

JINDAL STAINLESS LIMITED

(Cold Rolling Division)

Hissar (Haryana)

Unit Profile

Jindal Stainless Limited is the ISO 9001:2000, ISO 14001:1996 and OHSAS 18001:1999 certified Flagship Company of the \$ 2.0 billion Jindal Organization. It is the largest integrated manufacturer of international quality steel flat products in India.

The Group

Jindal Organization, set up in 1970 has grown from an indigenous single-unit steel plant in Hisar, Haryana to the present multi-billion, multi-national and multi-product steel conglomerate. The organization is still expanding, integrating, amalgamating and growing.

The group places its commitment to sustainable development, of its people and the communities in which it operates, at the heart of its strategy and aspires to be a benchmark for players in the industry the world over. The Jindal Organization today is a global player. It's relentless quest for excellence has reaped rich benefits and it is today one of the worlds most admired and respected groups within the steel fraternity.

Jindal Stainless, a \$780 million plus ISO: 9002 & ISO: 14001 company is the flagship company of the Jindal Organization. The company today has come a long way from a single factory establishment, started in 1970. As the numero uno it has taken on the task of making stainless steel a part of everybody's life by taking a 360 degrees approach from production of raw materials to supply of architecture and lifestyle related products.

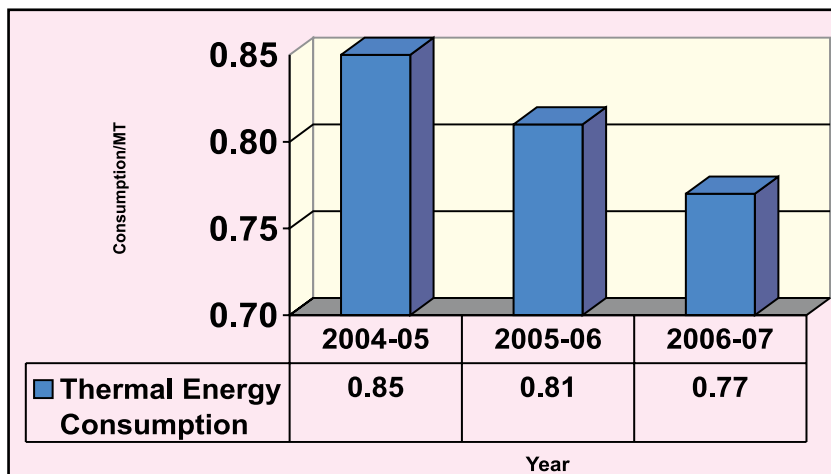
Hisar Plant, India

- At Hisar, Jindal Stainless has India's only composite stainless steel plant for the manufacture of Stainless Steel Slabs, Blooms, Hot rolled and Cold Rolled Coils, 40% of which are exported worldwide.
- **Precision Strips**
The company produces stainless steel precision strips in various grades. These strips are produced in narrow 20-Hi mills in the precision cold rolling unit.
- **Blade Steel**
The Company is the exclusive producer of stainless steel strips for making razor and surgical blades in India.
- **Coin Blanks**
Besides supplying CR Strips to the Government of India, the plant at Hisar houses a coin blanking line for supply of coin blanks to the Indian Mint and Mints in the global markets

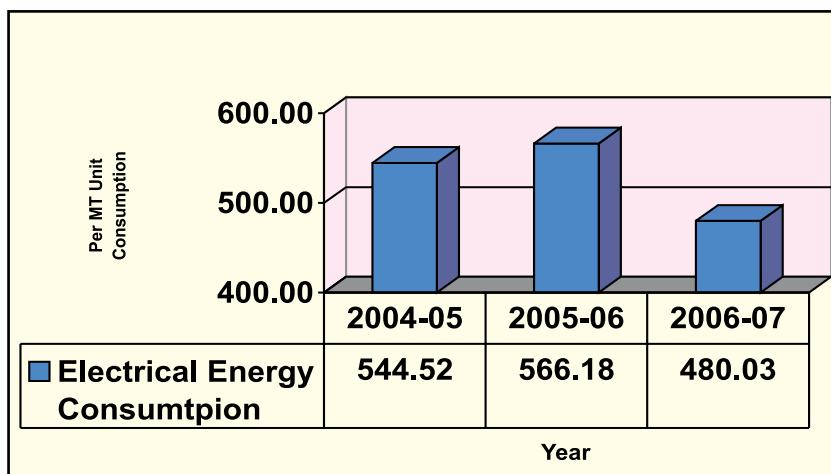
Energy Consumption

Description	Unit	2004-05	2005-06	2006-07
Cold Rolled Strips (Production)	MT	69097	89731	108517
Total Elect. Energy Consumption	Lakhs kWh	399.11	538.53	522.46
Money Value	Rs Lakhs	1420.85	2283.67	2789.94
Specific Elect. Energy Consumption	kWh / Ton	544.52	566.18	480.03
Total Thermal Energy Consumption	M Kcal	58.56	72.24	84.23
Specific Thermal Energy Consumption	M Kcal / Ton	0.85	0.81	0.77
Total Manufacturing Cost / ton	Lakhs Rs / Ton	0.115	0.125	0.125
Energy Cost / Total Manufacturing Cost	%	30.63	35.65	36.13

Specific Thermal Energy Consumption



Electrical Energy Consumption



Energy Conservation Commitment

Energy Conservation Policy



JINDAL STAINLESS LTD., HISAR.
(AN ISO 9001 & 14001 CERTIFIED COMPANY)

ENERGY POLICY

We, at Jindal Stainless Ltd. Hisar, are committed to continuously improve the specific energy consumption against the benchmarking with the best in business.

