Heraeus





AMPLICOAT®

CAPABILITIES AND TECHNOLOGIES TO KEEP YOU MOVING AHEAD

Improve patient outcomes in medical device applications where electrode sensitivity and signal fidelity are critical, including electrophysiology mapping, neuromodulation, and cardiac rhythm management.

Amplicoat is a biocompatible conductive polymer coating developed by Heraeus Medevio enabling the miniaturization of electrodes without sacrificing signal quality. Leverage this unique technology for miniaturized devices, high resolution, high channel count, low impedance, and excellent signal to noise ratio.

YOUR PARTNER IN BRINGING BETTER MEDICAL DEVICES TO MARKET.

Heraeus Medevio acts as a flexible, tailored, end-to-end extension of your engineering and product development teams. With expertise from materials, development, and pilot production to high volume manufacturing including unmatched clinical and technical expertise, Heraeus device experts will also help you efficiently manage global regulatory and submission requirements.

PRODUCT DESIGN & DEVELOPMENT

Global collaboration hubs committed to design and development with dedicated pilot production lines that can be mirrored in production

MANUFACTURING EXPERTISE

Proven manufacturing technology excellence and superior engineering know-how to solve complex challenges

COMMITTED TO QUALITY

170-year history in materials science and trusted quality

SUPPLY CHAIN OPTIMIZATION

Vertically integrated from concept to completion to simplify your supply chain



Take advantage of Amplicoat's ease of deposition without masking and improved system performance compared to other electrode surface modification technologies in sensing and stimulation applications. Commercially available biocompatible coatings have limitations where manufacturing process and design do not allow their use, however, Amplicoat is deposited via electrodeposition, which is a quick, safe, and effective process that can accommodate components or assemblies. Ideal for medical-device applications currently using bare electrodes where sensing and signal fidelity are critical, including:



Electrophysiology



Cardiac Rhythm Management

COMPATIBLE WITH A VARIETY OF MEDICAL ELECTRODE MATERIALS:

- Platinum
- Gold
- Stainless steel
- MP35N[®]
- Titanium
- Nitinol
- Iridium
- Tungsten

BENEFITS

- Low electrode impedance
- High charge injection capacities
- Enabling miniaturization
- Biocompatible polymeric interface
- Low temperature process
- Applied onto a component or an assembled device to fit your manufacturing process flow

AMPLICOAT IS:

- FDA and CE approved and commercially used for an acute application
- A proprietary, ISO 10993 biocompatible, durable conductive coating for electrodes
- Available for commercialization and licensing for medical devices
- Manufactured under an ISO 13485-certified quality system