



Razmax's demolition of Varshavskiy station in St Petersburg required the company to build relationships with state authorities and the general public at the same time as knocking down the buildings

**W**hat does “the market” mean? If you define it as a simple mechanism that puts buyers and sellers together, then a fully formed demolition market really does exist in Russia. There is a need to perform demolition and there are companies who do so.

But if you start with the market as a complex system where unified price politics and general rules exist, and all the main players interact with each other, it is difficult to say that there is such a thing as a Russian demolition market. It is still in the process of being formed.

### BACK IN THE USSR

Before the break-up of the old Soviet Union, there were no specialist demolition companies as such. There were trusts, which worked under the control of the state and carried out the state's orders. Within these trusts, management mechanisms existed to run the entire cycle of work.

The highest peak of demolition

Razmax has been called upon to tackle projects with temperatures falling as low as  $-40^{\circ}\text{C}$  in the far north west of Russia



# The birth of a market

How does one define the state of the demolition industry in a country as vast as Russia? **SERGEY EFREMOV** of the St Petersburg-based Razmax group of demolition companies takes a look behind the scenes at how the Russian demolition sector has evolved and where it is going in the future.

development in Russia under the centralised economics of the Soviet state was during and just after the Second World War, between 1942 and 1950. An enormous number of buildings that had been destroyed needed to be fully

restored, which involved them being fully or partly disassembled.

At that time technology was quite primitive, with the “standard package” including a cart and workforce. Beyond this, there was the 411B, a pneumatic excavator bought on lease from the USA, working with a diesel engine and pneumatic compressor.

Though not supposed to be used for demolition, its bucket was eventually replaced by a wrecking ball.

### FRESH START

At the end of the 20th century, and the beginning of the 21st, two parallel processes started in Russia. Firstly, management was privatised, with some players – who were not used to the competitive atmosphere – almost leaving the market. Secondly, private companies started to be set up – Razmax was an example of this, in 1997.

We understood that it was not possible to achieve the number of projects we needed without more modern equipment. With this machinery only available outside the country, it was up to us to bring the first excavators,

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# Stations, mines and factories – a look at some of Razmax's Russian demolition projects

## APATITE-NEPHELINE FACTORY

**Demolition of factory and preparation of site for recreational zone**

This became the largest-scale project in the north west federal district, and one of the biggest in Russia. It's complexity is because of the hazardous production zone and the large amount of underground and aboveground galleries. During demolition, Razmax experts carried out engineering surveys and ecological stewardship, including complex site reclamation. Direct explosion technology and 60 units of machinery were used. Preliminary stage and calculation execution took around six months.



## VARSHAVSKIY STATION

**Historic building demolition requiring a knowledge of building relationships**

Razmax demolished more than 200 of the former station buildings and dismantled the railway roads in four months. The Varshavskiy redevelopment is the biggest in St Petersburg. Taking into account the historical value of this site, Razmax experts carried out demolition under the gaze of a caring general public, while each action has been approved by the All-Russian Society of Monuments Protection. In the end all monumental structures stayed untouched. Regardless other type of structures, they were dismantled for the further development.

## RASVUMCHOR MINE

**Project in city of Kirovsk in northern Russia in temperatures down to -40°C**

Did you think that Russia is full of snow and bears? In this case you are absolutely right. For many years Razmax has been working in the extreme north with temperature down to -40°C. The company has been demolishing buildings in the city of Kirovsk, dismantling them step by step to reduce dust in the workplace.

destroyers, crushing plants and hydraulic scissors from Europe. But the demand for all innovative technologies was not the same, due to Russia's use of different materials, particularly in metal and concrete. A lot of technologies now widely spread across Europe have still not been accepted in Russia.

### IT'S NOT JUST THE MACHINE

From the late 1990s onwards, other companies actively started buying machinery. This 'arms race' ran for the next 10 years. Believing that successful project implementation depended on the amount of machinery in the fleet, demolition companies borrowed money to buy the newest models, resulting in the busiest period yet for leasing machinery.

Looking back, this stage was important for the development of the Russian demolition industry because quality machinery is the biggest part of success. Technique without technology or technique without specialisation is nothing.

Now, the Russian market is at a crossroads – a stage where it has the technical facilities to go ahead, but no unified, civilised market. For instance, there are a number of companies looking to recycle construction and demolition waste, but no regulatory body.

### THE CURRENT SITUATION

No one is saying that Russian demolition is a complete mess. There is a mechanism for getting projects approved and getting permission for building. There are SNiPs and GOSTs – standards and certification services – that our experts develop alongside the state authorities. But there is still no clear unified regulator that can judge the quality and value for money of demolition works. This means there are many companies, especially in remote regions, offering clients cheap prices to save on the cost of people and materials.

Apart from the lack of unified legislation, there is no education programme for demolition and the only way people can learn is by experience, and the experience of others. In the current situation, the best solution is to develop one's own training programmes and give this experience to the new demolition specialists. This is the way Razmax works.

But at the moment most people 'crush and run'. They don't care about technologies.

Demolition in Russia has overcome its crisis. Production is being modernised, new buildings are under construction.

But it is impossible to put up new buildings without preparing the site.

Many of the factories inherited from the old USSR are at the end of their useful life and dangerous, and should be demolished

by professionals – the generation of professional demolition companies that are just coming into being now.

And with large demolition projects in Russia are increasing at a rate of 35% a year, we are sure this market has a future. ■

