

## ExpressThermoControl Ltd

**Volume of investments required: \$ 1000 thousand**

### Use of funds

R&D - 25%

Acquisition of fixed assets - 15%

Product upgrade - 15%

Marketing - 15%

Acquisition of current assets - 20%

Other - 10%

### Company profile

1. Date of establishment – July, 2005.
2. Size and source of investment to date – \$ 28 000. In particular, The Urals Venture Foundation – \$ 3 000; The Foundation for Assistance to Small Innovative Enterprises – \$ 25 000.
3. Production – devices and monitoring systems for commercial oils and oil-filled equipment.
4. Target market – power generation, metal-working, transport.
5. Sales 2004 – none.
6. Description and value of assets – none.
7. Goodwill and intellectual property rights – Patent № 2221238 (Russia) “The method of express-control of liquid mediums” – owner is The Urals Venture Foundation. Currently, the transfer of the rights is being made from The Urals Venture Foundation to our company – the “NVF ExpressThermoControl”.
8. Signs of public recognition – the First degree diploma at the exhibition “XXI Century Innovations and Investments”, the Silver medal at the “Second Moscow International Salon of Innovations and Investments”.

### Owners

Individuals (3):	33,3%, 33,3%, 33,3%
Share of government property	0%

### Products characteristics

Devices and monitoring systems for oil-filled equipment and commercial oils quality in technological processes. They are used for monitoring of volatile impurities in working fluids of turbines, motors, transformers and for prediction the reliable operation and service life of the equipment. The existing devices have the following limitations: the reference to laboratory conditions, the long time period for preparation and carrying out of measurements, the high labor requirements of operating, the dependence of the measurements reliability from external conditions. Let us pointed out the problem and costliness of determination of a complex of volatile impurities, including gases, directly in operating oil-filled equipment. It is precisely the task that is the most actual for potential users. Our devices permit to carry out in situ measurements in vessels which volume is not less than 1 cm<sup>3</sup> with the hole diameter of 1 cm. The function of indication of volatile impurities level is completed by that of fast identification of an oil type. Our devices do not required expendable materials. They have any physico-chemical limitations on the probe's service life.

### Markets & Competition

Data	Express-indicator of volatile impurities in oils ETK-1	Water-titrater by the Carl Fischer method, Switzerland	Moisture meter for oil products, VAD40M, Russia	Other analogs
Geographical Region – Russia, CIS. Market size \$ 10 million				
2004 Company market share %	0%	60%	30%	10%
Geographical Region – Russia, CIS. Market size \$ 50 million				
2009 Company market share %	15%	50%	25%	10%

**Marketing & Sales**

The device models for monitoring were presented at innovative exhibitions and have been received positive responses from specialists. The preliminary tests of the device were carried out in the "Sverdlovenego" factories. The applications for adaptation of the device to given operation conditions have been received from "Sredneuralskaya" GRES and "Pervouralskiy" NTZ. The marketing is based on the papers in specialist journals, exhibitions and on-site device tests at potential users.

**Prospects of development**

OOO "Sverdlovenego" involves more than 1 000 units of costliness oil-filled equipment and carries out more than 2 000 mandatory analysis of oils at the total sum \$ 500 ths per year. Nevertheless the problem of reliability of electric power generation equipment is continued to be actual. The cost of block transformer exceeds \$ 250 ths; the power cut leads to essential loss. Similar situation takes place with turbines and motors of various purpose. Due to high mechanical and thermal workload on friction units it is necessary to carry out the oil's properties monitoring. The high costliness of existing analytical devices and high requirements to service level give rise to periodic oil's quality control in specialist laboratories. The appearance of simple and available "built-in" device for monitoring of commercial oils is able, according the response of experts, to turn on the new approach to the problem of monitoring.