

THE FOUNDRY TECHNOLOGIES LTD

Volume of investments required: **\$ 2 100 thousand**

Intended use of funds:

Working capital (moulding production)	25%
Fixed assets acquisition (production of high-duty cast iron mouldings)	69%
Marketing (technologies and moulding sales)	6%

Company profile:

1. Date of establishment - July 22, 2004
2. Stage of development - Seed
3. Size and source of investment to date: \$55 th. - own funds, \$25 th. - provided by the Foundation for Assistance to Small Innovative Enterprises as part of the Start program (project No. 5035).
4. Industry - Foundry production
5. Target market - Ferrous metallurgy.
6. Sales in 2003 - None
7. Description and value of assets - \$ 0.4 th. - PC.
8. Intellectual property rights - Patent No 2188240 "The method of high-duty cast iron production" (2002), patent holders: Rushanik B.A., Kavitsky I.M., Kavitsky S.I. The agreement for the transfer of the authority of patent's usage to the LLC "The foundry technologies" has been reached.
9. Signs of public recognition - The Tula city administration certificate for participation in the scientific and technical achievements exhibition (2004).

Owners:

1. Kavitsky I. M.	50%
2. Rushanik B. A.	50%
Share of government property	0%

Management and key personnel:

Rushanik, Boris Avseevich - Director, 57, Candidate of Science (economy), 15-year experience of technological innovations development, author of 3 patents (connected with the operation of the company).

Kavitsky, Igor Moiseevich - Deputy Director for Science, 68, Candidate of Science (engineering), 27-year experience as the head of a new materials applied-research laboratory, author of more than 30 publications and 3 patents (related to the theme), responsible for creation and manufacturing application of new technologies.

Borisov, Alexander Nikolaevich - key specialist, 50, Candidate of Science (engineering), responsible for mathematical modeling and the technological process characteristics optimization.

Products characteristics:

The technology of high-duty cast iron mouldings with the globular graphite producing is based on double modification with the help of the alloys with high content of rare-earth elements. The advantages:

1. The ability to manage the metal characteristics in its liquid state (the melted metal vitality increase from 5-7 minutes at current processes to 40-45 minutes);
2. The pollution-free and environmentally-friendly technology of production;
3. The cost of these articles (compared to market average price) is 20-25% lower due to the fit mouldings output increase and lower ligature consumption;
4. The technology can be applied in any foundry equipped with induction or arc furnace; without any production requirement.

Also, the operating practices permit to receive the cast iron with the special qualities: the antifriction (sleeve bearing) alloys instead of non-ferrous ones, the long-wearing alloys instead of steel ones (for the mortar mill paddle and other components, which are working in the abrasive deterioration conditions).

Comparative analysis with existing alternatives:

Characteristics of high-duty cast iron mouldings	LLC "The foundry technologies" Russia, 2004	Alternative 1 "The Kosogorsky metallurgical works" JSC, Russia, 2000	Alternative 2 Kashirsky foundry plant "Centrolit" Russia, 1998
Technical	The technical and performance attributes of high-duty cast iron mouldings (in compliance the Russian State Standard 7293-85)		
Pricing per ton (ths.\$)	1,1 - 1,2	1,4 - 2,0	1,4 - 2,0

Markets/Competition:

	Rate	Products/services of exhibiting company	Alternative 1	Alternative 2
2004	Geographical Region - Russia. Market size \$ 600,000 th.			
	Company market share \$ ths./%	0%	1 200 / 0,2%	3 600 / 0,6%
2008	Geographical Region - Russia. Market size \$ 800,000 th.			
	Company market share \$ ths./%	5 000 / 0,6%	2 400 / 0,3%	5 400 / 0,7%

The main high-duty cast iron market share (up to 90%) belongs to large-series producers of pipes and car components. They are working with the traditional technologies. At the same time, they have opportunity to use the method of double modification under the license agreement.

The two goals of the company:

1. Organization of domestic manufacture to receive the high-duty cast iron mouldings (according to the patented method).
2. Sale of licenses for application of new technologies; the prices are negotiable.