

## **Portuguese Engineering & Tooling Cluster: An Innovative World Solution Provider for Medical Devices**

### **New Challenges on Medical Devices**

The medical devices sector offers huge potential opportunities for Engineering & Tooling companies. Implants, prostheses, surgical instruments and accessories for surgery, among others, in metal, ceramics or plastic, supporting products/projects that these companies have conditions to take to practice.

The health device sector is growing strongly, driven by several social and economic factors such as the increase in the world population, the general ageing of the population in most developed countries and the economic growth in some developing countries, but also, new materials and technologies are becoming more reliable and adapted for these fields.

### **Challenges**

There are a number of challenges ahead, this is a highly regulated sector, whose concern with product quality is extreme, which includes barriers to entry for new suppliers, but at the same time is always interested in the development and production of innovative medical devices, either by the use of machining of high-precision parts, or by the development of molds for plastic devices.

Medical products, instruments and equipment are becoming increasingly more complex and miniaturized, involving multifunctionality, multi-properties, electronic integration and communication requiring higher quality and precision in manufacturing. This represents an opportunity for this sector and the added value is great but the engineering challenges for their production are also proportional.

To meet these challenges, precision technologies that are used in this industry coupled with rigor and knowledge of similar challenges, particularly in the automotive sector, offer many benefits to those who want to be manufacturers of moulds and/or medical products and devices.



Currently the Portuguese mouldmaking and plastics sector is technologically very advanced, both in terms of the equipment used and the skills of the people who work in it. The technological advancement of this industry has been evolving at a very fast pace and the adoption of robotization, simulation and advanced manufacturing technologies has been a norm for companies for many years. Technologies like 3D printing offer numerous advantages for use in medicine like the excellent production capacity of customized parts. These technologies are thus of maximum use for applications that require maximum individuality, such as implants.



The Portuguese companies have been dealing with these technologies for many years supported by research centers and universities and are aware of their capabilities and limitations. There are several companies that have this capacity in-house and can supply highly advanced types of products to the health sector and/or as a complementary offer to the production of moulds, injected parts and machined components.

The Portuguese industry has shown itself capable of overcoming barriers to entry in the medical devices sector, which leave out low-cost competitors. Quality is an

indispensable requirement to work with clients in the medical, laboratory and pharmaceutical areas and here the Portuguese cluster companies are at ease.

### Future

Health is one of the businesses of the future and the expectation is that the sector will continue to grow from year to year, generating new projects and orders. A growth that brings innovation, allowing the companies to travel unparalleled paths that lead to the development of additional skills.

Operating in this territory implies attention to new materials, technologies and processes, as well as respect for demanding regulations, but the knowledge accumulated in tooling can facilitate the entry or adaptation of companies to the health industry, as well as good practice and rigour.

Knowledge is a key factor, but not exclusive, as history teaches, factors such as experience, common sense, good practices, playing within global value chains, accuracy in quality and service, have always been associated with the adaptation of the cluster companies to the changes required and necessary for their survival and growth. These are internationally recognized aspects that will also make a positive contribution to companies that want to position themselves in the health area, guiding them on the path to success.



Source: CENTIMFE

### Portuguese Tooling & Plastics Industries

Portugal offers an important and strategic support INFRASTRUCTURE for the development of global products, thanks to its **Engineering & Tooling Cluster**, which incorporates the **Mouldmaking, Special Tools and Plastics industries**. This Cluster, is represented by the **POOL-NET Association – Portuguese Tooling & Plastics Network** ([www.toolingportugal.com](http://www.toolingportugal.com)), created at 2008, to promote Industry competitiveness (based on R&D, Internationalization, Cooperation and Branding) to support global clients to concept, develop and deliver complex products, using advanced materials and technologies. **POOL-NET** membership comprises businesses Companies (81%), Universities and R&D Centres (14%), Training Centres (1%), Trade Associations (4%) and Public Bodies (1%). Portugal has clearly taken on a role as a **One-Stop-Shop**, offering renowned expertise across a broad value chain, ranging from *Design, to Final Product*. The companies in the Cluster export over 90% of their production; During the years\_(2010-2018) the production and exports raised more than 100%, to more than 80 Countries, and the Cluster members are currently involved with several R&D projects over then 50 Million Euros, involving more than 100 companies and 50 universities and research centers.



