



K 2013 EXCEEDED THE HIGHEST EXPECTATIONS

POLYPLASTIC press service

The K 2013 International Trade Fair was held on 16–23 October 2013 in Dusseldorf.

Held only once every three years, this is the largest plastics and rubber industry event in the world. Producers of materials and additives, different plastic products and semi-finished goods get together with processing and analytical equipment specialists and technology companies to show off their latest innovations.

Among the participants of K 2013, companies from the plastic and rubber industry had particularly high expecta-

tions. Inspired by the great developments in the industry over the last few months, and confident in their ability to offer innovations across all areas of the production chain, even their high expectations were exceeded over the eight days of the trade fair.

The event hosted over 3,300 participants from 60 countries, and 218,000 visitors from over 120 countries over the eight days. According to the organisers, 58% of visitors – that's 126,000 people – were from abroad. Just under half of them came to Dusseldorf from far afield – from Angola,

Burkina Faso, the Falkland Islands, the Yemen, Malawi, Nepal, New Caledonia, Oman, Peru and Turkmenistan. As expected, most of the foreign guests (over 30,000 specialists) came from Asia: South, East and Central Asia, including the Middle East. The largest group was from India and this event saw the largest ever number of visitors from China, Indonesia, Iran, Japan and Taiwan.

The number of visitors from North America (USA and Canada) has significantly increased to over 8,100 people. About 11,000 specialists came from

Latin America, mainly from Brazil, Mexico, Argentina and Columbia. Russian speaking visitors were also present. The group from former CIS countries was one of the largest at the fair.

The seniority of the visitors was also important: over two-thirds of them were top and middle managers, over half were investment decision-makers. A significant proportion of visitors came from research and development and design divisions.

The organisers and exhibitors reported exceptionally high activity rates among visitors, and saw huge interest in new product presentations and a real desire to invest in innovation. Indeed, a remarkable number of business deals were agreed, some of which were worth millions.

The chairman of the Exhibitors' Advisory Board for K 2013, Ulrich Reifenhäuser, was extremely pleased with the results: "We had not expected visitors' willingness to invest to be this high! Many innovative products and applications launched in Düsseldorf met with great interest from trade visitors. The innovations were not just admired but led to concrete negotiations and signed contracts. Many customers are extending their capacities and are investing in new technologies to sharpen their global competitive edge. We very confidently anticipate strong post-fair business and expect further growth in our sector."

Werner Matthias Dornscheidt, President & CEO of Messe Düsseldorf, was delighted, along with his team, at the excellent response: "It has been proved again that K is, and remains, the most important event in the rubber and plastics industry! This is where new technologies are launched alongside fully matured advanced developments and this is also where orders are placed for these innovations. Foreign visitors to K 2013, in particular, showed an extremely high willingness to invest and one in two visitors came



to Düsseldorf with specific purchasing intentions in mind. Even if the size of delegations from the individual buying companies dropped slightly, no firm producing or using plastic goods missed this chance to find out about the innovations of today and the trends of the future at K 2013."

Solutions for energy efficiency and resources saving were dominant amongst the exhibited products, and the sector is driven by environmentally friendly and cost effective production.

Machinery and plant construction – the largest exhibiting sector at K 2013 with around 1,900 exhibitors – was also at the focus of visitors' interest. Around two-thirds of registered visitors said innovations in this sector were of high interest to them. 42% of visitors were interested in raw and ancillary materials, 22% had their interest in semi-finished goods and plastic and rubber components. The visitors rep-

resented all major sectors: building and vehicle construction, packaging and electronics, medical engineering and agriculture. Overall, K 2013 visitors expressed a high opinion of the exhibition (which encompassed 19 halls). 96% of them have confirmed that they achieved the goals of their visit.

K 2013 also highlighted a number of trends in today's plastic pipes industry:

Equipment for pipe production

Three years ago K 2010 was dominated by productivity issues, so producers of extrusion equipment presented longer screws and heavily increased rotation speed. The main priority for innovation today is energy efficiency. The main reason for change is the price of power supply (almost



two times higher than it was 10 years ago). Some analysts think that all the reserves for increased productivity of extruders are exhausted, so energy saving is now a hot topic for consumers.

