

# “We Want to Be more International“

## *Moulding Expo Will Take Place at the End of May, with More than 700 Exhibitors*

The signs point to growth: more exhibitors, more internationality and (as far as predictable) more visitors – this is only the second edition, but nevertheless, the Moulding Expo trade show is on its way to establish itself as the leading fair of tool, model and mold making in Europe. Booth bookings from the core area of the industry are over average, which is proof of the acceptance of Messe Stuttgart, Germany.



Aiming to attract 20,000 visitors for the Moulding Expo: Ulrich Kromer von Baerle, Managing Director at Messe Stuttgart (© Messe Stuttgart)

Already the first edition two years ago was considered a success. Right from the start, Moulding Expo (MEX) held in May 2015, in Stuttgart, Germany, was very popular, attracting 14,000 visitors, with a good 1500 of them coming from abroad. The organizers at Messe Stuttgart have set new goals, though: “We want to be more international, both in regard to visitors as well as exhibitors”, said Ulrich Kromer von Baerle, Managing Director of the operating company Landesmesse Stuttgart GmbH at a press conference on March 8.

Two years ago, a rough quarter of the 620 exhibitors came from countries outside Germany, mainly from neighboring European countries. This focus is due to remain the same. “We do not wish to grow without limits. We rather want to se-

lectively open up new markets together with our partners” explains MEX project leader Florian Niethammer. Moreover, according to Niethammer, every new exhibitor must fit in with the concept of the trade show. One might understand this as a clear distinction from EuroMold, with its profile extended beyond recognition, in the end.

### ***Half of the Exhibitors are Tool, Model and Mold Makers***

Another strong point of the South German trade show, as compared to EuroMold, which leads little more than a shadowy existence today, is what Kromer von Baerle summarizes as: “We listen”. At the same time he expresses his thanks to the

team. Accordingly, their efforts were aimed to satisfy the needs of tool, model and mold makers. In close co-operation with enterprises – including suppliers and service providers of the industry – and with its four large associations, i.e. VDWF (German association of tool and mold makers), VDMA (German mechanical engineering industry association) die and mold industry, VDW (German machine builders’ association) and MF (German association of model and mold makers) as partners, a trade show was designed according to the requirements of the industrial sector.

Now, just before the trade fair starts, the figures prove the organizers right: While, two years ago, 39% of exhibitors were from the core area of this industry, this rate is expected to approach 50% this year (with approx. 100 exhibitors more). This high share of tool, model and mold producers (see also p. 26) makes Moulding Expo unique. The second half of exhibits comprises components and accessories, machine tools, tools for processing, measuring units, special-purpose machines as well as software and service for tool making.

### ***Portugal – Number 3 in Europe***

To make MEX more international, the organizers presented the trade show at the major European tool making clusters. For example, Marinha Grande in Portugal was deliberately selected as the place of the press conference. This cluster, together with another cluster in Oliveira de Azeméis, includes 450 companies of the industry with approx. 8500 employees, at

extraordinary density. According to Manuel Oliveira, secretary general of Cefamol, the Portuguese association of tool making companies, the export volume achieved by this branch of industry was EUR 625 million in 2016. This figure corresponds to 90% of production, representing almost double the export rate of 2010. He states that Portugal is the third largest producer of molds for plastics processing in Europe, after Germany and Italy. Globally, the country is number 8.

According to Oliveira, Spain (22%), Germany (20%) and France (16%) are the largest markets for Portuguese tool makers. Mexico and the USA, being the major customers outside Europe, are in 6th and 8th place. In terms of customer industries, automotive industry is first (74%), followed by packaging and household industry (10 and 4%, respectively). This is how Oliveira defines the basis of success: "Today, we are not only tool makers. We rather control the entire value creation chain – from design, engineering and prototyping up to production and service." Probably, this is exactly what many German companies feel, too.

Just to show an example of how „state of the art“ tool making in Portugal is, two exhibitors will be mentioned in the following. Both are members of Cefamol. Moldes RP, being a specialist in multi-component and multi-cavity molds, switched to fully automatic production some time ago (Fig. 1). In making his decisions, managing director Rui Pinho also considers the chances of digitization and the chal-

lenges included in "Industry 4.0". Following the latest extension to a molding shop – with the company founded in 1990 investing in four new injection molding machines in 2016 – Moldes RP now has a staff of over 80, mainly in the production area.

### Unique: Electrochemical Polishing

As opposed to this, PMM follows an entirely different strategy. The company produces tools for automotive construction, household articles, sports and rehab as well as garden and irrigation systems. Close to a quarter of their 40 employees work in design and development. "We are tinkerers, always trying for something new", explains managing director Virgílio Barbeiro, "we do not put up with standard solutions." A specialty in production is the technique of electrochemical polishing (ECP). It was more by coincidence that they were able to purchase the prototype of the machine (type: Echode 53-A6) in 2000, and the machine is unique all over Europe.

Applying the ECP technique, a homogenous electrostatic field is built up inside the gap between mold surface and spark erosion electrode. An electrolyte solution (of nitrate salt) homogeneously transfers high-voltage current (20,000 A) across the gap, which is between 0.1 and 0.5 mm wide, to the metal surface. The nitrate ions chemically react with the surface to be polished, leading to deposition of an unsolvable hydroxide sludge. This solves and removes the mold surface in tiny steps. The surface obtained is metallurgically pure, homogeneously smooth and brilliant, as well as free from the hard white erosion layer, micro cracks and mechanical stress, which result from spark erosive and conventional mechanical processing.

While there is little or no need at all for moderately fine or very fine erosion, especially manual polishing, this technique saves a significant amount of costs, according to Barbeiro. Potential applications may be grid net structures for loudspeakers, tea strainers or glossy surfaces for reflectors (Fig. 2).

### VDWF Anniversary

The International Special Tooling & Machining Association is a new global part-



**Fig. 1.** Fully automatic manufacturing cell with programmed mold changing unit at Moldes RP (© Hanser / C. Doriat)

ner to Moulding Expo. ISTMA represents 19 national industrial associations with approx. 8000 member companies from all over the world, and with a turnover of USD 40 billion. According to Kromer von Baerle, the global association acknowledged Moulding Expo as the major meeting of the industrial sector of tool, pattern and mold making in Europe. And here comes one more reason to visit the trade show: On the second day (May, 31), the VDWF will celebrate its 25th anniversary at its huge joint booth with a glittering party. ■

*Dr. Clemens Doriat, editor*



**Fig. 2.** Unique in Europe: Electrochemical polishing at PMM, shown here for different parts (© Hanser / C. Doriat)

## Service

### Digital Version

- A PDF file of the article can be found at [www.kunststoffe-international.com/3424556](http://www.kunststoffe-international.com/3424556)

### German Version

- Read the German version of the article in our magazine *Kunststoffe* or at [www.kunststoffe.de](http://www.kunststoffe.de)