

"Aksel" Co. Ltd.

Zelenograd, Moscow

| | |
|--------------------------------|---|
| Owners: | 3 individuals with equal shares |
| Staff: | 10 permanent employees, 8 temporary employees |
| Previous financing: | \$ 160,000 internal funds |
| Current financing: | \$ 20,000, including internal funds of \$ 15,000, external funds of \$ 5,000 |
| Volume of investment required: | \$ 2,500,000 |

Intended use of the investments required: Acquisition of production areas, equipment and accessories - 40%; ISO 9000 certification - 1.5%; creation of the distribution network - 7.5%, patenting, including foreign countries - 3%; circulating assets - 25%; advertising - 9%; other - 14%

Company profile

"Scientific and Production Company "Aksel" Ltd. ("Aksel" Co. Ltd.) was established in 1991 by specialists coming from large-scale electronics enterprises. In 1991-93 the pilot technology of the flat thick-film heaters (FTFH) production was developed, the Russian Federation patent was received, the production department was set in operation, mass production of heaters started. In 1997 the household electro-heating fans assembly shop was set in operation, production of special application heaters was implemented; in 2001-2002 the design was developed and prototypes were manufactured of a series of household and industrial electro-heating devices, the patent on the electrical convector and the certificate on the utility model were received.

Area and directions of activity

Main fields of interests of the enterprise - electrical engineering and electronics.

The enterprise conducts business in the following directions:

- Development of materials, production technology and design of new FTFH types
- Pilot, small-scale and mass production and deliveries of metal-based and ceramic-based FTFH, production of household electro-heating fans and heating guns.

Products/Services/Technologies

Products:

- Metal-based and ceramic-based flat thick-film heating elements
- Discharger boards of ozone generators
- Household electro-heating fans, thermal curtains, thermal generators
- Thick-film ozone generating elements, working on effect of surface barrier discharge.

Services:

- Development and production of application-specific heating elements
- Designing, production and assembling of electrical air-heating systems for industrial, commercial, storage, etc. facilities of middle and large floor area.

Technologies: Usage of FTFH in household and industrial devices for air heating ensures absolute ecological safety due to low heater's temperature (lower than 250°C) - the device does not incinerate oxygen, does not change composition and humidity of heated air; reliability, durability and electrical safety.

Usage of FTFH for heating of liquid media allows achieving the power density up to 60 W/cm² that exceeds potentialities of tubular heaters significantly. FTFH-based running water heaters are practically non-inertial.

Achievements

The production shop of FTFH-based heaters has been established. One of the leading positions in the Russian FTFH-based heaters market has been gained. Production of household electric heating fans has been implemented that correspond to the best foreign analogs in respect of technical parameters and consumer quality.

The design has been developed and the prototype has been manufactured of the high-effective running water heater.

The enterprise was rewarded with the Diploma of the Organizing Committee of the II International Forum "High-Techs of Defense Industry" in 2001 as well as the Diploma and Medal of the Invention Exhibition in Paris in 2002.

Prospects of Development

The 15% share of the household heaters market in Russia will be gained by the third year of the project as well as the 8% share of the market of heaters for industrial, medical and special application; the company would enter the world market.

Financial expectations: 50% of earnings - from sales of household heaters, 30% - medical and automotive devices, 20% - industrial heaters.

During the first year the investments will be used for updating and expanding of capital assets including acquire of production areas for new production capacities development, for marketing research, for the comprehensive advertising campaign; for the staff expansion and PR & Marketing Network creation.

Sales volume (over the last 12 months): \$ 145,000

| year | Without investments requested | With the investments requested |
|------|-------------------------------|--------------------------------|
| 2002 | \$ 160,000 | \$ 180,000 |
| 2003 | \$ 200,000 | \$ 250,000 |
| 2004 | \$ 260,000 | \$ 2,000,000 |
| 2005 | \$ 300,000 | \$ 3,000,000 |