

Polyurethanex 2017 and PU & TPU 2017 attracting interest of many experts

Russia is confident about the year 2017 and the future: after having gone through challenging times, characterised by political tensions, commercial sanctions, oil price erosion and a weak Russian rouble, a lot of experts expect that the domestic economy is on the way to recovery. The World Bank also forecasts growth for the Russian economy. Numerous foreign companies count on the upturn and feel justified in having maintained their business relationships with Russian companies during the crisis. That these positive trends also hold true for the plastics and especially the polyurethane industry, was demonstrated first by the Interplastica 2017, the 20th international trade fair for plastics and rubber, that took place 24–27 January, and one month later from 28 February–2 March by the Polyurethanex 2017, the ninth edition of the international trade fair for raw materials, machinery and technologies for manufacturing polyurethanes.

The current economic background has an important impact on the success of any trade fair. Despite the challenging times, all big players of the PU industry participated in the international conference "PU & TPU 2017", to discuss the current and future situation of the Russian PU industry. The event took place on 27 February 2017, immediately prior to the Polyurethanex 2017 in Moscow, Russia.

For several years, the organizers of the two big events of the Russian PU industry are working hand in hand to take advantage of synergies: **Inventra**, a subsidiary of **Creon Company**, organises the conference "PU &

Prof. Dr. Victor A. Goncharenko victor-gonchar@mail.ru Institute of Material Science and Technologies MAI – National State University, Moscow, Russia www.mai.ru

Dr. Alexey P. Sergeenkov alexeyserg@mail.ru Moscow State University of Design and Technology, Moscow, Russia www.mgudt.ru

All figures and tables, unless otherwise stated, have been kindly provided by the authors.

TPU", **Mir-Expo**, organises the trade fair Polyurethanex. It should also be mentioned that the organisers have been supported by two non-commercial associations: the **Association of Russian PU foam manufacturers (APNPPU)** and the **Association of Russian PU panel manufacturers (NAPPAN)**.

Characterisation of the Russian PU market

During 2013 to 2016 the petroleum-based chemical industry in Russia has expanded its capacities by 2 million t/y. That contributed to a growth in 2016, a crisis-ridden year, of

+5 % compared to 2015 in plastics production, and a growth of even +6.5 % in the plastic processing industry. Thus, the industry performed better than the Russian GDP **(tab. 1).** But analysts also emphasise that the high credit costs slow down investments and prevent further growth.

The Russian PU market behaves very similar to the plastics market, but also shows some specialities and its own problems as discussed during the conference. In contrary to the market for standard plastics, the PU market in Russia still is extremely dependant on raw material imports. The biggest importers for MDI in 2016 were Dow Europe (41 %), Wanhua Chemical (17 %), BASF (16 %), Huntsman (10 %), and Covestro (8 %). For

Huntsman, a supplier of different raw materials to the Russian market



Participants of the conference "PU & TPU 2017" (Source: Inventra)



TDI it was Covestro (33 %), BASF (29 %), BorsodChem (23 %), Chori (4 %), and Dow Europe (3 %). Polyol imports are of lower importance for the Russian PU industry.

Recently, there is hope that the dependence on raw material imports may be reduced in the next years: In their plans to reduce the import rate of the chemical industry, the Ministry of Industry and Trade has also included MDI as a designated topic. It is expected that until 2020 the proportion of isocyanate imports will decrease by up to 6 %.

Besides PU raw materials, Russia is also importing other PU-based products such as adhesives, sealants, prepolymers, emulsions, hardeners or resins. In total, 24.18 kt of these materials have been imported in 2016 compared to 23.55 kt in 2015. Although small amounts (ca. 10 kt) of finished PU prod-

ucts, namely rigid foams, flexible foams, and non-foamed materials, are imported, the main volume of these materials is produced in the domestic market: In 2016, about 275 kt of these products have been produced in Russia, whereas it used to be only 187 kt in 2004. The biggest share was flexible foams (45 %), followed by rigid foams (38 %) and non-foamed PU products (17 %).

The economic crisis affected all market segments of the PU industry, however, with various degrees. Due to a reduction in consumer purchasing power, the three key sales industries, namely automotive, furniture and construction, showed falling sales volumes. Nevertheless, the construction industry still is the most important market for polyure-thanes in Russia. PU products for thermal insulation successfully gain ground in the market against mineral wool products.