To meet this goal, we will strive for:

- Energy efficient production and processing of steel and sustain continuous reduction in energy consumption year after year.
- Involvement of employees for energy conservation through awareness and recognition.
- Conserve and optimally utilize raw materials as: petroleum fuels and by products, steam, power, compressed air, water and other resources.
- Establishing and maintaining a energy management information system designed to support managerial decision making.

This can be achieved through dedicated team work, participation and commitment from all employees.

Date
27/08/2006


(Joint Managing Director)

Energy Conservation Achievements

Jindal Stainless Ltd (CR Division), has taken the various aspects of Energy Conservation very seriously. Many energy conservation Projects have been implemented and many more ideas are being considered for implementation.

The company is committed to achieve Energy Conservation by providing necessary knowledge and exposure to our employees & in the process has arranged various training programs.

JSL has regularly upgraded its technology & is constantly striving to adopt practices & processes that preclude undesirable impact on energy Conservation aspects.

SN	Description of proposal	Annual Savings (Rs. Lakhs)	FY	Actual Annual saving (Rs. Lakhs)
1	Down size the cooling water pump for DM water cooling and avoid valve operation	10	2005	16.35
2	Down size the dirty oil pump & avoid valve throttling in CRD1	10.8	2005	9.50
3	Modify the cooling water system for Z – 3 mill and avoid the operation of the hot well pumps	20	2005	25.06
4	Downsize the cooling water pump of Z-3 Mill and avoid valve control	54	2005	68.00
5	Optimise the combustion efficiency of AP - 2	3.9	2005	52.82
6	Minimize compressed air leakages in plant by rigorous maintenance	46	2005	47.31
7	Optimize the combustion Efficiency of the Furnace at AP3.	54	2005	54.00
8	Optimize the heat recovery of the recuperator in AP3	9.8	2005	9.78
9	Install Bell Mouth to the combustion air fan	3.3	2005	1.00
10	Replace cooling water pumps with correct size pumps	5.4	2005	40.24
11	Stop the operation of mill motor cooling ventilation fan	4.3	2005	1.53
12	Optimise lighting voltage at 205 – 210 V	2.2	2005	8.84
13	Remove voltage unbalance from Z-3 mill MCC and improve motor efficiency	11.4	2005	11.40
14	Optimize voltages in identified transformers and improve efficiency of motors	12	2005	13.16
15	Switch off DC motor blowers when DC motors are off by providing interlock	12.7	2005	0.57
16	Provide power factor correction capacitors at compressor motor terminal	3.6	2005	17.31
17	Replace 40 W fluorescent lamps with 28 W T5 lamps	5.3	2005	4.81
18	Optimise generation Pressure of compressed air	27.91	2007	15
19	Installation of wind Ventilators in place of exhaust fans in the plant	11.88	2007	6.97
20	Utilization of waste energy at Denox AP-3	156.45	2007	40.3
21	Installation of VFD on Hyd pump ST-4	1.52	2007	3.5
22	Installation of VFD on Hyd pump SPM	0.95	2007	3.5

Energy Conservation Plans and Targets

S.#	Project Description	Savings (Rs Lakhs)	FY	Investment (Rs Lakhs)
1	V/F Drive on Spray pmp of Z-2 Mill.(132 KW)	1.408	2007-08	6
2	V/F Drive on Motor Blower of Z-2 Mill.(30 Kw X 2)	0.528	2007-08	2.5
3	V/F Drive on Spray pmp of Z-1 Mill.(37 Kw)	0.616	2007-08	1.5
4	V/F Drive on AP-2 Quench Fan (90 Kw)	1.232	2007-08	2
5	V/F Drive on Z-3 Fume Exhaust blower (110 Kw)	1.408	2007-08	2.5
6	Energy Awareness Programmes	0	2007-08	5
7	Energy Audit	0	2007-08	2.5

Environment and Safety

- JSL, Hisar, since its inception has been very conscientious about maintaining Healthy, Safe & Pollution free work environment. It has always recognized the need to ensure healthy & clean environment to care of the employees & surrounding community, which is reflected, in its Environment, Occupational Health & Safety and Quality Policy. A well-defined World Class system on Environment Management System ISO-14001, Occupational Health and Safety OHSAS-18001 and Quality Management System ISO-9001 are in place.
- The plant is committed to achieve world class EHS excellence by providing pollution free, healthy & safe working environment to our employees & in the process has attained global standards of EHS practices. To achieve the current status Jindal Stainless Limited has regularly upgraded its technology & is constantly striving to adopt practices & processes that preclude undesirable impact on environmental and OH&S aspects.