

Siel Limited Rajpura

Siel Limited emerged as an independent entity in 1989 out of the erstwhile DCM Group. DCM Group was set up by Sir Shriram, Grandfather of the present Chairman – Mr. Siddharth Shriram. It started with a Textile Mill in Delhi and grew into one of India's largest Organisations in the private sector having manufacturing units for Textiles, Sugar, Electronics, Chemicals, Fertilisers, Plastics and Engineering Products at various locations in the country.

In 1989, arising out of a family settlement, DCM Limited was split into four companies one of which was Siel Limited. Thereafter, consequent to the re-organisation of Siel Limited and in pursuance to the scheme of arrangement the sugar business has been hived off into a separate entity as Mawana Sugars Limited.

Businesses of Siel Limited are as under:

Chemicals

Caustic Soda (Flakes & Lye), Liquid Chlorine, Hydrochloric Acid, Sodium Hypochlorite, Hydrogen and export oriented product - Stable Bleaching Power, STB - Decontaminant for military use

Vanaspati & Vegetable Oils

Brand leaders in the Hydrogenated Vegetable Oils and Refined Oils. The brand names are Panghat in Vanaspati and Ruby, Sunbeam, Cornola, Kohinoor in Refined Oils segment.

Siel has a sales turnover of approximately INR 220 crores (as on March 2005)

Siel Chemical Complex

(A unit of Siel Ltd.)

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Siel Chemical Complex (SCC) is one of the leading Chlor Alkali manufacturer in North India. The products are Caustic Soda (Flakes & Lye), Hydrochloric Acid, Stable Bleaching Power, Sodium Hypochlorite, Hydrogen and Liquid Chlorine. The manufacturing process is based on the environment friendly Membrane Cell Technology. The technology involved consist of fine control of all process parameters with world's most sophisticated Distributed Control System (DCS). Safe operation is an integral part of the DCS.

All the products manufactured, conform to BIS standards. The organization is ISO 9001-2000 certified for the manufacture of Stable Bleaching Powder.

SUBSIDIARY / ASSOCIATE COMPANIES

Mawana Sugars Limited

Units / Businesses

Mawana Sugar Works, Mawana (Uttar Pradesh)

Mawana Sugar Works (MSW) is located at Mawana, District Meerut, Uttar Pradesh on Meerut-Hastinapur Road. It is about 25 kms away from Meerut. The capacity of this Unit is 10,000 TCD. MSW is an ISO 9001:2000 company.

Titawi Sugar Complex, Titawi (Uttar Pradesh)

Titawi Sugar Complex is located at Titawi, District Muzaffarnagar, Uttar Pradesh on Muzaffarnagar – Shamli Road. It is about 15 kms from Muzaffarnagar. The capacity of this Unit is 5000 TCD with Double Suphitation (DS) process.

Joint Venture Companies in India :

Honda Siel Power Products Ltd.

This is a joint venture with Honda Motor Company, Japan for the manufacture of Portable Generating Sets, Water Pumps and other Power Products. The company is a market leader in India and has significant export business. The manufacturing unit is located at Rudrapur and Greater Noida (Uttar Pradesh).

Honda Siel Cars India Limited

This is a joint venture with Honda Motor Company, Japan for the manufacture of cars in India. The company has a significant market share in premium car segment in India. The manufacturing unit is located at Greater Noida (Uttar Pradesh).

Daikin Shriram Air-conditioning Private Limited

This is a joint venture with Daikin Industries Limited, Japan for manufacture and distribution of Air-conditioners in India.

CERA Tizit

This is a joint venture with Plansee Tizit GmbH of Austria for the manufacture of their latest range of Tungsten Carbide cutting tools and inserts in India. The manufacturing unit is located at Kolkata.

Subsidiary Companies in India

The Jay Engineering Works Ltd.

It has manufacturing facilities at Kolkata & Hyderabad for Electric Fans and Fuel Injection Equipment (This is to be shortly spun off into a separate company). The company is the major supplier of Usha International Limited.

Group Company

Siel Industrial Estate Limited

This company has acquired about 267 hectares of land in the State of Punjab to set up a modern Industrial Estate.

Usha International Limited

In addition to marketing the products of The Jay Engineering Works Limited (a subsidiary of Siel Limited), it also markets a wide range of household appliances, Sewing Machines, Diesel Engines, Generating Sets, Pistons, Pins & Rings, Single Cylinder Pumps, Components of Fuel Injection Equipment and other Automotive Products.

THE SOCIAL FACE OF Siel

A business unit doesn't exist to generate surplus alone, rather it is a constituent of the composite social structures and systems and as a responsible member of the society it is incumbent upon the business organizations to relate with the society as a whole and the surrounding community in particular by working for their betterment and welfare.

