

First Prize

Plastics

NILKAMAL LIMITED Valudavoor (Pondicherry)

Unit Profile

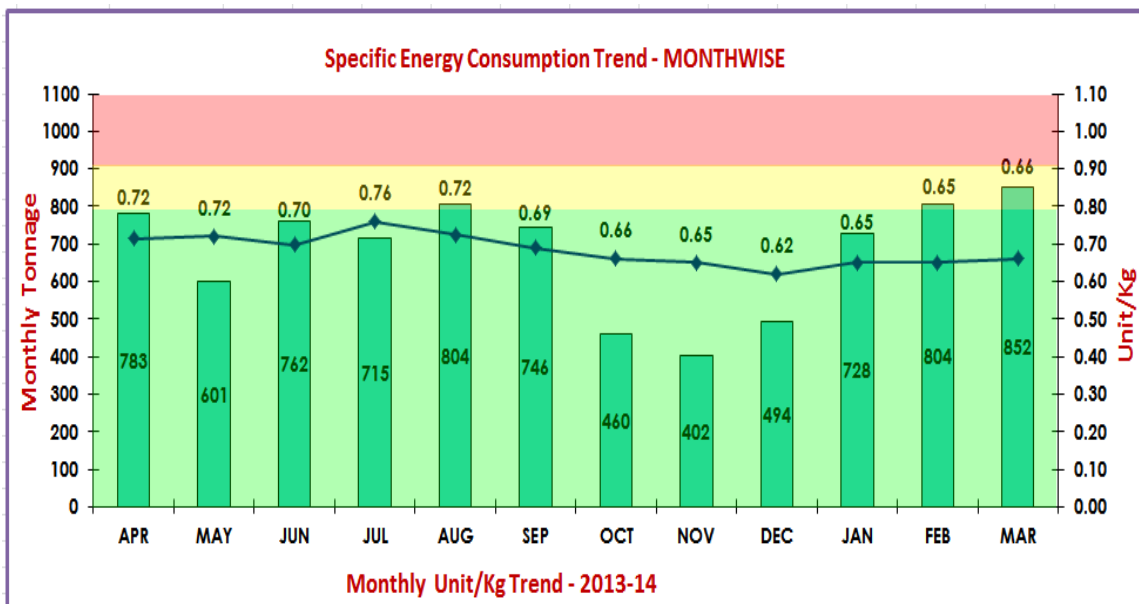
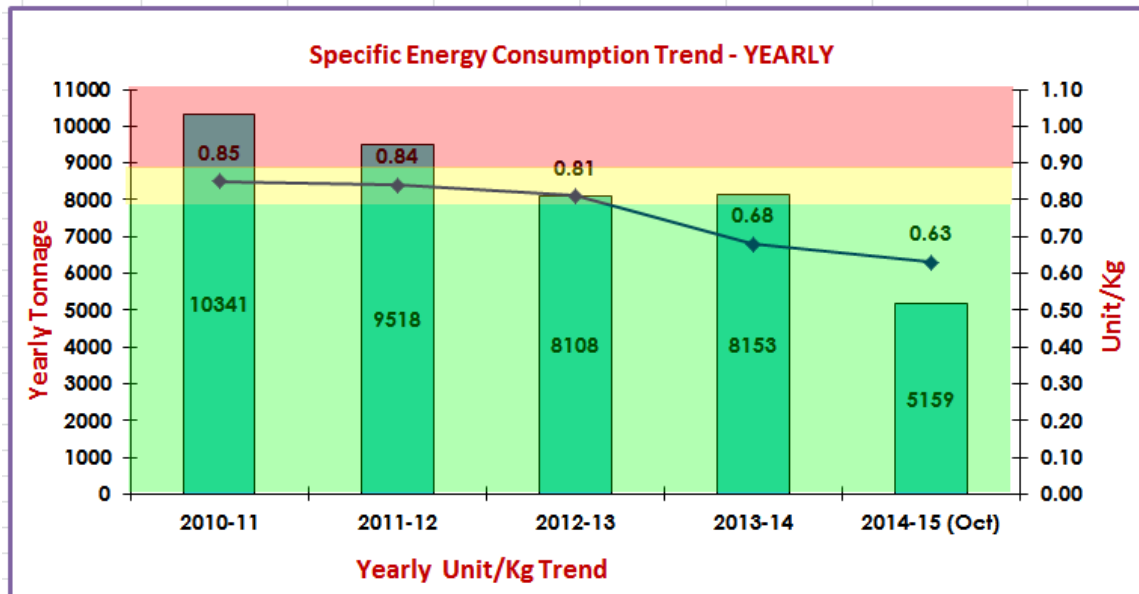
Nilkamal Limited is Asia's largest plastic processor of moulded products. It is also world's largest manufacturer of moulded furniture. The Furniture product range comprises Plastic Furniture, Material Handling Crates and Bins, Baby Table, Center Table, Dining Table, Planter, Rack, Stool, Industrial Pallets, Waste Bins, Insulated Crates etc.

