



Russia, Novochercassk

Summary

1. **Volume of investments required – \$ 100 thousand.**
2. **Production** – metallurgy, engineering industry, metals control and certification. Complex of electrochemical express-analysis of constructional alloy, portable alloys analysis module.
3. **Trade marks** – none.

Company profile

Date of establishment – December 29, 2006.

Signs of public recognition – the company members were awarded by diplomas of international, regional and university scientific and technical exhibitions; they won grants of SRSTU and of The Foundation for assistance to small innovative enterprises (FASIE) competitions; were the winners of faculty graduation thesis competition; are the authors of two RF patents and more than 40 publications in central, international and regional press.

Number of employees – 7 persons.

Team

Lipkin Mikhail – General Manager, 43 y.o. Candidate of chemical science, assistant professor of the Electrochemical technology department. Specialist in electrochemistry of intercalation compounds, electrochemical analysis methods, mathematical treatment of electrochemical measurements data. He is a leading specialist in full works cycle (scientific project, engineering development, developed batch, repetition work) for development of jeweler's alloys electrochemical analyzer. Experience in electrochemical power sources developments commercialization.

Shishka Vasilii – Director of Marketing, 42 y.o. Candidate of technical science, assistant professor of the Machine engineering technology department of SRSTU (NPI), obtained a NPI distinction in 1988 in Machine engineering technology, obtained second higher education in specialty "Economy and management on machine engineering company". Has an experience in company management, during four years organizes and provides teams work (communication to other companies, getting metal patterns, sensor elements production etc).

Pryazhencev Vitaliy – Electronics Engineer, 32 y.o. In 1998 graduated from SRSTU in specialty "Automatics and telemechanics", he worked electronics engineer in industrial research company "Karat", manager in company "K&M", nowadays engineer in "Gorelectroseti". He took part in development of jeweler's alloys electrochemical analyzers (project, debugging and design), designed design concept of hardware-software system of complex of electrochemical measurements.

Products characteristics

Complex of electrochemical analysis of constructional alloys (ELAM), including set of electrochemical pressure-exerting sensors, portable microprocessor unit with autonomous work option; software, assigned for precious measurements results handling, journaling and storing data.

Complexes are assigned for nondestructive express-definition of type and components content metal-compositional systems: nickel sub-group metals, copper, gold; carbon and silicon insertions in steels and base metals alloys, also metallic coatings.

Designed product is based on team's investigation and is protected by two RF patents, containing know-how's and diffusing over wide class of products and objects.

Basics of manufacturing technology are the original electrochemical sensor construction, algorithm of measurements and data handling.

Competitive advantages of this development are: wide application area: metal manufacture mechanical engineering, precious metals production, proving-diagnostic laboratories and centers, etc; lower price and equitable high accuracy of measurements comparing to the same X-ray equipment; possibility of completeness of analyzer delivery, and price level depending on exploitation conditions on customers requirements.

Current state

At this point the main financial source is state contract with The Foundation for assistance to small innovative enterprises (FASIE). The aim of current research technologic investigation is preparation for manufacturing of complex of electrochemical analysis of constructional alloys.

At the same time modules of particular alloys classes are being developed according to marketing investigations and consumers needs.

Development strategy**Use of funds**

1. R&D 30%
2. Acquisition of fixed assets (communications aids, chemical equipment (R&D needs, manufacturing technology), electrochemical investigations devices (R&D), equipment for electronics mounting and

debugging (manufacturing))	30%
3. Marketing	10%
4. Acquisition of current assets	20%
5. Other	10%

Prospective outcome of investment

The outcome of investment will be establishing of production of the complex of electrochemical analysis – not less than 500 peaces per year with provisional profit value not less than \$ 50 ths.

Marketing & Markets

In branch kind in target market the following markets are standing out: mechanical engineering companies; ferrous and non-ferrous metallurgy companies; the “Vtormet” system companies; galvanic manufacturing engineering companies and instrument-making companies; metallic ore and native metals mining and processing companies; technical academies.

Supply services in different mechanical engineering companies have need in portable, non-expensive indication device and (or) measurement, which realize inspection testing of structural steel directly before shipping from supplier company.

For “Vtormet” companies license conditions of economical activity realization with scrap metal require presence of proper control devices, whose lack denies for the company possibility of acquisition of license. Besides, sorting of scrap metal lets to increase its selling value in nearly two times. This case combination of simplicity, accuracy and expressiveness of used device is vital.

Suggested complex will let to realize as traditional, as and new, partially destructive express-methods of coating thickness definition in range 3–10 micrometers, based on use of pulse polarization. Besides the developing product will have ability to define galvanic alloys, which is a very important target of functional electroplating.

Complex characteristics let to use it in conditions of off-line operation in field environment (geological works, refining companies).

According to information from the “OOO LITPROM” and “OOO Komposit” companies, realizing different types of half-finished products including ones made from powder steels, at the South federal district’s territory there are more than 600 companies interested in purchasing of complexes of electrochemical analysis. That’s why “OOO LITPROM” is ready to realize over its channels in 2008–2009 30 such devices, and in 2009–2010 – 420 devices.

Interaction with investor

Investor’s share in the company – 20%; pay-back period – 3 years. Insurance arrangements – rights to share the intellectual property.