At Siel it is our continuous endeavour to evolve and initiate activities for the development and betterment of the surrounding community and several programs have been initiated to achieve this noble goal.

To promote the cultural heritage of our nation we had organized Dance and Drama 'RAM' shows by the internationally renowned troupe, SBKK, for the local community. A number of health check up camps and sports activities have been organized for the surrounding villages. School children are being regularly invited to our organization on occasions such as World Environment Day to promote environmental awareness through activities like tree plantations, painting competitions, debates and discussions etc. Extending our initiatives further, we have also adopted a linear stretch of land in the Rajpura city and worked on improving its aesthetic look by way of plantation and beautification.

We at Siel, as a responsible corporate citizen, fervently believe that such interface with the community is a continuous process and it shall continue to evolve in the times to come.

PRODUCTS

CAUSTIC SODA LYE

Physical Characteristics

Clear non-turbid liquid. Free from suspended particles.

Specifications

S. No.	Particulars	Specifications
1	Hydroxides as NaOH	47.5% +/- 0.5% w/w
2	Carbonates as Na ₂ CO ₃	0.4% Maximum w/w
3	Chlorides as NaCl	0.01% Maximum w/w
4	Sulphates as Na ₂ SO ₄	0.004% Maximum w/w

5	Iron as Fe ⁺³	2.0 ppm Maximum
6	Appearance	Clear non-turbid liquid

Packaging

Road Tankers

Applications

Used in soap, textile rayon, pulp and paper industries, petroleum refining, detergents and reclaiming rubber.

CAUSTIC SODA FLAKES

General Characteristics

Dry, crystalline, white flakes, free from hard lumps & impurities

Specifications

S. No.	Particulars	Specifications							
		Rayon Grade -1				Rayon Grade - 2			
		On basis	recd.	On basis	dry	On basis	recd.	On basis	dry
1	Hydroxides as NaOH w/w (min)	98.00%.		99.50%		96.00%		98.50%	
2	Carbonates as Na ₂ CO ₃ w/w (max)	0.40 %		0.40 %		1.20%		1.20%	
3	Chlorides as NaCl w/w (max)	0.02%		0.02%		0.10%		0.10%	
4	Sulphates as Na ₂ SO ₄ w/w (max)	0.004%		0.004%		0.10%		0.10%	
5	Iron as Fe ⁺³ in ppm (max.)	5.0		5.0		20.0		20.0	
6	Nickel as Ni in ppm (max.)	3.0		3.0		20.0		20.0	
7	Moisture as H ₂ O w/w (max.)	1.5%		-----		2.5 %		----	

Packaging

50 kg / 25 kg HDPE bags with LDPE Liner

Applications

Caustic Soda Flakes is used for preparation of chemicals, soap, dyes, detergents and sodium compounds, in oil and gas refining, textiles, rayon and paper industries.

STABLE BLEACHING POWDER (Export Grade, I.S.I. Grade – 1 & Grade - 2)

Physical Characteristics

Dry & Free flowing white/light yellow powder, free from hard lumps.

Specifications

S. No.	Particulars	Specifications			
		Export Grade	Grade-1 (Pulverised Quality)	Grade-1	Grade-2
1	Available Chlorine (%) Min.	35.0	34.5	34.5	33.7
2	Stability (th) max. (After heating at 100 +/- 2 oc for 2 hours)	1/15	1/15	1/15	1/11
3	Moisture (%) max.	0.3	0.3	0.3	0.5
4	Particle size (%) Min. <ul style="list-style-type: none"> • Passing through 10 mesh B.S.S. • Passing through 100 mesh B.S.S. 	99.5 --	99.8 90.0	99.5 70.0	99.0 --

Packaging

In bags and drums with double inner liner (25Kg HDPE bags / 50Kg GI Drum / 50Kg HDPE Drum / 25Kg HDPE Drum / as per pack size requirement by the buyer)

Applications

SBP is used for bleaching, whitening, sterilisation, disinfection and environmental hygiene. The use of SHRIRAM SBP are in the field of water purification, disinfection of swimming pools, control of epidemics, sanitation and general hygiene, aquaculture and shrimp culture, sewage disposal and industrial uses, viz. Carpet Industry, Textile Industry, Paper Industry, Soft drink bottling / Food Industry, Leather Industry, Manufacture of sodium silicate, Sugar Mill, Industrial effluent containing cyanides etc.

