



ENERGY CONSERVATION MEASURE IMPLIMENTED IN 2007-2008 Annexure'B' (4)

(To be filled up seperately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure Energy saving through replacement of conventional Lamps/Tubelights by Energy efficient Fluoriscent lamps	Sector: FOUNDRY
Year to be filled by BEE		Technology: Foundry
<p>Description of the energy conservation measure: 618 Nos of 40 Watt Fluorescent lamps were used in the Offices of Administrative building Total consumption of these Tube lights was 24.72 KW/day. All the Conventional tubelights were replaced by 28 watt Energy Efficient Tubes astheir power consumption was 17.304 KW. Total saving calculated as 24.72 kW -17.304 kW = 7.416KW. Annual saving in KWH = 7.416 KWx8Hrs.x25 daysx12 Months = 17798.4 KWH Annual saving in Rs. = Rate/unit Rs. 4.05 x 17798.4 = Rs. 72083.52 The amount will be recovered with in 6.9 Years.</p>		
Picture/ Scetch/ drawing before modification if available	Picture / Scatch/ drawing after modification	
		
Agency that executed the project (with complete address and e-mail) : GREY IRON FOUNDRY, JABALPUR 482-009 e-mail gif.ofb@nic.in		
Total investment, Rs.497490/-		Year of implementation:2007-2008

First year energy cost savings, Rs.72, 083. 52					
First year other savings, Rs. NIL					
On annual basis	kWh 000'	Coal (Tons)	Gas(Nm3)	Oil (kL)	Other
Energy consumption before	59328	NA	NA	NA	NA
Energy consumption after	41529.6	NA	NA	NA	NA
Energy tariff, Rs./ kWh/Ton/Nm3/kL...	Rs. 4.05	NA	NA	NA	NA
Company complete address: GENERAL MANAGER GREY IRON FOUNDRY, JABALPUR (M.P.) 482 009 FAX : 0761 - 2330517 ; Tel. No. 0761 - 2330216 SHRI AKHILESH KUMAR JT. GENERAL MANAGER GIF, JABALPUR FAX: 0761 - 2330517 ; TEL. NO. 2332903				We auathorise Bureau to use this information for dissemination Signature Date: / / 2008.	

ENERGY CONSERVATION MEASURE IMPLIMENTED IN 2007-2008 Annexure 'B'(2)

(To be filled up seperately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure Energy Saving by controlling switching of Hot water/Chemical Tanks of Phosphating plant	Sector: FOUNDRY
Year to be filled by BEE		Technology: Foundry

Description of the energy conservation measure:

The Phosphating Plant is having 6 Tanks of water and different type of Chemicals. Each tank is having 3 Nos. of 3.5 kW Heaters Total 63 KW. These heaters were switched ON manually in Night Shift at about 23:00 Hrs so that Hot Water and Chemical should be available for production in the morning at about 09:00 Hrs. It is observed that required Temperature is achieved with in 6-7 Hrs. and Heaters are remaining ON continuously for more then 9 Hrs. It is decided to control all the Heaters by introducing a Timer in the circuit. The ON Time was set at 02:00 Hrs. and Thermostates were also provided in each Tank to control the Temperature.



The saving recorded is as follows:

Earlier ON Time was 10 Hrs = $63 \times 10 = 630 \text{KWH}$. After Timer and Thermostates ON Time = $63 \times 7 = 441 \text{kWh}$.

Total saving = 189 Kwh/day Annual Saving = $189 \text{ Kwh} \times 25 \text{ days} \times 12 \text{ Months} = 56700 \text{ Kwh}$

Savings per Year = $\text{Kwh} \times \text{Unit cost} = 56700 \times \text{Rs. } 04.05 = \text{Rs. } 2, 29, 635/-$.

The cost of material used in the circuits is meagre hence investment was very less.

Picture/ Scetch/ drawing before modification if available	Picture / Scatch/ drawing after modification
	



Agency that executed the project (with complete address and e-mail) :

GREY IRON FOUNDRY, JABALPUR 482-009 e-mail gjf.ofb@nic.in

Total investment, Rs.:1000/-	Year of implementation:2007-2008
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First year energy cost savings, Rs. 2, 29, 635/-					
First year other savings, Rs.NIL					
On annual basis	kWh 000'	Coal (Tons)	Gas(Nm3)	Oil (kL)	Other
Energy consumption before	189000	NA	NA	NA	NA
Energy consumption after	132300	NA	NA	NA	NA
Energy tariff, Rs./ kWh/Ton/Nm3/kL...	Rs. 04.05				
Company complete address: GENERAL MANAGER GREY IRON FOUNDRY, JABALPUR (M.P.) 482 009 FAX : 0761 - 2330517 ; Tel. No. 0761 - 2330216				We auathorise Bureau to use this information for dissemination	
SHRI AKHILESH KUMAR JT. GENERAL MANAGER GIF, JABALPUR FAX: 0761 - 2330517 ; TEL. NO. 2332903				Signature Date: / / 2008.	

