

## **SECTOR A: ELECTRICAL**

### **A-1: ELECTROSTATIC AIR FILTERS**

#### **1. TECHNOLOGY DESCRIPTION**

The products, single stage and two-stage electrostatic air filters for varying applications from room air purification to industrial particulate emission control (for small boilers or other small dust load applications) have been developed. These products are available for technology transfer with detailed know-how for manufacture and testing of products. The products have been developed indigenously and are in use for the past 18 years. The products use the electrostatic principle for catching the particulate. One of the electrodes is charged at a high voltage (12 KV), which ensures charging of the particulate, which are then collected on adjacent electrode, which is at ground potential.

#### **2. TECHNOLOGY STATUS**

The products have been in commercial use in industries for particulate emission control as well as for clean-room environment required in Hospitals, pharmaceutical manufacturing, electronic component manufacturing etc. The product manufacturing is a simple process although stringent quality control and testing procedures are to be adopted.

These products have substantial demand all over the world in all countries (developed, under-developed and developing), considering the upgradation of pollution norms every 2-3 years.

### 3. COMPANY PROFILE

Company Name		FILTER ON (I) PVT. LTD
Address		New Gitanjali, Flat No. 5 Plot No. 59, Ideal Colony Kothrud, Pune-411038 Telefax: +91-20-546 6231
Contact Person		Mr. Vijay D Ghorpade, Director
E-mail		<a href="mailto:filteron@pn2.vsnl.net.in">filteron@pn2.vsnl.net.in</a>
Web Site		<a href="http://www.filter-on.com">http://www.filter-on.com</a>
Year of Establishment	:	1983
Products manufactured	:	Two-stage Electrostatic Air Filters Clean Room Systems Industrial Air Filters
Installed Capacity	:	5,00,000 Cubic Meter per Hour (About 80 Nos. of Cleaning Equipment of different capacities)
Production (2000-01)	:	About 45 Nos. of Cleaning Equipment of different capacities
Sales Turnover (2000-01)	:	Rs. 100 Million [US \$ 2 Million]
Exports	:	Rs. 10 Million [US \$ 0.2 Million]
Conformity to standards	:	Indian Standard Specifications
Compliance to ISO	:	Yes
Foreign Collaboration	:	None
Manpower Total	:	18 Nos.
Raw Materials Used	:	CRCA steel sheets High voltage ceramic insulators Insulating material Enameled copper wire Electronic controller
Effluent generated	:	NIL

#### 4. BROAD PROFILE OF EXPECTED PROJECT

Project Features		
Project	:	To Manufacture Electrostatic Air Filters
Capacity	:	5,00,000 Cubic Meter per Hour (About 80 Nos. of Cleaning Equipment of different capacities)
Land Requirements	:	5000 Sq. Ft. [465 Sq. Mtr.]
Building Requirements	:	2500 Sq. Ft. [232 Sq. Mtr.]
Plant & Machinery and Test Equipment	:	Rs. 1.6 Million [US \$ 0.032 Million]
Electrical Installation	:	15 KVA
Implementation Period	:	6 – 9 Months
Manpower Required (Total)	:	20 Nos.
Raw Material Required	:	CRCA steel sheets High voltage ceramic insulators Insulating material Enameled copper wire Electronic controller

Financial Data		
Total Project Cost	:	Rs. 4 Million [US \$ 0.080 Million]
Expected Annual Sales	:	Rs. 80 Million [US \$ 1.60 Million]
Profitability / ROI	:	Net 15%

<b>Target Market</b>	<b>:</b>	<b>South Africa, Ukraine</b>
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#### SECTOR A: ELECTRICAL

## **A-2: POWER CAPACITORS (LT & HT)**

### **1 TECHNOLOGY DESCRIPTION**

The technology is for manufacturing LT and HT power capacitors. The capacitors are basically of 2 designs, self-healing type and non-self healing type. The self-healing type capacitors have metallized polypropylene film as the raw material whereas the non-self healing type designs have plain propylene film as the dielectric medium and aluminum foil as conducting medium, with non-PCB oil as the impregnant. The technology has been in commercial use for a long time. The technology shall include detailed designs, manufacturing process, in process quality control and final testing of the product.

### **2 TECHNOLOGY STATUS**

The capacitors manufactured with this technology have been in service and have performed very creditably in the field. The products are in very good demand and can be manufactured in conformity with international standards. The product usage is universal and the use of the product is mandatory in all the countries for the reduction of transmission and distribution losses.

### 3. COMPANY PROFILE

Company Name	SEVA ENGINEERING WORKS PVT. LTD.
Address	Regd. Office: P. Box no. 822, Deccan Gymkhana, Pune, 411004, Maharashtra, India Tel: +91-20-445 5344, 445 0363 Fax: +91-20-445 5344 / 553 1347  Works: -- Saswad 412301 Dist. Pune Maharashtra, India Tel: +91-21152-2451
Contact Person	Mr. V Y Thite, Director
E-mail	<a href="mailto:seva@prabodhancapacitors.com">seva@prabodhancapacitors.com</a>
Web Site	---
Year of Establishment	: 1985
Products manufactured	: Power Capacitors (LT & HT)
Year of Establishment	: 1985
Installed Capacity per annum	: 10,000 KVAR* per month
Production (2000-01)	: 8,500 KVAR per month
Sales Turnover (2000-01)	: Rs. 20 Million [US \$ 0.40 Million]
Exports	: ---
Conformity to standards	: Indian Standards Specifications
Compliance to ISO	: No

\* KVAR - Reactive Power

In power factor correction, the power factor (represented as "k") is the ratio of true power (KW-kilo watts) divided by reactive power (KVAR). The power factor value is between 0.0 and 1.00. If the power factor is above 0.8, the device is using power efficiently. A standard power supply has a power factor of 0.70-0.75, and a power supply with PFC has a power factor of 0.95-0.99.

