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Volume of investments required – \$ 3 500 thousand

Summary

1. **Production** – automated hi-tech electric drive of new type (mute-inductor electric drive) on the basis of modern equipment. The enterprise carries out a full cycle: development, manufacture, realization and service of all of some capacities MID working in various branches of manufacture.
2. **Trade marks** – an application for trade mark registration is submitted.
3. **Sales 2007** – \$ 540 ths.

Company Profile

Date of establishment – the Open Company "SAPPHIRE" was founded in 1991. The main task of the enterprise is development and manufacture of electro-technical production of industrial purpose, competitive in the Russian and foreign markets, in particular, low energy using equipment, including devices of smooth start-up of asynchronous electric motors, control systems for electric motors and industrial objects. For all the production released by Open Company "Sapphire" there are certificates of conformity.

The enterprise constantly works on widening the nomenclature of production.

Use CALS/PLM of technologies allows solving complex scientific-technical problems at the organization of processes of development, designing, manufacture and realization of production of the company.

Description and value of capital assets – \$550 ths. Machine tools, industrial equipment, industrial premises.

Previous rounds of investments – none.

Signs of public recognition – by the Decision 21 from 12/17/1992, the Constant commission on power and maintenance of rational use of fuel and power resources at the Rostov area administration, the low energy using products were noted by 1st premium of «RostovEnergо». In 1998 and 2005 the enterprise took part in governmental exhibitions and represented achievements of the Rostov area in Moscow. In 2006 it took part in the exhibition «ElectroPromExpo» Rostov-on-Don. It was awarded with the diploma of regional competition «Best goods of Don», Rostov-on-Don, 2007.

Number of employees – 17 persons.

Structure of ownership

| | |
|--|------|
| Natural persons | 100% |
| Aggregate share of government property | 0% |

Team

Sanin Vladimir Kirillovich – Director, 54 y.o. Higher education, specialty “Electric drive and automation of plants”. The diploma of the Institute of management and innovations aeronautical industries, specialty – “Information systems in management”, 2005, Rostov on Don.

Dudkin Inna Mihajlovna – Deputy Director on quality, 53 y.o. Higher education, specialty – "Radio engineering". the diploma of the Institute of management and innovations of the aviation industries, specialty – “Electronic technologies of economy”, 2002, Rostov-on-Don. The expert (auditor) SMK Associations on certification “the Russian Register”.

Petrushin Alexander Dmitrievich – Head of calculation of magnetic systems of mute-inductor electric motors. Dr. Tech. Sci. Graduated from the Rostov institute of railway transportation in 1981, specialty “Electric machines”.

Production

The modern electric drive represents constructive unity of the electromechanical converter of energy (engine), the power converter with a control system. It provides transformation of electric energy in mechanical according to algorithm of work of technological installation. The sphere of application of an electric drive in the industry, on transport and in a life constantly extends. Now already more than 60% of all electric energy produced in the world are consumed by electric motors. Hence, efficiency low energy using technologies is appreciably defined by efficiency of the electric drive. Development of high-efficiency, compact and economic systems of a drive is a priority direction of development of modern technical equipment. Growth of a degree of integration in microprocessor technical equipment and transition from microprocessors to microcontrollers with the built in set of specialized peripheral devices, significant successes of power electronics, have made irreversible the tendency of mass replacement of analog control systems drives on systems of direct digital management. The enterprise carries out a full cycle: development, manufacture, realization and service of all of some capacities MID working in various branches of manufacture and constantly works above expansion of the nomenclature of production.

Main advantages:

- simplicity of design and high reliability of the electric machine – absence of the mechanical switch-board (collector, brushes, windings) on the rotor;
- high adaptability to manufacture and low number of used materials;
- high speed due to small lag effect of the rotor and completely laminated ferromagnetic system stator and a rotor;
- accuracy of management of the moment;
- contact less, smooth, double way of regulation of frequency of rotation in a wide range more than 100 000 rev/min.

Current state

The volume of realized production for 8 months of current year has made \$443.2 ths. Works on application of mute-inductor electric drive for oil-extracting industry are conducted. It is developed documentation for batch production of mute-inductor electric drive of 1.1 kw – 22 kw power.

Development strategy

Use of funds

| | |
|--------------------------------|-----|
| 1. R&D | 6% |
| 2. Acquisition of fixed assets | 25% |
| 3. Marketing | 35% |
| 4. Turnaround means | 30% |
| 5. Another | 4% |

The investments received are directed on partial purchase of the special equipment, manufacturing of industrial equipment necessary for serial release mute-inductor electric drives of some capacities. Purchases of accessories and units, test beds. Creation of a marketing network.

Prospective outcome of investment

Creation of competitive automated hi-tech manufacture of electric drives of new type (mute-inductor electric drive) on the basis of modern equipment.

Creation of new low-energy using effective household equipment for population (vacuum cleaners, washing machines).

Marketing & Markets

Basic consumers – joint-stock company "Innovet" (Moscow); VolTEX (Volzhsky City, the Volgograd area); ON "Hero" (Vitebsk, Belarus); TURBOMASH (Moscow); Open Company NPO "SOYUS-A" (Kurgan City, the Water canal of the Rostov region); Open Company "Karbonlight" (Moscow); Joint-Stock Company the Volgograd factory of irrigating systems; Open Company "PC-ZTEO" (Naberezhnye Chelny) and others. Approx. volume of drives of various capacity is from 5 to 10 thousand pieces a year.

Creation of new types of modern equipment with mute-inductor electric drive use (automated complexes of water supply for the population, industrial automated systems of ventilation, centrifuges for biomedicine, industrial vacuum cleaners, engine-generator for hybrid motor vehicles, hydraulic boosters of a rudder of motor vehicles, electro mobiles).

Creation of new domestic commodity markets and production output to foreign markets. Our share should make 45% of the market and more.

Interaction with investor

Share of investor in the company – 35%. Value of the share on exit – \$ 10 500 ths.

Financial characteristics, \$ thousand

| Data | Facts | | | Forecast | Forecast with the investment required | | | |
|------------------|-------|-------|-------|----------|---------------------------------------|-------|-------|--------|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
| Sales | 345.0 | 419.0 | 540.0 | 590.0 | 1 560 | 3 870 | 9 350 | 15 600 |
| Operating income | 52.3 | 55.3 | 62.3 | 88.4 | 295 | 1 085 | 3 086 | 5 460 |