ENERGY CONSERVATION MEASURE IMPLIMENTED IN 2007-2008 Annexure 'B' (3)
(To be filled up seperately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure Energy saving through replacement of 150 Watt HPSV Lamps by 70 Watt HPSV Lamps of Street Lights inside the Factory.	Sector: FOUNDRY
Year to be filled by BEE		Technology: Foundry
<p>Description of the energy conservation measure: This Factory is having total 80 Nos of Street Light Poles. Previously each pole was having 150 W HPSV lamp fittings. Energy conservation measures were applied on 65 Nos. Street Light Poles & replaced 150 W HPSV lamp fittings by 70 W HPSV lamp fittings. By this measure, factory has saved total 22776 Units annually and saved Rs. 92,242. The breakup is follows: Annual Energy Consumption by 150 W HPSV Lamp Fittings = (65 X 150 x 12 X 365)/1000 KWH = 42705 KWH Annual Energy Consumption by 70 W HPSV Lamp Fittings = (65 X 70 x 12 X 365)/1000 KWH = 19929 KWH Annual Saving (in KWH) by replacement = 22776 KWH Savings per Year = KwhxUnit cost = 22776 KWH x Rs. 04.05 = Rs. 92, 242.8</p>		
Picture/ Scetch/ drawing before modification if available		Picture / Scatch/ drawing after modification
		
Agency that executed the project (with complete address and e-mail) : GREY IRON FOUNDRY, JABALPUR 482-009 e-mail gif.ofb@nic.in		
Total investment, Rs.:71500/-		Year of implementation:2007-2008

First year energy cost savings, Rs. 92242.8					
First year other savings, Rs.NIL					
On annual basis	kWh 000'	Coal (Tons)	Gas(Nm3)	Oil (kL)	Other
Energy consumption before	42705	NA	NA	NA	NA
Energy consumption after	19929	NA	NA	NA	NA
Energy tariff, Rs./ kWh/Ton/Nm3/kL...	Rs. 04.05				
Company complete address: GENERAL MANAGER GREY IRON FOUNDRY, JABALPUR (M.P.) 482 009 FAX : 0761 - 2330517 ; Tel. No. 0761 - 2330216 SHRI AKHILESH KUMAR JT. GENERAL MANAGER GIF, JABALPUR FAX: 0761 - 2330517 ; TEL. NO. 2332903				We auathorise Bureau to use this information for dissemination Signature Date: / / 2008.	

ENERGY CONSERVATION MEASURE IMPLIMENTED IN 2007-2008


Annexure 'B' (1)

(To be filled up seperately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure Electrical Energy saving by reducing Holding Time, Cintering Time and Proper scheduling of Furnaces.	Sector: FOUNDRY .
Year to be filled by BEE		Technology : Foundry

Description of the energy conservation measure:

This factory is having 6 Nos of 3 Ton Medium Frequency Furnaces and one No. of 5 Ton Main Frequency Furnace. It was in prectice to Switch ON Furnaces in night shift at about 23:30 Hrs. to get the molten metal ready in the morning at about 09:00 Hrs for production purpose. The Switching ON Time of Furnaceses was rescheduled and fixed in the morning at about 04:30 Hrs. It is also observed that Furnaces are lying in molten metal holding position for more than 4-5 Hrs daily since moulding Boxes are not ready for pouring the metal. the production is planned in such a way that furnaces should not kept in Holding position for more than 1-2 Hrs. The Cintering Time of all the furnaces was about 23-24 Hrs. after fresh lining. The Cintering Timing reduced from 23-24 Hrs to 13-14 Hrs. Saving = 231 kWh/Tonne
 Total annual saving(in kWh) = 1370421.6kWh.
 Total annual saving (in Rs.) = kWh x Unit cost= 1370421 x 04.05 = Rs. 5550206/-

Picture/ Scetch/ drawing before modification if available	Picture / Scatch/ drawing after modification
	



Agency that executed the project (with complete address and e-mail) :
 GREY IRON FOUNDRY, JABALPUR 482-009 e-mail gif.ofb@nic.in

Total investment, Rs.:NIL	Year of implementation:2007-2008
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First year energy cost savings, Rs. 55,50206/-					
First year other savings, Rs.NIL					
On annual basis	kWh 000'	Coal (Tons)	Gas(Nm3)	Oil (kL)	Other
Energy consumption before	6526881	NA	NA	NA	NA
Energy consumption after	5156460	NA	NA	NA	NA
Energy tariff, Rs./ kWh/Ton/Nm3/kL...	Rs. 04.05				
Company complete address: GENERAL MANAGER GREY IRON FOUNDRY, JABALPUR (M.P.) 482 009 FAX : 0761 - 2330517 ; Tel. No. 0761 - 2330216 SHRI AKHILESH KUMAR JT. GENERAL MANAGER GIF, JABALPUR FAX: 0761 - 2330517 ; TEL. NO. 2332903				We auathorise Bureau to use this information for dissemination Signature Date: / / 2008.	

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