



Shriram Vinyl & Chemical Industries Kota

i. Unit Profile

Shriram Vinyl & Chemical Industries (SVCI) established in the year 1963 is situated at Kota in state of Rajasthan, in the North - western part of India.

SVCI is a part of DSCL, a Rs. 1900 crore + diversified business group based in North India.

DSCL business interests comprises of:

- ⇒ Agri-Business (Urea fertilizer, Sugar, Farm inputs marketing such as DAP, Pesticides, Seeds, Agri retailing - Haryali Kisan Bazaar)
- ⇒ Plastics (PVC and PVC compounds)
- ⇒ Chemicals (Chlor-Alkali)
- ⇒ DSCL Building Products (Fenesta door and window profiles)

Other businesses include Cement, Textiles and Energy Services.

Founded by Sir Shriram in 1889 (as DCM limited), today DSCL (which spun of as a separate company in 1990) is managed by Mr. Ajay S. Shriram, Chairman and Senior Managing Director and Mr. Vikram S. Shriram, Vice Chairman and Managing Director along with a highly professional executive team.

DSCL has a strong brand equity reflective of credibility, ethical values and consistent high quality product image. With over 30 years of experience in managing large scale process industries with sustained high level of performance, DSCL meets the needs of a wide range of customers from farmers to industrial users, from house builders to business owners. Fostering enduring relationships is at the core of DSCL's business philosophy - with vendors, business partners, and customers and within the organization between employees.

In year 2004-05, for improving the performance in terms of energy consumption & environment we have completed the conversion project. Since 22nd March'05 we are operating membrane based plant.

It is to be noted that we are the "FIRST INDIAN" plant for completing the conversion after CREP recommendation.

We have obtained the technology from M/s. Asahi Kesai Japan. Our Electrolysers are based on **Natural Circulation. These type of electrolysers have been installed First time in India,**

Natural circulation has superiority in terms of power consumption, simplicity over the conventional forced circulation electrolysers.



Picture: Electrolyser area

For **continual improvement** in quality, environment & safety following systems are in place:

- ☞ **ISO 9001 –2000**: To consistently meet customer expectations and enhance customer satisfaction.
- ☞ **ISO-14001**: To continue to remain an Environmentally responsible entity.
- ☞ **OHSAS 18001**: For continual improvement in Occupational Health & Safety.
- ☞ **TPM (Total Productive Maintenance)** to build a comprehensive productive management system for entire life span of the equipment.

☞ **British Safety Council - Five Star Rating**

Latest initiative of aligning our safety management system with British Safety Council guidelines and ultimately qualify for Five Star Rating.

ii. **Energy Consumption**

Chlor Alkali plant is an energy intensive plant. The AC Power is converted to DC power by rectifiers & DC power is used for electrolysis. During electrolysis apart from the main product Caustic soda lye, Chlorine & Hydrogen are also generated as co-product. Part of the main product caustic soda lye is being converted to Caustic soda flakes as per the market demand.

For converting the caustic soda lye into flakes, SVCI has a fusion plant of capacity 45 TPD. Combination of Furnace oil & Hydrogen is used for heating & converting 47.5 % of Caustic soda lye to flakes (~ 98 % un- hydrous NaOH). Heating of lye is carried out in six furnaces in series of six Nickel pots by indirect heating of pots by burning Hydrogen & Furnace oil.

In year 2004 - 2005 the unit consumed 1349 lakh KWH of electricity. The cost of consumed electricity is 35 Rs. crores.

iii. Energy Conservation Commitment Policy and Set up

Continual improvement in Energy Management is a key component of our strategy to improve cost competitiveness of our products and their long-term profitability.

We are committed for benchmarking our energy utilisation techniques with best practices, adopting modern techniques, retrofitting with high efficiency equipment and seeking cooperation from external agencies to reduce our energy consumption.

The plant has an energy conservation committee headed by Vice President (Chlor Alkali). This committee comprises of 10 (Ten) engineers looking after various sections. They interact on regular basis to discuss various EC steps and implement. In addition to EC each person, in the plant, is well aware and actively participating for energy conservation and cost reduction.

Similar committees have been informed in other units of the company. The review of EC performance is done on regular basis.

Plant also has an attractive "SUGGESTION SCHEME" in place to motivate employees towards betterment / improvement of the system, energy conservation, cost reduction etc. Suggestions received from workmen, supervisors, shift engineers, are registered, evaluated & implemented subsequently.

The scheme generally covers all types of suggestions, which will benefit the organization.

More specifically scheme covers suggestion of following aspects: **Safety, Energy Conservation, Cost reduction, Quality improvement, Work Simplification** etc.

Cash rewards in kind ranging from Rs. 300/- to Rs. 20,000/- will be given to each accepted suggestion. In addition, there is a token reward of Rs. 50/- to all eligible employees for filing a suggestion.

iv. Energy Conservation achievement

In year 2004-05, we have completed the conversion project for improving the performance in terms of energy consumption & environment.

This was the biggest achievement for year 2004-05.

v. Energy conservation plans and targets

We are committed for continual improvement in energy consumption & efficiency.

After the switch over from mercury based plant to membrane based plant, we have now planned to execute the following measures

- Installation of voltage monitoring system – For better operational control & monitoring.
- Instillation of high efficiency cell units.

- Installation of new membranes having more residence to iodine.

vi. Environment and Safety

Being an **ISO-14001 & OHSAS 18001** certified company; **adoption of cleaner technology has always received strong emphasis at our complex.**

In year 2004-05 to strengthen safety of work place, Health and safety management, complex was aligned to the requirements of **British Safety Councils Safety management System.**

This programme took continuous efforts on all fronts including rigorous training and change in mind sets of the people. **The complex was audited by a British auditor and finally it was awarded Five Star rating.**