Group Production capacity is 75000 Ton/Annum, Comprising of Furniture and crates, where Pondy plant has contributed for 8153 tons plastic, converted with the capacity utilization of 90 %. The Pondy unit's annual sale turnover was Rs. 204 crores in last year 2013-14.



Specific Energy Consumption

The decline in SEC is observed in following graph -




Energy Conservation Measures Taken

The unit has implemented many energy saving projects during 2013-14. Annual savings of Rs. 57 Lakh was achieved with an investment of Rs. 18 Lakh with payback period of within 5 months.

1. Unit/kg reduction by Mould Machine Matrix in PIPMD 03-MIR-1050 M/c and 08Magna-665 M/c
2. VFD Installation for IMD Machines
3. Process Optimisation By CT Reduction for 4 Molds
4. Installation of Areogel Heater Jackets in injection moulding machines

| Major Projects Implemented During 2013-14 | | | | | | |
|---|----------------------|---------------------|---|----------------------|--------------------|--------------------|
| | | Project Description | | Units Saving in Lacs | Rs. saving in Lacs | Investment in Lacs |
| A | Mold Machine Matrix | 1 | Unit/Kg reduction by Mould machine matrix in PIMD 03-MIR-1050 M/c | 2.50 | 14.25 | Nil |
| | | 2 | Unit/Kg reduction by Mould machine matrix in PIMD 08 Magna-775 M/c | 1.06 | 6.04 | Nil |
| B | VFD Installations | 3 | VFD installation in PIMD 07 Omega-450 M/C | 0.64 | 3.65 | 1.8 |
| | | 4 | VFD installation in PIMD 14 JW-850W M/c | 2.00 | 11.40 | 8.3 |
| C | Process Optimisation | 5 | VFD Frequency optimisation in Mir 675 m/c | 0.35 | 2.00 | Nil |
| | | 6 | VFD Frequency optimisation in CLF - 1000 m/c | 0.39 | 2.22 | |
| | | 7 | VFD Frequency optimisation in JW - 500 m/c | 0.41 | 2.34 | Nil |
| | | 8 | VFD Frequency optimisation in JW -850 m/c | 0.29 | 1.65 | |
| | | 9 | Reduction of Unit/Kg by Cycle time reduction in Mould CC6545315 DW A | 0.01 | 0.07 | Nil |
| | | 10 | Reduction of energy consumption by the reduction of cycle time in CH4737152-B | 0.02 | 0.09 | Nil |
| | | 11 | Reduce energy consumption by the reduction of cycle time in CH4737152-A1 | 0.01 | 0.08 | Nil |
| D | JACKET | 12 | Reduction of Unit/Kg by installation of Aerogel Heater Jacket in 11 Injection Molding m/c's | 1.20 | 6.84 | 7.43 |
| E | Improvements | 13 | Air Compressor | 0.56 | 3.21 | Nil |
| | | 14 | Blending M/C Star Delta Conversion | 0.25 | 1.42 | |
| | | 15 | DB Power Pack Star Connection | 0.09 | 0.49 | |
| | | 16 | OLTC setting | 0.09 | 0.49 | |
| | | 17 | Unit/Kg reduction in Grinding m/c by 2 blade to 3 blade conversion. | 0.13 | 0.73 | 0.84 |
| Total Savings | | | | 10 | 57 | 18 |
| Lacs | | | | Units saved | Rs. Saved | Rs. Invested |

Energy Policy



Energy Policy


We at Nilkamal recognize and share our responsibilities to help, protect and preserve the environment.

Our policy is a constant reminder of our responsibilities to ensure continuous management commitment and act effectively to reduce the environmental impact of all our activities and commensurate energy consumption.

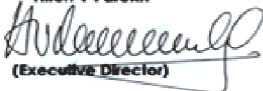
This Energy Management Policy reveals our intent to:

- Reduce our carbon foot print, energy consumption, eliminate waste, and conserve energy resources by using energy-efficient and cost-effective technology ensuring adherence to regulatory requirements.
- Incorporate energy efficiency into the decision-making process during the design and acquisition of facilities, equipment and transportation systems emphasizing the use of renewable energy sources.
- Increase energy efficiency through capital investment and improved operations.
- Create continuous awareness by way of communication, training and display to share and own the responsibility towards energy conservation as a moral obligation towards society.

The document sets out a strategic action plan and associated management system which will ensure continuous review and improvement of our objectives to be achieved.



Date: 01/01/2012

Hiten V Parekh

(Executive Director)