

# ETMM

EUROPEAN TOOL & MOULD MAKING

## THE MAGAZINE

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**EDM Europe**

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# PORTUGAL EXCELLENCE GLOBAL PRODUCTS ON TOOLING ENGINEERING

Design  
Engineering  
Prototyping  
Tooling  
Products

engineering & tooling ®



FROM PORTUGAL

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<http://app.toolingportugal.com>



The Portuguese Engineering & Tooling Cluster is represented by Pool-Net, the Portuguese Tooling Network.

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# From Portugal out into the world: Tooling industry enhances its profile

The Portuguese Engineering & Tooling Cluster has more than six decades of experience on the international market. Now Europe's third-largest exporter of plastic injection moulds is further strengthening its networking activities across the continent.

Since 2010, under the common brand "Engineering & Tooling from Portugal", the Portuguese Engineering & Tooling Cluster (Pool-Net) has increased its production and exports by over 100 percent. The tooling sector now comprises more than 500 companies employing more than 11,000 people. In 2018, the Portuguese tooling industry exported goods worth approximately 700 million euros, and the country ranks number three in pro-

duction of plastic injection moulds in Europe. The Portuguese Engineering & Tooling Cluster is a global reference in these industries, which is reflected by its staggering export share: 90 percent of total tooling production goes to markets including Germany, France, Spain, the UK and the USA.

When new developments are made, the mould making and plastics industries play a critical role. During the Covid-19 pandemic, companies within

the cluster reinforced their capacity by developing an extended action plan based on innovation and people qualification, allowing for new solutions in design, product development and manufacturing. The companies invested 50 million euros in research and development projects.

### Ready for new trends

Using competitive processes as well as advanced and green materials, supported by zero-defect manufacturing approaches and Industry 4.0 technologies such as artificial intelligence, additive manufacturing, simulations/digital twin, life cycle assessment and high-performance computing, Portuguese companies are exploring the new opportunities and challenges provided by digital and green trends, and adapting their skills and technological competences accordingly.

The Portuguese Engineering & Tooling Industries have been developing an advanced and diversified value chain. The companies involved are also focusing on cooperation to provide solutions to markets such as automotive, aerospace, medical devices, packaging and electronics.

### Training and networking

To improve the qualification of the people employed in its industry, the Portuguese Engineering & Tooling Cluster launched a pilot initiative at national level to train and qualify its industrial workers. Due to its multi-sectoral impact the cluster functioned as a demonstrator for the overall European industrialisation process.

Since Germany is the most important export market for the Portuguese Engineering & Tooling Cluster, the companies are organising their participation at two important trade fairs under the common brand "Engineering & Tooling from Portugal". The companies within the cluster will participate at Fakuma in Friedrichshafen, Germany, and at the

#### INFO

### Portuguese tooling projects

- **Tooling 4G** — Advanced Tools for Smart Manufacturing: involves 20 companies and ten training organisations (RTOs) and universities; the project explores IIoT technologies, collaborative robotics, AI, AR, AM, and zero defect production.
- **S4 Plast** — Sustainable Plastics & Advanced Solutions: involves nine companies and six RTOs and universities; organised by Pool-Net; explores design for circularity, sustainability and added value, new advanced and multifunctional polymeric materials, advanced production technologies, and the intelligent integration of products and processes.
- **PTcentroDiH** — Digital Innovation Hub for Portugal Centre Region: coordinated by Pool-Net and three other clusters, three universities (Coimbra, Aveiro and UBI), six polytechnic institutes, eight RTOs, and is supported by the Portuguese Commission for Regional Development (CCDR); the project aims to make progress in digitalisation.

medical technology trade fair Compamed which will be held in Düsseldorf, Germany, from 15 to 18 November 2021.

On a global level the cluster wants to demonstrate its capacity in the form of webinars, B2B events, cooperation agreements, open houses, and international conferences for new business opportunities and cooperation.

One of the activities planned by the cluster is Moulds Event 2021, which takes place at Marinha Grande, Portugal, from 21 to 26 November 2021. Participants will have the opportunity to meet the cluster stakeholders, identify new business opportunities and promote innovative projects. This bi-annual event will involve face-to-face and online activities, so that as many people as possible can find out what Portugal has to offer.

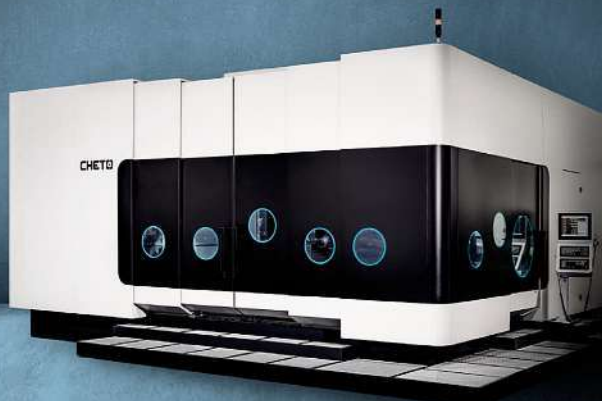
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