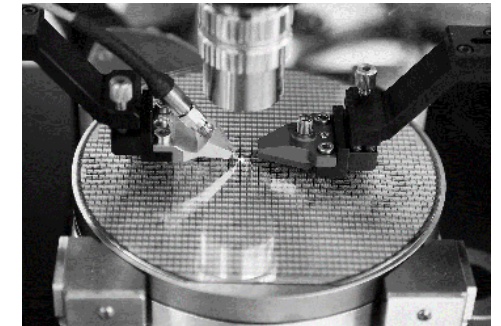
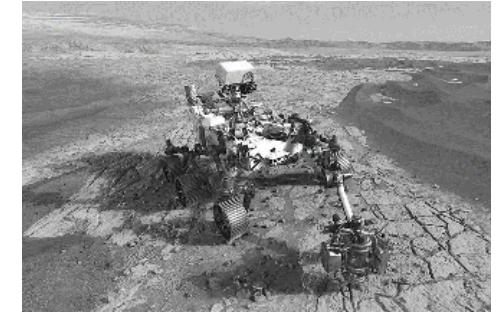
## Palladium price per oz

- 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**





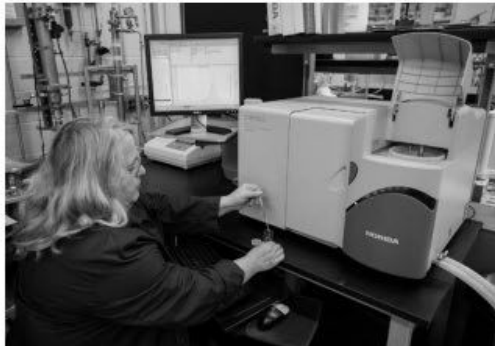
# Mott Corporation – A Leader in **Specialty Chemical** Filtration and Flow Control

**With over 65 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

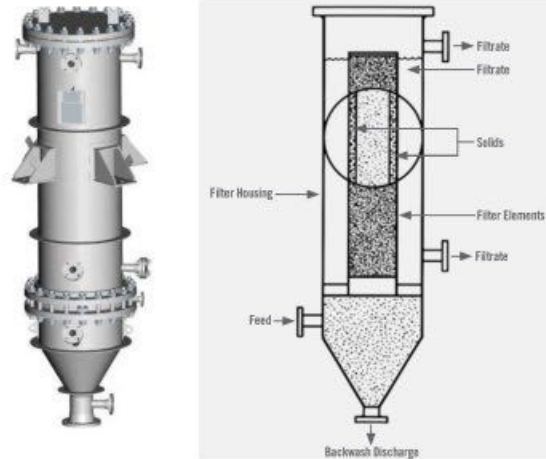
**Reduce operating expenses by up to 20% over existing catalyst recovery technology**

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%
<b>Annualized cost savings</b>	<b>\$630,000</b>	<b>\$882,000</b>
<b>Expected ROI</b>	<b>29 Months</b>	<b>21 Months</b>

## Key Features & Benefits:

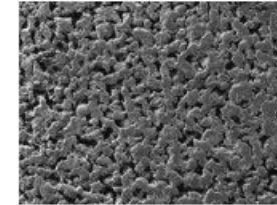
- Capture 99%+ of your expensive catalyst
- Closed-loop & automated system
- Single pass clarity
- Tailored to your process
- Quick and efficient backwash
- No catalyst breakthrough
- No rotating parts



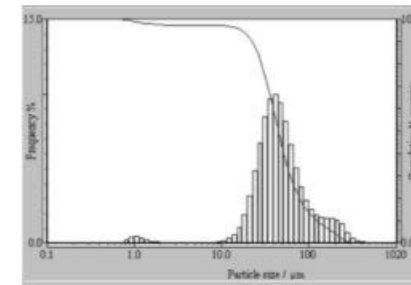
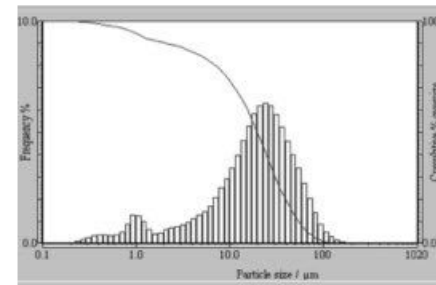
Ex. Mott HyPulse LSI Filtration System

