

Aspect-Conversion LTD

Volume of investments required: **\$ 500 thousand**

Intended use of investment required:

R&D (products with use of supersonic ejectors)	10%
Fixed assets acquisition (oil purification units)	50%
Products upgrade	10%
Marketing	10%
Working capital	10%
Other (serial production certification)	10%

Company profile:

1. Date of establishment - February 12, 2004
2. Stage of development - Start-up
3. Size and source of investments to date - \$ 20 th., company's own assets
4. Industry - power engineering, heat engineering
5. Target market - oil and gas sector, water treatment, household utilities, food industry
6. Sales in 2003 - None
7. Description and value of assets - None
8. Intellectual property rights - 2 RF patents for inventions (No. 2209350, 2208594), practicable model No.25504 and applications that have passed through formal expertise (No. 2004123235, 2004123234, 2004123233, 2003131614).
9. Signs of public recognition -Golden medal of the «Archimedes - 2004» Exposition, Moscow

Owners:

Three individuals **Equal shares**

Share of government property **0%**

Management and key personnel:

Naumova, Marina Vyacheslavovna - Director General.

Penzin, Roman Andreevich - Lead Specialist.

Kos, Alexander Vladimirovich - Lead Engineer

Products characteristics:

The products include the following: devices and technologies intensifying the processes in gas-liquid media. The main elements of the equipment are supersonic ejectors. To date, the company has mastered the manufacture of supersonic ejectors and promotes the following types of products:

1. Unit on the basis of supersonic ejectors designed for iron oxydation and industrial discharge neutralization.
2. Units for continuous purification of crude oil from hydrogen sulphide and other gases.

The following products are at the stage of development:

3. Small-size supersonic deareators for purification of water from oxygen and other gases (usage of steam is not required). The promotion of this development will permit to solve the problem of increase of the lifetime of pipelines in heat and water supply systems. The existing methods for solving this problem are not effective in regard to household utilities. The implementation of this product will allow to municipal structures to increase the lifetime of heat and water routes, that will provide for considerable savings at the stage of operation.

4. Unit for continuous purification of transformer oils from water and dissolved gases.

At the moment the unit is at the stage of serial sample updating. Spent transformer oil is an expensive product and its regeneration is economically expedient. The proposed unit permits to extract accumulated water.

Comparison of the water purification unit with analogues:

Characteristics	OOO "Aspect-Conversion"	"Geyser" company	NPO "National water resources"
Process of iron oxydation	No reactant	Catalytical	Catalytical
Process of regeneration	Not required	Reactant (treatment with potassium permanganate)	Reactant (treatment with potassium permanganate)
Allowed content of iron in initial water	Up to 40 mg/l	Up to 15 mg/l	Up to 15 mg/l
Allowed content of hydrogen sulphide at the entrance	Up to 15 mg/l	Up to 5 mg/l	Up to 5 mg/l
Flushing water discharge into sewerage	None	30-50% of water discharge	30-50% of water discharge

Comparison of the ejector method for oil purification from hydrogen sulphide with analogues:

Characteristics	Ejector method	OAO "Samaraneftegaz"	GUP VNIIS
Hydrogen sulphide extraction method	Vacuum-dynamic	Blowing	Oxydation
Capital costs	0,5 rub./t	7 rub./t	5 rub./t
Electric power costs	4 cop./t	6 cop./t	1 cop./t
Content of hydrogen sulphide at the entrance	Up to 5%	Up to 2%	Up to 2%
Net cost of purification	0.7 rub./t	6.4 rub./t	4.1 rub./t

Markets/Competition:

	Characteristics	Oil ejectors	Water purification units
2005	Region – Russia. Market capacity	\$ 300 thousand	\$ 30 000 thousand
	Market share of the company. \$ ths./%	300 /100%	\$ 300 / 1%
2008	Region – Russia. Market capacity	\$3000 thousand	\$ 30 000 thousand
	Market share of the company. \$ ths./%	3 000 тыс. / 100%	1 500 тыс. / 5%.

It is planned to promote the proposed products to the main Russian markets in 2005-2008, and, upon obtaining required certification in accordance with foreign standards and regulations, to foreign markets.

Water treatment (purification of water from iron and organic substances).

The main consumers of this type of products are cottage owners in Russia.

The unit of 2 cub.m/h is simple and economical in operation and assures highly effective purification of water from iron within one stage, without using any reactants. Technical specifications for serial manufacture of this product have been developed. The distribution of this product will be performed through regional representatives.

Oil treatment ejector (EN series)

It is planned to promote this product to the markets of Russia in 2004-2005. The testing of these ejectors at the site of a leading Russian oil company has demonstrated a unique efficiency of the proposed unit for purification of oil from hydrogen sulphide. It is planned to supply the product directly to large and medium-size oil companies, as well as companies that extract and process oil with high content of sulphure. Due to quite high efficiency of use of these ejectors in regard to solving this urgent problem it is supposed that it will be possible to apply pricing with high profitableness rate (over 300-400%) for this type of products.

The promotion of this product to the Middle East market is planned for 2005.