Industry	2010	2011	2012	2013	2014	2015	2016
Gross national product	4.5	4.3	3.4	1.3	0.7	-3.7	-0.7
Total industry	8.2	4.7	3.3	0.3	0.6	-3.4	1.1
Petro-based production	10.6	9.5	4.1	5.4	2.0	6.3	5.3
Plastic production	7.8	8.8	0.2	14.6	7.9	8.1	5.0
Plastic processing	21.5	13.1	7.4	7.3	11.8	-5.0	6.5

◀ Tab. 1:
Growth rates in Russia in %
(Source: Aliance-Analitics)

▼ **Tab. 2:** Exhibitors at Polyurethanex (Source: Mir-Expo)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Number of exhibitors	18	11	20	30	45	60	57	59	66
Number of countries	5	5	6	9	14	14	15	15	14

New venue Expocenter, Moscow, Russia



Automated Gasketing, Gluing, Potting



Sonderhoff — your expert in Formed In-Place technology

Benefit from our wide range of foam sealing, gluing and potting systems for more than 300 vehicle applications: Like fast-curing or low-emission PUR seals or temperature resistant silicone foam gaskets. Also ask for our dispensing machines for your FIP applications.

Try out prototype sampling and toll manufacturing of your parts at our location in Suzhou.

sonderhoff.suzhou@sonderhoff.com www.sonderhoff.com



magazine magazine

For other segments, the economic crisis surprisingly showed positive impacts: Volumes of polyurethanes in refrigeration systems and agriculture industry grew due to an increased demand for storage as imported goods became more expensive. Some companies used this trend not only to survive in the market but, moreover, to expand their business.

An overview of the Polyurethanex 2017

For the first time, the Polyurethanex took place at a new venue, the exhibition facilities of Expocenter in Moscow. In the past, the fair was located at the Crocus-Expo International Exhibition Center outside the city. Both, Russian and foreign attendees praised the professional organisation and high level of service at the venue, which is one of the leading exhibition facilities in Russia.

Despite the challenging economic environment for the Russian plastics industry, the interest in the Russian market does not decrease as could be noticed from the number of exhibitors and their internationality (tab. 2). As in the last years, all traditional topics of the industry have been presented: PU raw materials, machinery, tools and technologies for manufacturing and processing polyurethanes, PU foams for thermal insulation, industrial products, sports and leisure, computer modelling (processing and mould design), and recycling concepts.

The broad range of products and technologies were presented by 66 exhibitors (18 of them attending the Polyurethanex for the first time). The exhibitors came from 14 countries, including Austria, Belarus, China, Germany, Hungary, India, Italy, Korea, Lithuania, Poland, Russia, Turkey, United Kingdom, and the USA.

Most of the leading companies of the Russian PU market as well as their Russian representatives and subsidiaries were amongst the exhibitors, e.g., ASD-Tehnika, Biesterfeld Rus, Cannon Eurasia, Covestro, D-Former, Dow Izolan, Eigenmann & Veronelli Russo, Elastokam, Evonik, Hennecke, Huntsman, H&S Anlagentechnik, Jiahua Chemicals, KraussMaffei, Maris Polymers, Momentive Performance Materials Rus, Nordichem Europe, PPU 21 VEK, RMPA, Unicom-Service, Walter Chemie, Wanhua-BorsodChem and many others.

Some of the international companies that are well known on the Russian market have been attending the Polyurethanex for many years, such as Covestro (fifth attendance), or were newcomers like KraussMaffei. While these companies presented their whole product portfolio during Interplastica 2017, that took place in the previous month (Covestro presented polyurethanes, polycarbonates, adhesives, coatings, specialities; KraussMaffei presented machinery for injection moulding, extrusion, reaction injection technologies), they focused during Polyurethanex only on their PU-relevant portfolio.

Other events taking place in parallel to Polyurethanex

The traditional scientific conference "Presence and Future of PU Industry in Russia" that took place on 1 March 2017 is intrinsically tied to Polyurethanex. The combination allows the attendees to get informed about new products and services on the one hand and new developments and trends on the other hand.

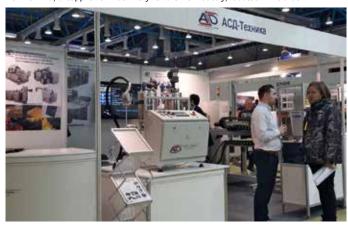
The offer was complemented by two additional international trade fairs taking place at the same time and in the same pavilion as the Polyurethanex: the Composite-Expo 2017 and the Adhesives & Sealants 2017. More than 15,000 visitors, about 90 % of them being professionals, seized this opportunity.

Both, exhibitors and visitors were full of praise for the organisation of the event. This is also expressed in the fact that most of the exhibitors have already confirmed their participation for the next Polyurethanex.

The Polyurethanex 2018 will take place 27 February – 1 March 2018 at the Expocenter, Moscow, Russia.

For more information see: www.polyurethanex.com

ASD-Tehnika, a supplier of machinery for the PU industry, located in Belarus



Evonik, a global supplier of additives, is attending the Polyurethanex for years

