

A Clear Path to Treat Spinal Infection.





BlackArmor® from icotec: Now Indicated for De Novo Spinal Infections

Suffering Patients. Complex anatomy. Systemic comorbidities. The need for long-term monitoring. Treating spinal infections remains one of the most formidable clinical challenges in orthopedic care.

Traditional titanium implants are mechanically reliable but can obscure critical details in medical imaging—details essential to accurately assessing a patient's condition and progress. When this happens, poor imaging may lead to diagnostic delays, distort assessment of the surgical site in the adjuvant setting, and interfere with long-term monitoring—while the patient's health hangs in the balance.

That's where icotec's BlackArmor® Carbon/PEEK implants come in. Now cleared by the FDA for use in de novo spinal infections, BlackArmor® radiolucent implants empower surgeons, radiologists, and post-op care teams with unmatched imaging clarity—bringing infection into focus as the implant, itself, virtually disappears.

Invisibly Better

BlackArmor® is made from a proprietary continuous carbon-fiber-reinforced PEEK composite that is radiolucent under CT and MRI. This allows for unprecedented visibility of the surrounding soft tissue and bone structures.

- Supplementary diagnostic confidence for immunocompromised patients: In cases where bloodwork is unreliable due to immunosuppression, artifact-reduced MRI enabled by BlackArmor® implants provides a critical imaging-based modality to help confirm infection resolution and assess hardware integrity.
- Improved post-op surveillance: Follow the healing process with clear postoperative MR-imaging. Detection of residual or unresolved areas of infection may help inform decision-making and guide treatment pathways.
- Uncompromising strength: BlackArmor® implants deliver the biomechanical stability needed for infection-related spine reconstruction, with over 20 years of clinical use and proven outcomes worldwide.

"icotec's carbon fiber technology and instrumentation provide superior postoperative visualization for my patients, enabling better treatment strategies for my oncological and de novo infection patients."

Dr. Marc Moisi

Hurley Medical Center's Neurological Center; Fenton, Michigan

Unlike titanium implants, BlackArmor® doesn't create scatter, streak, or blooming artifacts. Radiologists can interpret scans with greater precision—and post-op care teams can make better-informed decisions for their patients.

Surgeons benefit, too. With improved visualization of anatomical landmarks and pathology, intraoperative navigation becomes more precise, and the overall procedure can be more targeted and less invasive—an edge that matters in high-risk, high-variability cases.

An Established Peer Choice

BlackArmor® expansion into infection care builds on a proven legacy of performance, safety, and visibility. Spine surgeons with deep clinical experience using BlackArmor® are at the forefront of its adoption for infection cases, anticipating significant benefits.

"The carbon fiber screws have a much smaller footprint on imaging techniques, so we can visualize the area of pathology more precisely," notes Dr. John Dimar (Norton Leatherman Spine; Louisville, Kentucky), who has used BlackArmor® in tumor cases for over five years. Based on his experience, he sees clear potential for the material to enhance infection care, as well. "We're going to be able to see a lot better in there. Anything that improves my ability to visualize the spine is a clinical advantage."

Dr. Marc Moisi (Hurley Medical Center's Neurological Center; Fenton, Michigan) has

also used BlackArmor® for years and is now extending its use to infection cases, including osteomyelitis and discitis. "I met with some of the people from icotec and realized their instrumentation was far superior. That's why I first switched," he explains. Today, it's his material of choice when imaging clarity is critical. "It provides both visualization and stabilization—key elements that allow us to cure the infection."

"The carbon fiber screws have less degradation of radiographic imaging, so we can visualize the area of pathology more precisely."

Dr. John Dimar

Norton Hospital Leatherman Comprehensive Spine Tumor Treatment Center; Louisville, Kentucky

Advantages That Make a Difference

With BlackArmor®, you get mechanical performance, proven safety, and unparalleled imaging—all in one solution. It's the first and only material cleared for use in de novo spinal infections.

By minimizing the risks that come with poor imaging, BlackArmor® helps you work with greater confidence—and gives your patients a better chance at recovery.

Because when you can see clearly, you can guide therapy better. And that makes all the difference.

Want To See the Difference for Yourself?

Contact your icotec representative to learn more about BlackArmor® for spinal infections.

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