

## Medicoat

recognized by **MED TECH** magazine as

TOP 10  
MEDICAL DEVICE  
MANUFACTURING  
CONSULTING/SERVICES COMPANIES IN EUROPE - 2019

An annual listing of 10 companies that are at the  
forefront of tackling customer challenges

### TOP 10 MEDICAL DEVICE MANUFACTURING CONSULTING/ SERVICES COMPANIES IN EUROPE - 2019

**T**he medical device manufacturing industry plays a crucial role in developing new medical technologies that can improve the ability to diagnose and treat illness. New regulations and standards are emerging, healthcare dynamics are evolving, reimbursement rules are becoming more sophisticated, and companies are facing an increasingly competitive landscape.

Companies in this industry face all of the same general business scaling challenges as any other business: building capital, defining goals, creating infrastructure, obtaining sales, and delivering consistent value. In addition, they may also potentially face several other complex scaling challenges including but not limited to: consistent fundraising, compliance and regulations requirements, industry culture, research and development, and innovation.

Amid these challenges, however, there is great opportunity and technology will play a large role. From X-ray tubes to pacemakers to sophisticated imaging equipment, the medical device industry has always embraced innovation to improve and save lives. A recent trend in that evolution is the concept of additive manufacturing or 3D printing. Cloud-based solutions will become a lot more significant as they help medical device manufacturers reduce costs without compromising quality or service.

Fortunately, solution providers are ready and waiting with relevant solutions that unite tech stacks and allow data to flow through complex systems, automate workflows, and manage projects beyond the four walls of individual companies. To assist CIOs in identifying the most reliable companies to partner with, a distinguished panel consisting of CEOs, CIOs, analysts, and MedTech Outlook's editorial board has assessed and shortlisted some of the most prominent organizations in the industry. We present to you – "Top 10 Medical Device Manufacturing Consulting/Services Companies in Europe - 2019".

**COMPANY:**  
Medicoat

**WEBSITE:**  
medicoat.com

**KEY PERSON:**  
Philipp Gruner  
CEO

**DESCRIPTION:**  
Offers complete coating solutions,  
thermal spray systems and spray powders  
in a medical setup

## Medicoat

### Optimising Medical Coatings to Drive Better Results

**W**hat sets Medicoat apart from other medical coating providers is their prowess to provide all medical related porous coating solutions under one roof. Since its inception in 1989, the company has been stringent about the optimization and fine tuning of all of the components of the machine and of all of the coating parameters and controls to provide the best possible functional coatings with solid reproducibility as required for medical devices. The experience and expertise of almost three decades have enabled Medicoat to be a well-known brand in the thermal spray business with a specialisation in plasma spraying. "We coat implants, realise complete coating systems and produce spray powders for many various types of implants for orthopaedics or spine surgery," says Philipp Gruner, CEO, Medicoat. Additionally, their unique business model can provide both in sourcing as well as outsourcing, which helps them to serve their clients better. Hence, whether an organisation is keen to develop their own in house coating shop or wants to outsource its coating process, Medicoat addresses both the needs.

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We coat implants, develop and manufactures coating systems and produce medical-grade spray powders

Encompassing everything from engineering to maintenance to retrofitting, Medicoat propose a complete offering of services and coating equipment. With respect to plasma spraying, they have two main systems—atmospheric plasma spraying and vacuum plasma spraying. Leveraging these thermal spray systems, the company offers titanium, hydroxyapatite (HA), and their newly developed modified HA antimicrobial coating. Elaborating more about HA coating, Gruner says, in the very early years of its use on medical implants, including dental implant, the coating was not stable enough and led to clinical complications after implantation. However, with extensive research and development of the founder Dr. Heiko Gruner, this problem has been solved and

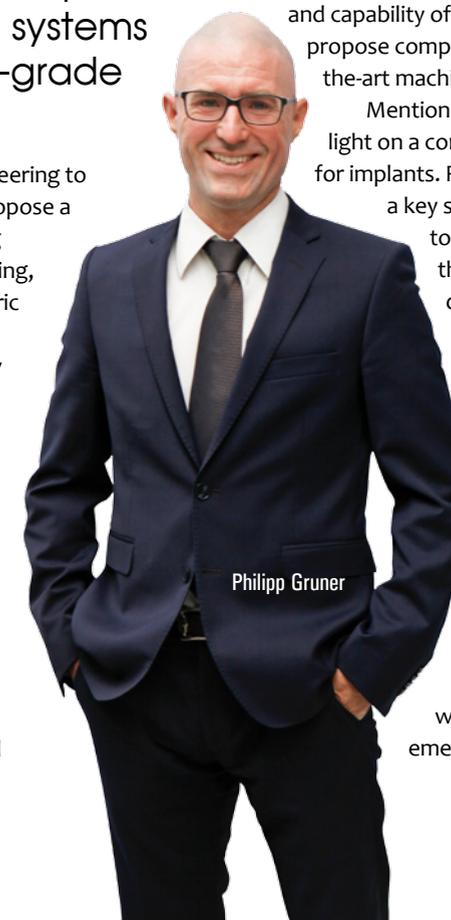
Medicoat was established. Today, Medicoat offers a stable HA coating only or as an added layer to a rough titanium coating that enhances the osseointegration of the implant. HA being a natural constituent of the bone tissue aids metal implant in the ingrowth process time of the coated prosthesis and pure rough titanium provides a large surface area giving bone cells the optimal space for the essential ingrowth process.

Additionally, talking about implants being used Gruner mentions that some implants (for hip or knee replacement) are made up of cobalt chromium (CoCr) alloys because of the hard nature they provide best friction behaviour. However, in some cases, allergies from these metals have been observed that strongly affected patient health. Consequently, research has been conducted to replace these materials with better biocompatible ones like ceramics. However, coating on ceramics is not an easy job, but Medicoat has mastered it. The company has also pioneered coating on polymer and particularly PEEK-based implants.

Today, as many medtech companies are fraught with falling profit margins, stagnancy in business, very high competition, and pressure from healthcare organisation to reduce cost, this has resulted in device manufacturers drastically reducing their margins. However, Medicoat, having in-depth knowledge and capability of every step in the coating process is able to propose competitive prices to its customers with state-of-the-art machinery.

Mentioning a customer success story, Gruner sheds light on a company that was active in plasma spraying for implants. For the company, having hydrogen as part of a key spray parameter was no more possible due to the risk of explosion. Seeking a solution to their problem, they contacted Medicoat to develop a new spraying process that does not involve hydrogen. Medicoat developed new method wherein hydrogen was replaced by nitrogen; additionally, the client could use their old machines avoiding the cost to procure new machines. As a result, the client was able to function at its maximum potential.

Envisioning the future, Medicoat is deploying its sales force to address new markets like China, Japan, Australia and more. Additionally, with a new plug and play smaller plasma equipment, Medicoat will strengthen its position on price sensitive emerging markets. 



Philipp Gruner