



## **POLYMER BARRIERS AT SIBUR POLYLAB**

POLYPLASTIC Group's latest product has been installed at SIBUR's research centre.

In October 2020, the first POLYSAFE safety barriers were installed at the SIBUR PolyLab research centre. They are a new product from POLYPLASTIC Group, made from high-strength polymers.

Prior to installation, pilot products were tested at POLYPLASTIC Group's Klimovsk Pipe Plant in conditions close to their actual future application. Simulations tested the ability of the materials and structures to ensure the safe movement of people and vehicles in production logistics areas.

---

AS THEY ARE MADE OF SPECIAL POLYMER BLENDS, THE BARRIERS ARE DURABLE, CORROSION-RESISTANT, ABSORB SHOCK LOADS WELL AND, UNLIKE THEIR CONVENTIONAL METAL COUNTERPARTS, CAN RETURN TO THEIR ORIGINAL SHAPE QUICKLY

---

At the next stage, POLYPLASTIC experts cooperated with SIBUR PolyLab to identify the most suitable solutions to protect the different components of the building and ensure the safe passage of personnel and vehicles.

After that, several safety barrier structures were installed in the research centre's production area. Tailored to PolyLab's individual requirements and needs, the POLYSAFE barriers were installed by a team of specialists from POLYPLASTIC Commercial Subsidiary's service centre.

POLYPLASTIC Group started to develop and produce these innovative POLYSAFE barriers in April 2020.

As they are made of special polymer blends, the barriers are durable, corrosion-resistant, absorb shock loads well and, unlike their conventional metal counterparts, can return to their original shape quickly. In addition, POLYSAFE barriers have virtually no operating costs and do not damage the surfaces they are fixed to.

POLYPLASTIC Group's POLYSAFE system is a single solution for a number of tasks relating to the safe organisation of work processes and movement of people and vehicles. This is thanks to its wide range of protective barrier elements that can be assembled at logistics and industrial facilities, whether in goods loading and unloading areas, or around production lines and process equipment.

POLYSAFE polymer barriers are currently manufactured according to tailored drawings agreed with the customer to suit their specific

needs, but serial production is slated for launch early next year.

“In 2015–2016, SIBUR actively used polymer solutions during the construction of ZapSibNeftekhim. Even back then, POLYPLASTIC Group specialists were already working with SIBUR, advising on the optimal technical solutions and providing construction support. Our cooperation on the construction of one of Russia’s largest PE pipe water conduits was a positive experience for both companies. Since then, POLYPLASTIC Group and SIBUR have benefitted from a productive working relationship,” said Petr Titov, Director of the Information Policy and Development Department of POLYPLASTIC Group, “Today, we are collaborating on SIBUR’s new investment projects: POLYPLASTIC Group specialists are actively exploring the possibility of swapping out traditional materials with more up-to-date polymers. This process is vital for both companies, for example, when deciding whether to use a polymer-based technical solution, we compare technical and economic cost/benefit ratios for traditional materials and polymers, identify where polymers excel, process a lot of data on the regulatory constraints around their use, and pinpoint areas where further R&D is required to prove their applicability. We see flaws and gaps in the technical and legal frameworks that need to be supplemented or amended in the coming years to give the green light to polymers. We are also building a database that shows exactly which polymers with special properties are in demand today, and which polymers will be able to replace traditional materials in the future.”

“Today, cooperation between these two market leaders – SIBUR as a producer of feedstocks and POLYPLASTIC Group as a manufacturer of pipes and fittings – mainly takes the form of proving the high performance of polymer pipe products and making a joint effort to grow the volume and footprint of polymer pipe sales in Russia,” added Mr Titov.