PFC is not used solely for computer power supplies. In other industries, PFC equipment is used to reduce the reactive power produced by fluorescent and high bay lighting, arc furnaces, induction welders, and equipment that use electrical motors.

Foreign Collaboration	: None
Manpower Total	: 25

Tech. & Admin.	:	5
Raw Materials Used	:	Polypropylene film, PXE oil, aluminum foil, MPP film, CRCA sheets, insulators
Effluent generated	:	Not Significant

#### 4. BROAD PROFILE OF EXPECTED PROJECT

<b>Project Features</b>		
Project	:	To manufacture LT & HT power Capacitors
Capacity	:	10,000 KVAR per month
Land Requirements	:	10,000 Sq. Ft. [929 Sq. Mtr.]
Building Requirements	:	4,000 Sq. Ft. [372 Sq. Mtr.]
Plant & Machinery and Test Equipment	:	Rs.4.0 Million [US \$ 0.080 Million]
Electrical Installation	:	110 KVA
Implementation Period	:	9 to 12 Months
Manpower Required	:	25 Nos.
Raw Material Required	:	PP film, Aluminum Foil and PXE Oil to be imported

<b>Financial Data</b>		
Total Project Cost	:	Rs. 9.0 Million [US \$ 0.18 Million]
Expected Annual Sales	:	Rs. 20 Million [US \$ 0.40 Million]
Profitability (Net Profit)	:	10% to 15%

<b>Target Market</b>	:	<b>South Africa, CIS Countries</b>
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### SECTOR A: ELECTRICAL

#### A-3: TRANSFORMERS (POWER & DISTRIBUTION)

#### 1. TECHNOLOGY DESCRIPTION

The technology is for manufacturing power and distribution transformers required in transmission and distribution of electrical power. The technology is for detailed designs, manufacturing process, quality control and testing. The technology is universal and the manufacturing process includes winding of LT / HT coils out of copper / aluminum enameled conductors, assembly of core stamping, placing in steel tanks and filling oil under vacuum. The technology has been fully developed and has been in commercial use for the last 30 years.

## **2. TECHNOLOGY STATUS**

The transformers manufactured with this technology have been in use in the electrical installations all over the country and have performed very well. The product is used necessarily for transmission and distribution of electrical power in all parts of the world and shall have continuous demand in the coming decades. The available technology can also be used for repairs of existing transformers.

### 3. COMPANY PROFILE

Company Name		MAHATI ELECTRICS
Address		32/33, Shankersheth Road, Behind ST Workshop, Pune 411037 Maharashtra (India) Tel: +91-20-444 9486 / 444 3127 Fax: +91-20-444 0776 / 444 3847
Contact Person		Mr. Shreyans Shah, Managing Director
E-mail		<a href="mailto:mahati@giaspn01.vsnl.net.in">mahati@giaspn01.vsnl.net.in</a>
Web Site		Not Available
Year of Establishment	:	1970
Products manufactured	:	Transformers (Power & Distribution), Load Banks, Control Panels
Installed Capacity per annum	:	100 units per annum
Production (2000-01)	:	60 units
Sales Turnover (2000-01)	:	Rs. 80.00 Million [US \$ 1.60 Million]
Exports	:	---
Conformity to standards	:	Indian standards
Compliance to ISO	:	No
Foreign Collaboration	:	None
Manpower Total	:	400 Nos.
Tech. & Admin.	:	50 Nos.
Raw Materials Used	:	Copper and Aluminum winding wires, Stampings, CRCA Sheets, Mild Steel.
Effluent generated	:	Nil



#### 4. BROAD PROFILE OF EXPECTED PROJECT

<b>Project Features</b>	
Project	: To manufacture Power and Distribution Transformers
Capacity	: 50 units per annum
Land Requirements	: 100,000 Sq. Ft. [9290 Sq. Mtr.]
Building Requirements	: 40,000 Sq. Ft. [3720 Sq. Mtr.]
Plant & Machinery and Test Equipment	: Rs. 4.0 Million [US \$ 0.080 Million]
Electrical Installation	: 200 KVA
Implementation Period	: 9-12 Months
Manpower Total	: 75 Nos.
Raw Materials Required	: Copper and Aluminum winding wires, Stampings, CRCA Sheets, Mild Steel.

<b>Financial Data</b>	
Total Project Cost	: Rs. 9.50 Million [US \$ 0.19 Million]
Expected Annual Sales	: Rs. 40.00 Million [US \$ 0.80 Million]
Profitability	: 15 % Net Profit

<b>Target Market</b>	: <b>South Africa, CIS Countries</b>
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