Extruder manufacturers are looking into the following technologies to save energy:

- Gearless main drives
- Intelligent drive control systems
- Use of friction energy
- Completely isolated extruder with energy use control.

Reifenhäuser presented a prototype of a completely isolated single screw extruder with an expected reduction of energy consumption of about 20–30%. Although the extruder on display was just a prototype, it does give indications for the future.

Most of the extrusion line producers drew the attention of the visitors with possibilities of significant resources savings though the inner cooling of pipe heads. Some of them come with exotic designs and generated great interest with the number of co-extrusion layers in the pipe wall (up to 9 layers!). Heat and water recuperation were also taken into consideration.

Production of standard extrusion equipment is moving to China, India

and Turkey. Italian producers are becoming Europe's most popular choice with their medium-sized manufacturers offering good value for money and a high level of customer service. According to the latest review, extrusion equipment producers like battenfeld-cincinnati or KraussMaffei are losing their positions. Some of the bigger companies still seem to struggle with individual service provision, especially compared with small and medium processors.

Equipment for plastic pipeline installation

Traditionally, Pavilion No.11 is dedicated to manufacturers of plastic pipeline installation equipment.

Most of the new types of butt welding machines presented focused on portability – with special transport buggies, wheels or crawlers. Previously, mobile welding units were a trademark of McElroy, but now almost every manufacturer offers a similar solution. The idea of mobile units isn't novel, although it still drew lots of attention at this trade fair.

The portability of the welding units in Russian conditions (strong winds,

torrential rain and temperatures below zero) is not that critical. Moreover, if welding is being carried out under a heated tent, moving the whole thing (tent, generator, fan heater etc.) can be quite troublesome. Therefore it is much simpler to pull the pipe string through after the welding.

It also needs to be borne in mind that the price of a mobile welding unit is two-three times higher than its stationary alternative. This can negatively impact the sales targets of these modern machines.

Analytical equipment

Equipment for the identification and testing of plastic materials and products was also presented at the fair and we can see two major developments. First, there is the launch of special routine analysis solutions for the plastic processing industry, not for the experts. For example, NETZSCH-Geraetebau GmbH (Germany) presented DSC 214 Polyma, a new differential scanning calorimeter. The unit has a number of improvements in design (with enhanced oven and sensor, improved crucible) and software. Upgraded software allows differential scanning calorimetry (DSC) thermogram calculations and can even identify the plastic using its incorporated database.

The second development sees some of the different analysis methods of various manufacturers being combined. A couple of years ago, this was an unusual thing to do however today, most producers offer these solutions. Mettler Toledo has presented a system featuring the Mettler Toledo TGA/DSC1 thermal analyser and Thermo Scientific Nicolet iS10 Fourier Transform Infrared Spectrometer.

Some of the producers go further and offer ready-made solutions. For example, NETZSCH-Geraetebau and Bruker Optic offer an integrated

STA 449 F1/F3 and IR Alpha spectrometer system. This is a good example of the globalization of the automatic equipment market.

‘Kunststoff bewegt – Plastics move the World’ Special Show

Visitors from all over the world enjoyed a K 2013 special show entitled “Kunststoff bewegt – Plastics Move the World”. This show was dedicated to the contributions that plastics have made to ‘life in movement’, particularly the role they play in different aspects of human mobility, and the way they’ve helped to express emotions through, for example, art and design. Future-oriented issues like population growth, energy needs and climate change were also discussed during the show.

Unfortunately, Russia was represented by a smaller number of delegates than at K 2010. As ever, the POLYPLASTIC Group stand was in the central pavilion (No.6) – and was the main meeting place for many Russian visitors. Here the products of the POLYMERTEPLO Group, Radius Systems of



Britain, AEON and Subterra were all presented. These companies work under incorporated management and can offer a full range of integrated services in CIS countries and in Europe.

TAIF Group showcased Kazanorgsintez and NizhnekamskNeftekhim in pavilion No. 5 and there was a stand in pavilion No. 8 where a number of Russian companies were presented. But that’s all.

Neither SIBUR nor other large Russian polymeric companies took part in the fair. We hope they will change their mind next time so that Russia will be better represented at this very important international plastics and rubber event.

The next K 2016 Trade Fair will be held from 19 to 26 October 2016 in Dusseldorf.

We’ll look forward to seeing you all at our stand in three years!

