FIDELITRADE® INCORPORATED

Trusted Bullion Services... Straight from the Source®

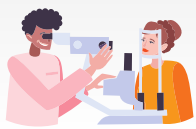
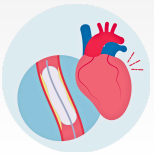
Educational Shorts

Precious Metals Insights, Facts, and Resources

Why is Platinum Important in Medical Device Applications?

Platinum contains a unique combination of properties makes it indispensable for a wide range of medical applications, from implants to diagnostic and therapeutic devices. From life-sustaining implants to cutting-edge diagnostic tools, platinum plays a pivotal role in modern healthcare. But what makes this noble metal so indispensable in the realm of medical devices?

Chart 1: Medical Device Markets

Surgical Instrumentation	Arthroscopic, ophthalmology; endo-laparoscopic, electro-surgical	
Electro-medical Implants	Pacemakers, defibrillators; hearing assist devices; heart pumps	
Interventional	Stents; angioplasty; catheter ablation; distal protection	
Orthopedics	Spinal fixation; hip implants; knee implants	

Source: Johnson Matthey

Why is platinum important in medical device applications?

- It does not harm living tissue – it has high bio-compatibility.
- It does not corrode inside the human body – it is inert.
- It is durable and has low corrosivity.
- It conducts electricity easily, and electricity is important for diagnosis and treatment.
- It is visible to x-rays. [1]

Overall, platinum's unique combination of properties makes it indispensable for a wide range of medical applications, from implants to diagnostic and therapeutic devices.

Platinum is important to medical technology, treatment, and procedures. Where can it be found?

Platinum coils	During an angiogram, platinum coils are inserted into an aneurysm to stop the blood flow through it.	
Guidewire	Guidewire is used to place and guide devices like balloon dilation catheters during angioplasty.	
Stent	Stents are placed temporarily inside a blood vessel, canal, or duct to aid healing or relieve an obstruction.	
Neuromodulation Devices	Neuromodulation devices send electrodes to the brain, the spinal cord, or peripheral nerves. The instruments can be used to treat a wide range of disorders, not limited to cardiac pacing, eyesight, epilepsy, headaches, hearing, movement disorders, chronic pain, movement disorders, stroke, and urinary frequency. [2] [2] ScienceDirect	
Pacemakers	Pacemakers send electrical pulses to help the heart beat at a normal rate and rhythm. Platinum is often used in the lead tips. [3] [3] USGS	

Jennifer Ropiak is a precious metals market specialist with over 30 years' experience, including 20 years of trading (15 at Morgan Stanley). In 2014, Jennifer launched Trusted Partner Metals, an independent consultancy whose clients span the metals industry. Services include expert witness opinions in precious metals cases.

The information is not intended as, and shall not be understood or construed as, financial advice, investment advice, legal advice, or other professional advice. The information is not a substitute for professional advice, and we strongly encourage you to contact a financial advisor if you have any questions about purchasing or selling bullion. Any reliance that you place on information provided is strictly at your own risk. We disclaim all liability and responsibility arising from any reliance placed on such information by you or by anyone who may be informed of any of its contents.

---

[1] Johnson Matthey