




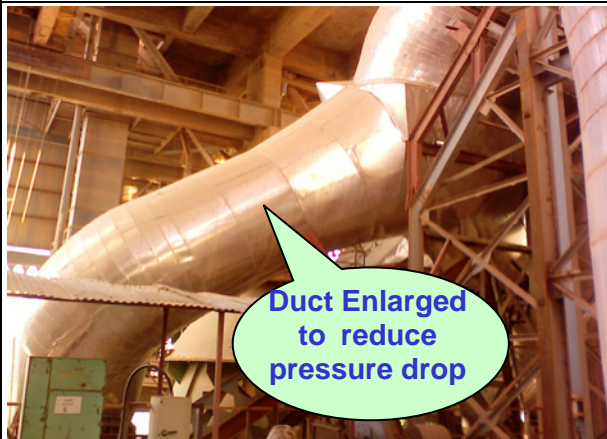
Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure Replacement of Lower efficiency Impeller for Raw Mill ESP fan with upgraded Higher Efficiency.	Sector : Large Scale			
Year to be filled by BEE		Technology : Cement manufacturing			
<p>Description of the energy conservation measure:</p> <p>At the present output level of 3100 TPD of clinker with pet coke, it has been observed that Raw Mill ESP fan is running on its full speed without having any extra margin for further increase in production level. Also it has been observed during the stoppage of Raw Mill for longer period of time when the gas volume increases due to higher temperature, the fan is not able to handle gases resulting in reduction in production level. Even during stoppage of Coal mill also, there is slight pressurization observed at the discharge of Preheater fan. Because of high efficiency fan, there will be a substantial saving in power consumption. Low Efficiency RM Esp fan replaced with higher efficiency thus reduction in power savings of 120 kW.</p>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): Flakt Woods India Ltd.					
Total investment, Rs.: 113.55 L			Year of implementation: 2007		
First year energy cost savings, Rs.: 27.94 L					
First year other savings, Rs.:					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	400				
Energy consumption after	280				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	2.812				
Company complete address: Grasim Industries Limited Cement Division – South Reddipalyam, Ariyalur taluk, Perembalur District, Tamil Nadu. PinCode - 621704				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information: V.B .Ekre (V.P.Technical)				Signature Date	



Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure Replacement of Lower efficiency Cooler fans (2 nos) with Higher Efficiency.	Sector : Large Scale			
Year to be filled by BEE		Technology : Cement manufacturing			
Description of the energy conservation measure: Two Nos of High pressure Cooling fans are replaced with Higher Efficiency fans .Which results in savings of 42 KW. Hence net savings achieved = 9.77 Lacks/Annum					
Picture/ sketch/ drawing before modification (if available)	Picture/ sketch/ drawing after modification				
					
Agency that executed the project (with complete address and email): Reitz Fans					
Total investment, Rs.:15 Lacs	Year of implementation: 2007				
First year energy cost savings, Rs.: 9.77 Lac					
First year other savings, Rs.:					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	256				
Energy consumption after	214				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	2.812				
Company complete address: Grasim Industries Limited Cement Division – South Reddipalyam, Ariyalur taluk, Perembalur District, Tamil Nadu. PinCode - 621704				We authorize Bureau to use this information for dissemination Signature Date	
Contact person who could be contacted for more information: V.B .Ekre (V.P.Technical)					

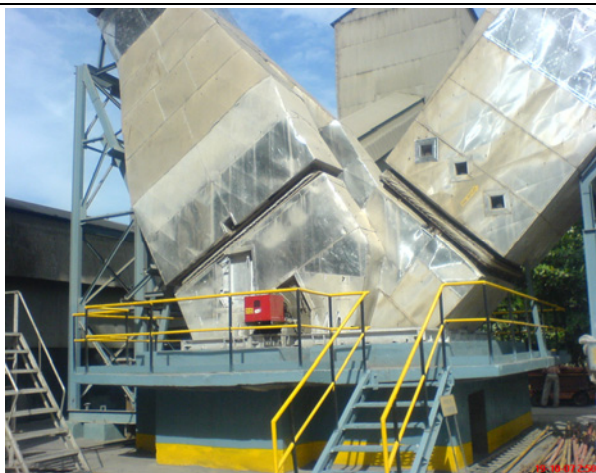
Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure Reduction of power consumption in Raw Mill Circuit	Sector : Large Scale			
Year to be filled by BEE		Technology : Cement manufacturing			
Description of the energy conservation measure: After Plant Up gradation from 2950 TPD to 3250 TPD the increase in power consumption of Raw Mill circuit was observed. Hence Detailed study for the change was done by analyzing the pressure drop, measurement of air volume and velocity calculation at different locations. With the study it was observed the High pressure drop from Preheater Outlet to Raw Mill Inlet “ Around 136 mmWG” and also the velocity in inlet duct was 26 m/sec. Hence it was decided to remodify the duct geometry and size to reduce the pressure drop and velocity from 26 m/sec to 18 m/sec.					
After modification			After modification		
					
Agency that executed the project (with complete address and email):					
Total investment, Rs.: 102.79 Lacs			Year of implementation: 2007		
First year energy cost savings, Rs.: 6.06 Lacs					
First year other savings, Rs.:					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	14.01				
Energy consumption after	13.37				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	2.812				
Company complete address: Grasim Industries Limited Cement Division – South Reddipalyam, Ariyalur taluk, Perembalur District, Tamil Nadu. PinCode - 621704				We authorize Bureau to use this information for dissemination Signature Date	
Contact person who could be contacted for more information: V.B .Ekre (V.P.Technical)					

Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure Reduction of power consumption Fly ash conveying	Sector : Large Scale			
Year to be filled by BEE		Technology : Cement manufacturing			
Description of the energy conservation measure: As before flyash was situated around 65 meters from mill ,so power consumption was more for transportation. Since production of PPC also more there is in need for another silo. Hence to reduce the power consumption and also to meet the Flyash Requirement detailed study was done which results in constructing a New flyash silo nearer to the Mill. By installation of new silo nearer to the mill power savings of 130 Kwh was achieved by stopping two compressor for transportation. Breakdowns because of transportation problem was also avoided.					
Before modification			After modification		
					
Agency that executed the project (with complete address and email):					
Total investment, Rs.: 90 Lacs			Year of implementation: 2007		
First year energy cost savings, Rs.: 21.49 Lacks					
First year other savings, Rs.:					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	25.91				
Energy consumption after	25.27				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	2.812				
Company complete address: Grasim Industries Limited Cement Division – South Reddipalyam, Ariyalur taluk, Perembalur District, Tamil Nadu. PinCode - 621704				We authorized Bureau to use this information for dissemination Signature Date	
Contact person who could be contacted for more information: V.B .Ekre (V.P. Technical)					

Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure Retrofitting of Cooler Vent fan of Higher frequency		Sector : Large Scale		
Year to be filled by BEE			Technology : Cement manufacturing		
Description of the energy conservation measure: After Cooler Up gradation the efficiency of Cooler vent fan decreased upto 40%. A fan of higher efficiency (70%) was installed which results in the fan power by 37 KW.					
Before modification			After modification		
					
Agency that executed the project (with complete address and email):					
Total investment, Rs.: 110 Lacs			Year of implementation: 2007		
First year energy cost savings, Rs.: 8.61 Lacs					
First year other savings, Rs.:					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	90				
Energy consumption after	53				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	2.812				
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				Date	