


## Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure <b>Conversion of Mercury Cell into energy efficient Membrane Cell</b>	Sector ... <b><u>Chlor Alkali</u></b>																																					
Year to be filled by BEE		Technology ... <b><u>Membrane</u></b>																																					
Description of the energy conservation measure:																																							
<p><b>Mercury Cell plant was converted into Membrane Cell Technology</b></p> <ul style="list-style-type: none"> <li>- Replaced the existing 175 TPD Mercury Cell Plant with 400 TPD Membrane Cell Plant II</li> <li>- Additional production of 60 TPD from the power saved on 175 TPD</li> <li>- No additional investment required on power plant for increasing the caustic capacity.</li> <li>- Reduction in Power Consumption :</li> </ul>																																							
<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 8%;">Sr.No.</th> <th style="width: 42%;">Particulars</th> <th style="width: 10%;">UOM</th> <th style="width: 15%;">Mercury Cell</th> <th style="width: 25%;">Membrane Cell</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Production</td> <td>TPD</td> <td>175</td> <td>Equivalent 235</td> </tr> <tr> <td>2</td> <td>Power requirement</td> <td>MW/Day</td> <td>22.86</td> <td>22.86</td> </tr> <tr> <td rowspan="2">3</td> <td>i) Cell Power</td> <td>KWH/T</td> <td>2797</td> <td>2110</td> </tr> <tr> <td>ii) Aux. Power</td> <td></td> <td>317</td> <td>250</td> </tr> <tr> <td></td> <td>Total Power consumption</td> <td>KWH/T</td> <td>3114</td> <td>2360</td> </tr> <tr> <td></td> <td>Reduction in percentage</td> <td></td> <td colspan="2"><b>24.21% per ton</b></td> </tr> </tbody> </table>						Sr.No.	Particulars	UOM	Mercury Cell	Membrane Cell	1	Production	TPD	175	Equivalent 235	2	Power requirement	MW/Day	22.86	22.86	3	i) Cell Power	KWH/T	2797	2110	ii) Aux. Power		317	250		Total Power consumption	KWH/T	3114	2360		Reduction in percentage		<b>24.21% per ton</b>	
Sr.No.	Particulars	UOM	Mercury Cell	Membrane Cell																																			
1	Production	TPD	175	Equivalent 235																																			
2	Power requirement	MW/Day	22.86	22.86																																			
3	i) Cell Power	KWH/T	2797	2110																																			
	ii) Aux. Power		317	250																																			
	Total Power consumption	KWH/T	3114	2360																																			
	Reduction in percentage		<b>24.21% per ton</b>																																				
Picture/ sketch/ drawing before modification (Mercury Cell House)			Picture/ sketch/ drawing after modification (Membrane Cell House)																																				
																																							
Agency that executed the project (with complete address and email): <b>M/s. Jacob H&amp;G Mumbai</b>																																							
Total investment, <b>Rs.: 95.67 Crores</b>			Year of implementation: <b>2006-07</b>																																				
First year energy cost savings, <b>Rs.: 25.45 Crores (on annual basis)</b>																																							
First year other savings, Rs.:																																							
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other																																		
Energy consumption before	241671	-	-	-	-																																		
Energy consumption after	183155	-	-	-	-																																		
Energy tariff, Rs/ kWh	Rs.4.35/ KWH	-	-	-	-																																		
Company complete address:				We authorise Bureau to use this information for dissemination																																			
<b>GRASIM CHEMICAL DIVISION</b> <b>BIRLAGRAM, NAGDA (MP.) Pin 456331</b> <b>Fax No. 07366 246097 / Phone 07366 255520</b>				Signature																																			
Contact person who could be contacted for more information:				Date <b>18.10.07</b>																																			
<b>R.K. MAHESHWARI</b>																																							