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Industrial Keynote

The promise of 3D-printed implants – Arburg plastic freeforming with medical certified materials

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Additive Manufacturing technologies have ignited a transformative revolution in the healthcare sector, particularly in the realm of medical implants. By leveraging advanced materials and design intricacies, 3D printed implants offer tailored solutions for complex cases.

Medical science and technology have witnessed remarkable advancements in recent years, particularly in the field of implants. One such innovation that holds the potential to revolutionize the way we approach implant surgeries is the development of resorbable implants. These implants, designed to gradually dissolve within the body over time, offer numerous advantages over traditional permanent implants.

The Arburg Freeformer is a leading-edge additive manufacturing platform that empowers the production of complex, functional parts with high precision. It employs a patented process known as Arburg Plastic Freeforming (APF) that enables the layer-by-layer construction of complex structures from standard granulates – the same materials like in the injection molding process, offering exceptional flexibility in material choice and design.

By utilizing resorbable and biocompatible polymers, this technology enables the production of intricate, patient-specific implants. The convergence of the Arburg Freeformer and certified medical polymers marks high potentials in healthcare innovation, promising improved patient outcomes and reduced risks.

AUTHOR'S STATEMENT

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