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**Summary**

1. **Volume of investments required – \$ 200 thousand.**
2. **Production** – blood flow phantoms (the test-objects for training experts, calibration and testing of ultrasonic medical diagnostic devices).
3. **Trade marks** – none.

**Company Profile**

**Date of establishment** – June 2005. The enterprise was created on the basis of hydroaerodynamics department of the St. Petersburg State Polytechnic University.

**Signs of public recognition** – the prize-winner of “Start-2005” program competition; the “Small business in innovation” exhibition participant (October 25–27, 2005, the cultural-exhibition center “Eurasia”, St. Petersburg).

**Number of employees** – 8 persons.

**Team**

**Yukhnev Andrey** – Director General, 49 y.o. Expert in the field of experimental hydrodynamics, has a long-term work experience in the field of medical equipment (artificial heart valves, medical pumps and ultrasonic devices). The author of 50 research works, 2 books and 2 patents. Held administrative positions with small research and engineering enterprises.

**Chumakov Yuriy** – Deputy Director on scientific research, 60 y.o. PhD, Professor of hydroaerodynamics department of the St. Petersburg State Polytechnic University. Expert in the area of experimental and computational hydroaerodynamics, has long-term experience in measurements and calculations of complex turbulent flows. The author of 60 research works, a book and 2 patents.

**Zjabrikov Vladimir** – Deputy Director on economics, 52 y.o. PhD, the senior lecturer of economics in the Department of Enterprise and Business, Faculty of Economics, St. Petersburg State University. Expert in the area of tax planning, economics of the enterprise and general management; has experience of organizing several small enterprises in research and technical sphere.

**Products characteristics**

The problems of ultrasonic diagnostics are not enough efficient use of ultrasonic diagnostic devices, device model and specialist’s preparedness level having material effect on the diagnostic’s parameters.

Developed production is blood flow phantoms (test-objects for specialists’ training, calibration and testing of ultrasonic medical diagnostic devices). It is made on the base of tissue mimicking material and blood-analog fluid manufacturing with the modern technologies.

Decision is received (03.05.07) on the patent’s issuance on the application №2006106661/14 (007208).

*Physiology modeling* of blood vessels’ form, biological tissue properties and blood flow curve form in the developed blood flow phantoms allows:

- to increase the efficiency of ultrasonic diagnostics education of specialists;
- to increase ultrasonic medical diagnostic devices’ testing and calibration accuracy;
- to increase ultrasonic diagnostic results’ objectivity.

**Current state**

The first stage of R&D work has been completed: the draft documentation is developed and the operating model of blood flow phantom is made.

**Development strategy****Use of funds**

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| 1. R&D   | 10% |
| 2. Acquisition of fixed assets (the process equipment and test stands for products’ development and manufacturing) | 20% |
| 3. Marketing   | 40% |
| 4. Acquisition of current assets   | 30% |

**Prospective outcome of investment**

Organization of small-scale manufacture, manufacturing and sale of small series of blood flow phantoms.

**Marketing & Markets**

As of 2007 the market segment includes: domestic manufacturers of ultrasonic medical diagnostic equipment, sellers of the ultrasonic medical diagnostic equipment, educational establishments, service station and research institutes. The market volume (as of 2007) is 40 pieces (\$ 320 ths).

In the long term the market segment will extend, and basically due to new consumer groups – metrological services and medical establishments of North-West region, because introduction of the requirements of the State Standards 8.605-2004 on the medical ultrasonic diagnostic devices parameters' techniques measurements is forthcoming. The volume forecast of the market segment for 2010 is 300 pieces (\$ 2400 ths).

The basis of marketing strategy includes direct work with large potential purchasers, information about production efficiency through scientific conferences, specialized medical journals publications and ultrasonic diagnostics specialists' Internet-conferences. For promotion of the products it is supposed to use an operating model of the blood flow phantom and of its' work demonstration in medical organizations of Moscow and St. Petersburg and at manufacturers of ultrasonic medical devices. The basic trade channel is direct sales.

**Interaction with investor**

The share in the authorized capital is up to 50%. Time of recovery is of outlay 3 years.