

IZUREM Ltd

Volume of investments required: \$ 1 000 thousand

Use of funds

Acquisition of fixed assets - 80%

Acquisition of current assets - 20%

Company profile

1. Date of establishment – June 2005.
2. Size and source of investment to date – \$ 25 000. – The Foundation for Assistance to Small Innovative Enterprises. It is planned to invest \$ 150 000 of internal funds in 2006–2008.
3. Production – fireproof foamed polyurethane (FPU) systems and items on their basis.
4. Target market – industrial and civil engineering; thermal insulation of pipes with different application.
5. Sales 2004 – none.
6. Description and value of assets – none.
7. Goodwill and intellectual property rights – a favorable decision is granted on issue of a patent for the invention “A technique for the production of fireproof foamed polyurethane”. Open JSC “Izurem” is the patentee.
8. Signs of public recognition – A Diploma of The Foundation for Assistance to Small Innovative Enterprises is given as a winner in the “Start 05” program.

Owners

Open JSC “ASA”	50%
Individuals – 3 persons with equal income distribution	50%
Share of government property	0%

Products characteristics

Fireproof foamed polyurethane (FPU) materials and products on their basis. The production of structural sandwich-panels and of other items from fireproof foamed polyurethane has been organized. At present the noncombustible FPU-materials are actually not available in the Russian Federation. During the production of structural sandwich-panels the mineral plates are used with inferior characteristics with respect to thermal insulation properties and processibility as compared with FPU-materials. Noncombustible materials for sputtering the ready-made structures and buildings are not available. The cost of the FPU-materials being developed will be approximately by 10% higher than that of the used standard systems with the same isolating and physical and mechanical properties but they will provide a high degree of fire resistance not less than G2 class.

Market & Competition

At present approximately 4.4 mln tons of rigid foamed polyurethanes are produced annually for thermal and sound isolation of residential and industrial constructions, pipelines, complicated refrigeration engineering, etc. According to various estimates the total amount of the foamed polyurethanes produced in Russia is 25–30 ths tons per year (~\$ 100 mln). A broad application of FPU-materials is impeded due to their combustible nature. Replacement of combustible thermal-insulating materials for noncombustible FPU-materials settle the problem of heat saving which is especially important for the Northern and Eastern regions of our country. It also opens up possibilities for broadening the application of FPU-materials in industrial and civil engineering, refrigeration engineering, special production units, and in other fields of national economy.

Currently there are no large manufacturers of FPU-materials in Russia. Closed JSC “Izolan” and Closed JSC “Vladipur” (Vladimir city) as well as Closed JSC “Sarov” (Nizhny Novgorod) are mostly known in the Russian market.

In 2009 the production amount of FPU-materials in Russia is expected to increase approximately by 2–3 times (about 100 ths tons, ~\$ 300 mln) under the condition that the domestic raw material is available. In view of the investments granted by 2009 we are planning to organize the production of noncombustible rigid FPU-materials with the yield of ~300 tons/year, and that will make possible manufacturing different items for the sum of ~\$ 5 mln. Testing of noncombustible FPU-materials in different fields will provide their wide introduction, and their yield will increase rapidly up to several thousands of tons per year.

Marketing & Sales

It is planned to disseminate information on our products by sending it directly to industrial construction enterprises, automotive plants, shipbuilding and aviation facilities. It is also planned to make the pilot and industrial samples of both foamed polyurethane and components for their production available for testing by these enterprises. While marketing it is planned to use engineering, educational and technological contacts of Nizhny Novgorod State Architectural Academy. The data on new noncombustible FPU-materials will be included into curriculum and scientific and technology periodicals.

Prospects of development

Scientific and research work on the development of new fire retardants will be carried out in 2005–2008, which will allow to reduce the cost of the manufactured products and to expand the nomenclature of noncombustible FPU products. Besides, investigations will be carried out on addition of more cheap polymers, natural products or even industrial waste into noncombustible FPU materials, and this will allow not only to diversify our products but also to settle some ecological problems. This work will be financially supported by The Foundation for Assistance to Small Innovative Enterprises within the framework of the "Start 05" program.