

# BelAZ conquers Las Vegas

Belarusian dump trucks arouse huge interest among mining companies

By Kirill Pirogov

The international exhibition is an Olympiad for all mining enterprises every four years, in American Las Vegas. It gathers the largest producers of quarry machinery from around the world, who demonstrate their latest developments, competing to be known as strongest in this narrow but prestigious market. This year, the Belarusian 360 tonne BelAZ-75603 took part, creating a real stir among such giants as Caterpillar, Komatsu and Liebherr. Every day, hundreds of visitors visited its stand, allowing several contracts to be concluded with global mining leaders. As ever, the most interesting facts failed to be photographed or covered by official press releases.

This was the first time that BelAZ had demonstrated its impressive dump truck in Vegas, since thousands of kilometres separate Belarusian Zhodino from the desert location. It would be a challenge to send a small passenger car so, naturally, delivery of monster-size trucks is a unique challenge.

Every day, MAZ produces several dozen dump trucks, each taking a whole month to assemble, since components are many and sourced from all over the globe before the finished article is sent to mine copper, coal or salt. Russia, Ukraine, Venezuela and Chile are among existing customers for 50-100 tonne BelAZ trucks. The 360 tonne exposition vehicle is, of course, even larger.

"It's taken over two months for the truck to reach its destination," explains the General Director of Western Technologies (specialising in the promotion of BelAZ trucks to North America), Dmitry Tikhomolov, who helped organise the Belarusian stand at MINExpo. He notes that the truck travelled for almost 45 days by sea from Klaipeda port and by train, needing 16 platforms to transport it in disassembled form. Assembly at its destination was the most complicated task, since it's tricky even in the home workshop — despite being routine. Assembly in the 'field' presents a massive challenge — especially taking into account the weight of a single wheel (more than that of a small truck).

A joint group of Belarusian and American designers — headed by deputy chief designer Leonid Semenov — oversaw this complicated task in Las Vegas. He notes, "Partners from American Jas company provided the cranes without which it would have been impossible to unload the BelAZ components. Moreover, we were assisted by a group of highly qualified mechanics



Negotiations in Las Vegas

who helped with assembly. Conducted in the open air, under the hot sun, the task was even harder. It's really quite unpleasant to be outside when the temperature is over 40 degrees and we had to assemble the giant mechanisms with great accuracy." Mr. Semenov adds, "Taking into consideration these conditions, we decided to start as early in the day as possible. By 6am, our team was ready, achieving as much by lunchtime as is usually seen in an eight hour working day."

The assembly of the giant truck took a team of eleven and two weeks, with the last days seeing the lifting of a platform by two 150 tonne cranes, for placement on bridge stands (each weighing over 100 tonnes). However, as Mr. Semenov admits, painting was the most challenging element, as the truck had lost its lustre after the long sea journey; of course, a show like MINExpo relies on each truck looking impressive! "It's a difficult job to paint a BelAZ truck but, in the USA, we faced the additional difficulty of local legislation. You can't paint vehicles in the open air with the usual painting devices since electrostatic paint spraying is impossible at such a temperature. So, we had to paint the truck in the



Such machines impress everyone

## Great presentation

### Belarus presents powerful MTZ tractors to Ukraine

RUE Minsk Tractor Works, alongside Slavyanskaya Tekhnologiya JSC and Lidagropromash JSC, has demonstrated its powerful 'Belarus 3522' and 'Belarus 3022DTs.1' tractors. Four of the tractors were sent to Ukraine to take part in a major demonstration of their technical characteristics. The Ukrainian Ministry for Agrarian Policy and Food and heads of regional agro-industries watched the demonstration, alongside Ukrainian farmers and

representatives from Belarus.

Minsk Tractor Works was founded in 1946 and is now part of the Industry Ministry, producing over 60 models and modifications of tractors and machinery, in more than 100 versions, tailored to suit various climatic conditions and work purposes. Conveniently, the latest models are compatible with equipment made by various other brands. RUE MTZ's machinery is suitable for use at foresteries, communal works and mines; it employs around 30,000 workers.

## Opinions change, science remains

### Some think that Belarus significantly lags behind the West in the sphere of electronics. Belmicrosystems Scientific and Technical Centre — a branch of Integral JSC — aims to change this opinion.

Russian satellites and rocket carriers, positioning and navigation systems, board radar stations and weapon direction systems, as well as aircraft and helicopter control panels, strategic armaments, air defence, anti-missile defence and counter-measure systems use developments

of Belarusian specialists. From 2004-2011, they introduced 184 newly competitive high-tech goods, raising export supplies; currency earnings rose 4.5-fold. Meanwhile, 2010-2011 has seen Integral's sales volumes reach 40 percent of the total from the last 8 years.

This work has a very important socio-political aspect, providing technological independence from foreign manufacturers. It also reinforces ties with Russia and enhances the competitiveness of our defence technology while helping fulfil the

EurAsEC Microelectronics of the 21st Century inter-state programme.

The Scientific and Practical Materials Research Centre of the National Academy of Sciences of Belarus and Integral JSC have claimed the 2012 State Award for Science and Technology for developing and organising the industrial manufacture of specialised micro-electronic products with dual and special purposes. Three specialists are sharing the honour, including the Director of Integral's Belmicrosystems Scientific and Technical Centre, Sergey Shvedov.