

Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure Installation of Hydrate by-pass system in Calciner.	Sector : Chemical			
Year to be filled by BEE		Technology			
Description of the energy conservation measure: Hydrates by-pass system helps Calcining a part of Hydrate from the heat with hot product, thereby reducing temperature of product Alumina and savings fuel to the tune of 0.5 1.0 Liter/MT of production.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email): In-house					
Total investment, Rs.: 10.0 Lakhs			Year of implementation: 2006		
First year energy cost savings, Rs.: 42.61 Lakhs					
First year other savings, Rs.:					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before					
Energy consumption after					
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...					
Company complete address: NATIONAL ALUMINIUM COMPANY LTED, MINES & REFINERY COMPLEX, DAMANJODI – 763 008 DIST: KORAPUT, ORISSA.				We authorise Bureau to use this information for dissemination Signature Date	
Contact person who could be contacted for more information: Sri S.K. Roy, DGM(OPRN), M&R complex, Damanjodi.					

Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure	Sector : Chemical			
Year to be filled by BEE	Use of Spent Liquor for product filter overflow line flushing instead of Washed Filtrate.	Technology			
Description of the energy conservation measure:					
<p>Necessary modification has been carried out to use Spent Liquor for flushing product filter over flow line instead of Washed Filtrate, thus reduces the evaporation load (MT at water evaporated per MT of product). The reduction in evaporation load is 0.03 T/T of production. Steam saving is 0.0103 T/T of production.</p>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email): In-house					
Total investment, Rs.: 5.0 Lakhs			Year of implementation:		
First year energy cost savings, Rs.: 37.66 Lakhs					
First year other savings, Rs.:					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before		0.218 T/T			
Energy consumption after		0.216 T/T			
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...		1137/T			
Company complete address:				We authorise Bureau to use this information for dissemination	
NATIONAL ALUMINIUM COMPANY LTED, MINES & REFINERY COMPLEX, DAMANJODI – 763 008 DIST: KORAPUT, ORISSA.				Signature	
Contact person who could be contacted for more information:				Date	
Sri S.K. Roy, DGM(OPRN), M&R complex, Damanjodi.					

Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure	Sector : Chemical			
Year to be filled by BEE	Optimization of pressure drop across three element control valve in Boiler- 4.	Technology			
Description of the energy conservation measure:					
<p>Previous pressure drop across the three elements control valve was 10 kg/cm² resulting in increased pressure loss and energy loss. Pressure drop reduced to 6.5 kg/cm². Power saving is 50 KW approximately.</p>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email): In-house					
Total investment, Rs.: -NIL-			Year of implementation: 2007		
First year energy cost savings, Rs.: -NIL-					
First year other savings, Rs.: 5.80 IAKHS					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm³	Oil (kL)	Other
Energy consumption before					
Energy consumption after					
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...					
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Contact person who could be contacted for more information:					
Sri L.A. Khan, DGM(SPP), M&R Complex, Damanjodi.					

Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure	Sector : Chemical			
	Modification of Control scheme in ID Fan in Boiler- 4.				
Year to be filled by BEE		Technology			
Description of the energy conservation measure:					
<p>ID Fan control is through inlet guide vane and variable fluid coupling. The previous philosophy was to make flow control by changing IGV opening. This has been changed to keeping IGV fully open and flow control by varying the speed of fan through scoop control of fluid coupling.</p>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email): In-house					
Total investment, -NIL-			Year of implementation: 2007		
First year energy cost savings, Rs.: -NIL-					
First year other savings, Rs.: 3.75 Lakhs					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before					
Energy consumption after					
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...					
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