## How we recover more catalyst:

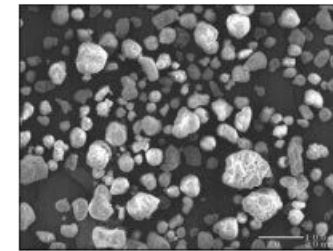
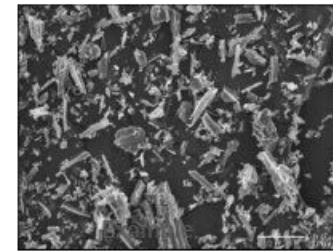
Utilizing our proprietary membrane and particle sizing process & technology, we maximize the range of catalyst capture exactly to the particle size distribution in your feed stream while ensuring compatible materials for your process.



Ex. Optimized Filtration Membrane



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

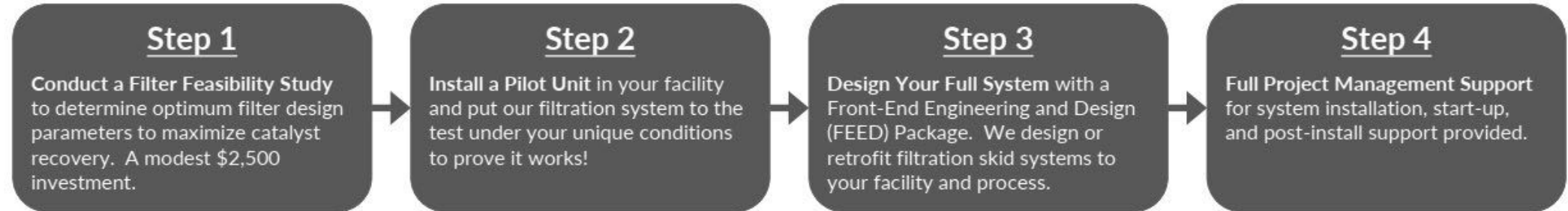


Ex. SEM image of captured 5% Pd-on-C (left) and 2% Pd-on-Al (right)



# 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.**



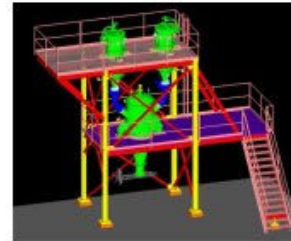
*Pouring filtrate sample into test filtration media*

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**



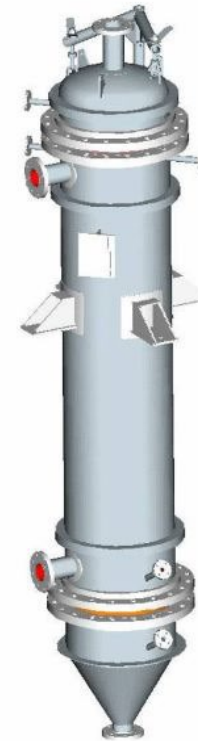
**Polyol/Resin Filtration Systems**  
Mott liquid filters for polyol/resin manufacturing processes



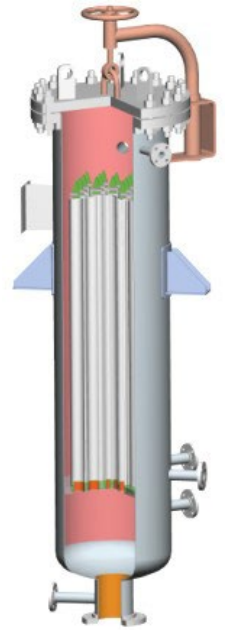
**Extreme Temperature Specialty Chemical Filtration Systems**  
Mott filter systems for chemical processing production lines with extremely elevated operating temperatures



**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

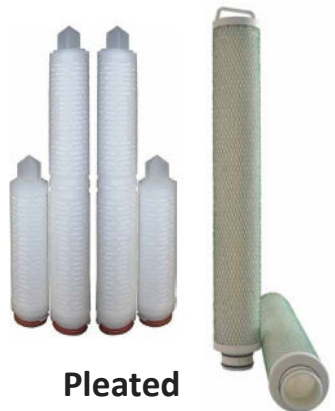
Melt Blown



Wire Mesh



Coalescer



Pleated



Sintered Powder

Thank you for attending

# Questions?

## Stop by our booth 714

[www.mottcorp.com](http://www.mottcorp.com)

Wayne Freeman

[wfreeman@mottcorp.com](mailto:wfreeman@mottcorp.com) +1.615.594.8079