

### Energy Conservation Measure implemented in 2007-2008

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

ID to be filled by BEE	Title of the measure <b>Replacement of BFW heater with better design exchanger in Ammonia plant.</b>				Sector : Petrochemicals	
Year to be filled by BEE					Technology: In House	
In Ammonia synthesis section, existing BFW heater was replaced by another exchanger with better design. This has reduced the synthesis gas side pressure drop by 3.5 kg/cm <sup>2</sup> , which in turn saved compression energy to the tune of 165KW or 0.03 Gcal/MT of Ammonia product.						
<b>Picture/ sketch/ drawing before modification</b> (if available)			<b>Picture/ sketch/ drawing after modification</b>			
Agency that executed the project (with complete address and email):						
Total investment, Rs.:6000000			Year of implementation: 2005-06			
First year energy cost savings, Rs.: 2000000						
First year other savings, Rs.:						
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other	
Energy consumption before						
Energy consumption after						
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...						
Company complete address: K-1, MIDC Industrial Area, Taloja, Dist-Raigad. Pin-410208. Tel: 022 6768 4271.				We authorise Bureau to use this information for dissemination  Signature  Date 01/10/2008		
Contact person who could be contacted for more information: Mr. R.S.Sankhe, General Manager, PI & EnCon.						

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ID to be filled by BEE	Title of the measure <b>Zirconium Coating on Reformer Furnace Refractory.</b>		Sector : Petrochemicals		
Year to be filled by BEE			Technology: In House		
Zirconium coating was done for reformer furnace refractory. This has resulted in better reformer heat recovery efficiency. Thereby reducing fuel consumption by 0.009 Gcal/MT of Ammonia Product.					
<b>Picture/ sketch/ drawing before modification</b> (if available)			<b>Picture/ sketch/ drawing after modification</b>		
Agency that executed the project (with complete address and email):					
Total investment, Rs.: 650000			Year of implementation: 2007-08		
First year energy cost savings, Rs.: 504000					
First year other savings, Rs.:					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before					
Energy consumption after					
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...					
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ID to be filled by BEE	Title of the measure <b>Process Air chilling at compressor suction in Ammonia plant.</b>		Sector : Petrochemicals			
Year to be filled by BEE			Technology: In House			
Addition of process air chilling at compressor suction has resulted in energy saving of 0.014 Gcal/MT of Ammonia product.						
<b>Picture/ sketch/ drawing before modification</b> (if available)			<b>Picture/ sketch/ drawing after modification</b>			
Agency that executed the project (with complete address and email):						
Total investment, Rs.: 1550000			Year of implementation: 2007-08			
First year energy cost savings, Rs.: 783000						
First year other savings, Rs.:						
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other	
Energy consumption before						
Energy consumption after						
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...						
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ID to be filled by BEE	Title of the measure		Sector : Petrochemicals			
Year to be filled by BEE	<b>Use of low pressure steam in place of HP steam in deaerator</b>		Technology: In House			
A modification to use LP steam in place of HP steam in deaerator of Captive Power Plant was carried out. This has resulted in the saving of about 1.5 MT/hr HP steam.						
<b>Picture/ sketch/ drawing before modification</b> (if available)			<b>Picture/ sketch/ drawing after modification</b>			
Agency that executed the project (with complete address and email):						
Total investment, Rs.:1000000			Year of implementation: 2006-07			
First year energy cost savings, Rs.: 5400000						
First year other savings, Rs.:						
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other	
Energy consumption before						
Energy consumption after						
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...						
Company complete address: K-1, MIDC Industrial Area, Taloja, Dist-Raigad. Pin-410208. Tel: 022 6768 4271.				We authorise Bureau to use this information for dissemination		
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ID to be filled by BEE	Title of the measure				Sector : Petrochemicals	
Year to be filled by BEE	<b>Synthesis Gas chilling at 2<sup>nd</sup> stage suction of compressor in Ammonia Plant.</b>				Technology: In House	
Description of the energy conservation measure:						
<p>Synthesis gas compressor 2<sup>nd</sup> stage suction temperature brought down from 43°C to 20°C. By addition of new chilled water exchanger.</p> <p>This has helped in increasing capacity of the synthesis gas machine and hence production.</p>						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
Agency that executed the project (with complete address and email):						
Total investment, Rs.: 1206000			Year of implementation: 2007			
First year energy cost savings, Rs.: 912000						
First year other savings, Rs.:						
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other	
Energy consumption before						
Energy consumption after						
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...						
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ID to be filled by BEE	Title of the measure				Sector : Petrochemicals	
Year to be filled by BEE	<b>Condensate Recovery &amp; Flash steam generation in Ammonia Plant</b>				Technology: In House	
Description of the energy conservation measure:						
<p>The condensate, collected from different plants, is flashed in flash tank. The LP steam generated from this flash tank is used in Boiler deareator operating at 0.3 kg.cm<sup>2</sup>g. This has reduced the steam consumption of deareator by 1.5 mt /hr.</p>						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
Agency that executed the project (with complete address and email):						
Total investment, Rs.: 1452000			Year of implementation: 2006			
First year energy cost savings, Rs.: 5904000						
First year other savings, Rs.:						
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other	
Energy consumption before						
Energy consumption after						
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...						
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## Energy Conservation Measure implemented in 2007-2008

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ID to be filled by BEE	Title of the measure <b>Additional NG heater</b>	Sector : Petrochemicals			
Year to be filled by BEE		Technology: In House			
Description of the energy conservation measure:  Additional NG heater is installed to utilize Methanator Exit Gas heat which was earlier being lost to cooling tower. This has resulted in saving of 0.17Gcal/hr energy.					
<b>Picture/ sketch/ drawing before modification</b> (if available)			<b>Picture/ sketch/ drawing after modification</b>		
Agency that executed the project (with complete address and email):					
Total investment, Rs.: 1325000			Year of implementation: 2007-08		
First year energy cost savings, Rs.: 912000					
First year other savings, Rs.:					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before					
Energy consumption after					
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...					
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