This collective business strategy is supported by a collective and distinctive brand, **“Engineering & Tooling from Portugal”**.



that embodies know-How, Technology and Innovation, Quality and Reliability, Social Responsibility, Networking and Competitiveness, as main attributes. The **Portuguese & Tooling Industry** is internationally famous for its know-how, high levels of investment and training as well as its integrated approach to problem-solving, because it is part of the global client’s value chains.

In this context, **Innovation** is one of the success keys of this Cluster that coordinates also the **European Tooling Platform (MANUFUTURE Sub-platform)** since 2008, involving the European Tooling & Plastics Community into **HORIZON 2020** and **HORIZON EUROPE (2030)**, supports **EFFRA – European Factories of the Future Research Association**, to promote international and industrial partnerships for Industrial R&D.

Considering the high level of industrial modernization and technologies investments developed during the recent years, the advanced skills and competence developed (*specially on design for manufacturing and zero-defect production*), and the integration in global suppliers networks, this companies are assumed as global strategic partners, for the most advanced industrial sectors, namely: *Automotive, Medical Devices, Packaging, Aeronautics and Aerospace, Electronics, Sports*, etc.

Challenge our companies and you will get positive results on your business!



**Engineering & Tooling Cluster**

[www.toolingportugal.com](http://www.toolingportugal.com)

Edifício OPEN, Zona Industrial  
Rua da Bélgica, lote 18, PO BOX 78  
2431-901 Marinha Grande  
PORTUGAL

Cofinanciado por:



UNIÃO EUROPEIA  
Fundo Europeu  
de Desenvolvimento Regional



## Portuguese Engineering & Tooling Cluster: An Innovative World Solution Provider for Medical Devices

**New Challenges on Medical Devices**

The medical devices sector offers huge potential opportunities for Engineering & Tooling companies. Implants, prostheses, surgical instruments and accessories for surgery, among others, in metal, ceramics or plastic, supporting products/projects that these companies have conditions to take to practice.



The health device sector is growing strongly, driven by several social and economic factors such as the increase in the world population, the general ageing of the population in most developed countries and the economic growth in some developing countries, but also, new materials and technologies are becoming more reliable and adapted for these fields.

**Download this E-special Report now!**

Sponsored by:



[Associação Pool-Net Privacy Policy](#)

### Get the E-special Report

First Name\*

Last Name\*

Email Address\*

Company\*

Industry\*

Business Phone\*

Country\*

State or Province\*

Zip or Postal Code\*

Link para E-special Ereport

## Portuguese Engineering & Tooling Cluster: An Innovative World Solution Provider for Medical Devices

### New Challenges on Medical Devices

The medical devices sector offers huge potential opportunities for Engineering & Tooling companies. Implants, prostheses, surgical instruments and accessories for surgery, among others, in metal, ceramics or plastic, supporting products/projects that these companies have conditions to take to practice.



The health device sector is growing strongly, driven by several social and economic factors such as the increase in the world population, the general ageing of the population in most developed countries and the economic growth in some developing countries, but also, new materials and technologies are becoming more reliable and adapted for these fields.

**Download this E-special Report now!**

Sponsored by:

Co-financiada por:



[Associação Pool-Net Privacy Policy](#)

### Get the E-special Report

First Name\*

Last Name\*

Email Address\*

Company\*

Profession\*

Business Phone\*

Country\*

State or Province\*

Zip or Postal Code\*

[Get The E-special Report Now!](#)

## Email

From: PlasticsToday <[plasticstoday@ubmame.media.com](mailto:plasticstoday@ubmame.media.com)>

Sent: Monday, September 30, 2019 12:57 PM

To: ubmcanonenl <[ubmcanonenl@hcl.com](mailto:ubmcanonenl@hcl.com)>

Subject: \* TEST \* Portuguese Engineering & Tooling Cluster: An Innovative World Solution Provider for Medical Devices \* TEST \*

PlasticsToday: E-special Report [View this email in your browser](#)

**Portuguese Engineering & Tooling Cluster: An Innovative World Solution Provider for Medical Devices**

**New Challenges on Medical Devices**

The medical devices sector offers huge potential opportunities for Engineering & Tooling companies. Implants, prostheses, surgical instruments and accessories for surgery, among others, in metal, ceramics or plastic, supporting products/projects that these companies have conditions to take to practice.

The health device sector is growing strongly, driven by several social and economic factors such as the increase in the world population, the general ageing of the population in most developed countries and the economic growth in some developing countries, but also, new materials and technologies are becoming more reliable and adapted for these fields.

[Download E-special Report Here!](#)

Link para E-special Ereport