

## THE SUPREME INDUSTRIES LIMITED

Durgapur Unit, Burdwan, (West Bengal)

### *Unit Profile*

Founded in 1942, Supreme is an acknowledged leader of India's plastics industry. Its moulding machine range is from 80 ton to 1600 ton. Covered area is 166458 sq ft having 485 employees. Manufacturing PVC Pipe, fitting, water tank, XF Film, packaging film and located at 28 Places. Supreme is also happens to be the largest plastics processor of country. Not surprisingly, company also offer the widest and most comprehensive range of plastic products in India.

The Supreme Industries Limited, Durgapur unit was established in the year 2000. It offers wide range of plastic products with a variety of applications in Molded Furniture, Storage & Material Handling Products, Industrial Molded Products, company major industrial customer are Exide Industries Limited, Tata Chemicals Limited & Tata Motors Limited.



## Energy Consumption

Description	Year (13-14)	Year (14-15)
POWER CONSUMPTION IN KWH	10684016	9842200
POWER COST/ TON- IN LAC	0.0729	0.0687
TURN OVER IN LAC	18365.53	18821.18
MFG. COST-LAC	15576.91	16313.93
PROD. IN TONS	11459.56	11494.19
ENERGY COST % OF MFG. COST	5.37	4.84
ENERGY COST/ TURN OVER	4.55	4.2

## Achievements

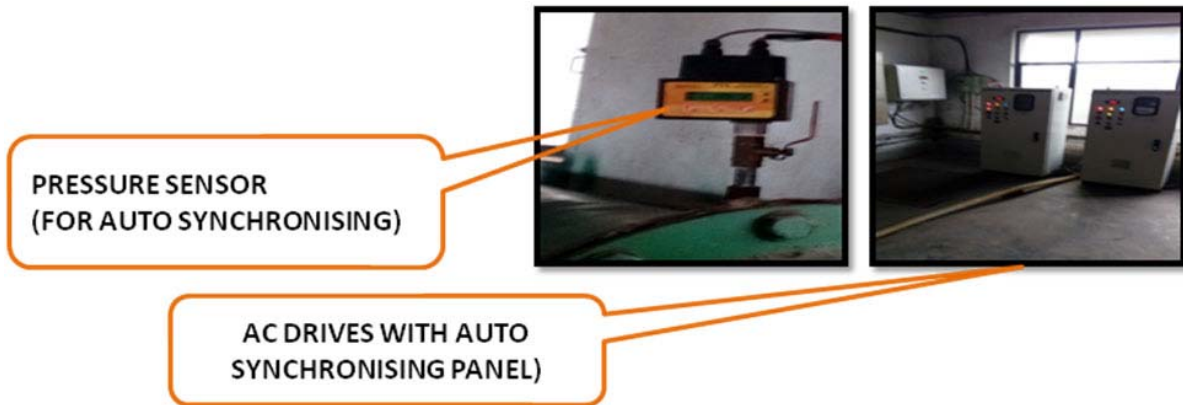
- *Reduced energy cost from 835.94 lac to 789.69 lac.*
- *Turn over increased Rs 18365 lac to Rs18821 lac.*

## List of Energy Saving Measures-2014-2015

ENERGY SAVING MEASURES (14-15)	Annual saving lac	Annually Measured Saving-kWh	Total Fuel (MTOE/OIL)	Investment Rs(lac)
Reduced demand	18.47			
Installation of 750 Amps. Hybrid filter panel & 545 KVAR. Detuned APFC Panel				21.88
Installation of AC Drive with Auto Synchronizing Panel for EXIDE Plant's Process water Pumps	9.102	113497	976074	3.79
Replacement of 37 KW process water pump by 22 KW process water pump and installation of AC Drive for all process pumps	16.432	204888	1762037	1.25
Installation of AC Drive for process water pumps at Old Fur. Plant	8.603	107270	922522	1.35
Installation of Auto Temperature based controller for all the cooling towers fan motor & feeding pumps of all the Plants	12.089	150739	1296355	0.45
Optimization of production planning and better productivity with respect to Mould VS Machine combination and colour sequence.	23.872	297650	2559790	Nil
<b>TOTAL</b>	<b>88.568</b>	<b>874044</b>	<b>7516778</b>	<b>28.72</b>

**SAVED (Metric tonne of oil equivalent) = 7516778**

Due to fluctuation of production requirement in Exide Plant, company has installed (in the year 14-15) AC Drive with process water pumps as well as incorporated Auto Synchronizing Panel with digital pressure sensor/switch with preset required value to automatically select the number of pump / pumps to be required to run as well as rpm of the pumps according to the process requirement with the help of pressure sensor'/switch's feedback. For this project company investment was Rs. 3.79 Lacs and got the saving of 113497 kWh in the year 14-15.



- 1 Looking into fluctuating business scenario as well as production load in TCL & New Fur. Plant has replaced (in the year 14-15) 1 no. existing 37 KW process pump (Mega G 125-315) by spare 22 KW pump (Mega G 100-315) as well as installed AC Drives for those pumps to reduce / save the power consumption as well as better utilization of process water pump / pumps. For this project company investment was Rs.1.25 Lacs and got the saving of 204888 kWh in the year 14-15.



- 2- Looking into fluctuating business scenario as well as production load in Old Fur. Plant has installed (in the year 14-15) AC Drives for process water pumps to reduce / save the power consumption as well as better utilization of process water pump / pumps. For this project company investment was Rs.1.35 Lacs and got the saving of 107270 kWh in the year 14-.
- 3- Company has incorporated / installed temperature based auto controller in its all plants cooling towers control circuit (in the year 14-15) to prevent the wastage of power due to continuous running or uncontrolled running of cooling tower feeding pumps and towers fan motor. For this project company investment was Rs.0.45 Lacs and got the saving of 150739 kWh in the year 14-15.



### BEFORE

COOLING TOWER FEEDING PUMPS OPERATED BY STARTER ONLY



### AFTER

COOLING TOWER FEEDING PUMPS STARTER CONTROLLED BY TEMPERATURE BASED AUTO CONTROLLER.

TEMPERATURE BASED AUTO CONTROLLER.