LIQUID CHLORINE

Physical Characteristics

Clear, Yellow liquid

Specifications

S. No	Particulars	Specifications
1	When vapourised chlorine as Cl ₂	99.9% Minimum w/w
2	Residue on vapourisation over a clear tile	No residue
3	Appearance	Clear Yellow liquid
4	Moisture	20 ppm Maximum

Packaging

Tonnors and Cylinders

Applications

Chlorine is used as chlorinating agent in organic and inorganic synthesis; used in textile, pulp and

paper industries; also in preparation of pesticides, herbicides, refrigerants and propellants and water treatment.

BLEACH LIQUOR

Physical Characteristics

Clear liquid, Colour yellowish to light green

Specifications

S. No.	Particulars	Grade-1	Special Grade
1	Available Chlorine	90gpl - 100gpl	101gpl - 115gpl
2	Free Alkali as NaOH	12gpl - 20gpl	21gpl - 35gpl

Packaging

MSRL Road Tankers

Applications

Bleach Liquor is a carrier of chlorine. Solution is alkaline and is used for bleaching, whitening, sterilization, disinfection and environmental hygiene.

HYDROCHLORIC ACID

Physical Characteristics

Colorless to light yellow fuming liquid.

Specifications

S. No	Parameters	Specifications
1	Acidity as HCl	30 % - 33 % w/w.
2	Free Chlorine as Cl ₂	20 ppm Maximum
3	Iron as Fe ⁺³	2 ppm Maximum
4	Mercury as Hg ⁺²	N.T.
5	Heavy metals as Pb ⁺²	N.T.
6	Appearance	Colorless to light yellow fuming liquid


Packaging

MSRL Road tankers.

Applications


Hydrochloric Acid is used in the dyes, starch, glucose, gelatins, steel galvanising, paper, leather and glass industries.

Major Energy Conservation Projects Implemented During The Year 04-05

1.Replacement of main DM water pump (P-5102A) with correct size pump and motor.		
Total investment	Rs. 0.45 Lacs	
Initial power required	30.0 KW	
Final power required	15.34 KW	
Power saved	14.66 KW	
Amount saved per annum @Rs 3.75 /Kwh	Rs. 471000	
Pay back period	1.15 Month	

2.Replacement of hydrogen pit pump (P-2708 A) with correct size submersible pump.		
Total investment	Rs. 0.20 Lacs	
Initial power required	21.40 KW	
Final power required	8.57 KW	
Power saved	12.83 KW	
Amount saved per annum @Rs 3.75/kwh	Rs. 412000	
Pay back period	0.58 Month	

3. Return water pump of rectifier equipped with 50 HP motor was replaced with 30 HP motor.

Total investment	Rs. 0.45 Lacs	
Initial power required	33.60 KW	
Final power required	24.44 KW	
Power saved	9.16 KW	
Amount saved per annum @Rs 3.75/kwh	Rs. 294000	
Pay back period	1.83 Month	


4. Stoppage of one chilled water supply system.

Total investment	Rs 0.20 lacs	
Initial power required		
Final power required		
Power saved	20.16 KW	
Amount saved per annum @Rs 3.75/kwh	Rs. 363000	
Pay back period	0.66 Month	


5.Replacement of BC feed water pump (P5605-A) with correct size pump and motor.

Total investment	Rs 1.2 lacs	
Initial power required	48.90 KW	
Final power required	32.40 KW	
Power saved	16.50 KW	
Amount saved per annum @Rs 3.75/kwh	Rs. 530000	
Pay back period	2.71 Month	

6. Replacement of cooling tower feed pump (P 5605-A) at evaporator house with correct size pump and motor.

Total investment	Rs 0.60 lacs	
Initial power required	57.43 KW	
Final power required	20.78 KW	
Power saved	36.65 KW	
Amount saved per annum @Rs 3.75/kwh	Rs. 1178000	
Pay back period	0.61 Month	


7. Replacement of chilled water circulation pump P-5501A) with correct size pump and motor.

Total investment	Rs 0.50 lacs	
Initial power required	45.80 KW	
Final power required	27.48 KW	
Power saved	18.32 KW	
Amount saved per annum @Rs 3.75/kwh	Rs. 589000	
Pay back period	1 Month	

8. One of water supply pump (P5612-A) was replaced with correct size pump and motor.

Total investment	Rs 1.0 lacs	
Initial power required	35.43 KW	
Final power required	52.05 KW	
Power saved	10.38 KW	
Amount saved per annum @Rs 3.75/kwh	Rs. 334000	
Pay back period	3.60 Months	

9.Replacement of ETP pump (P535-A) with correct size pump and motor.

Total investment	Rs. 0.40 Lacs	
Initial power required	8.55 KW	
Final power required	6.10 KW	
Power saved	2.45 KW	
Amount saved per annum @Rs 3.75/kwh	Rs. 78000	
Pay back period	6 Months	