

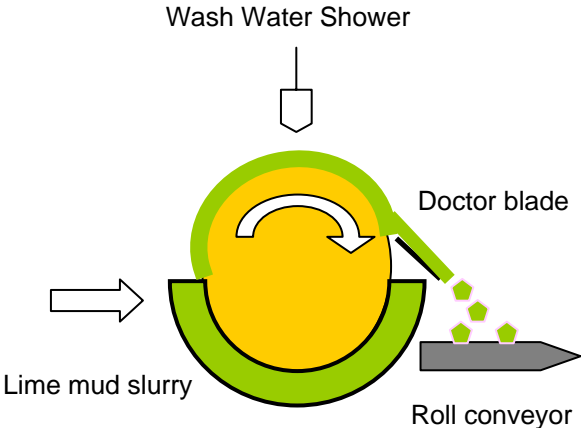
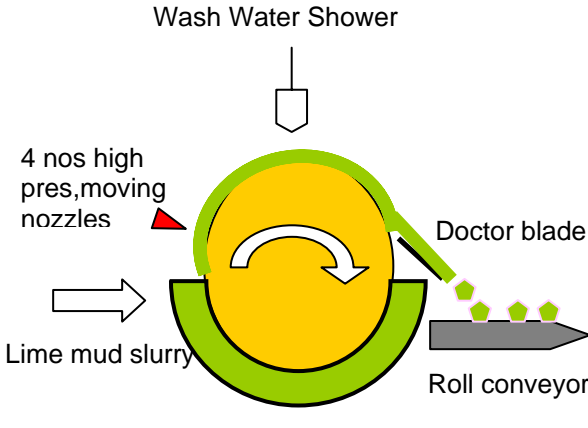
Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure Installation of 2 nos Dryers in Sheeting M/C to increase the Drying Capacity	Sector paper & pulp			
Year to be filled by BEE		Technology			
Description of the energy conservation measure: Rayon Sheet is dried by passing steam inside the drying cylinders. Our M/C had 34 Drying Cylinders and a drying capacity of 103 TPD . Two spare Drying Cylinders were installed in positions 35 & 36 to increase the drying capacity to 106 TPD.					
Picture/ sketch/ drawing before modification (if available)	Picture/ sketch/ drawing after modification				
Agency that executed the project (with complete address and email): Sharma Fabricators, Gurgaon.					
Total investment, Rs.:1.0 lacs	Year of implementation: 2006-07				
First year energy cost savings, Rs.: 1.68 lacs					
First year other savings, Rs.:					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	7008000	-	-	-	-
Energy consumption after	6840000	-	-	-	-
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	Rs 2.0/kwh	Rs 1850/t	-	Rs 22500/t	-
Company complete address: Century Pulp & Paper, Ghanshyam dham, Lalkua, Distt. Nainital 262402 Contact person who could be contacted for more information: Mr S K Agarwal				We authorise Bureau to use this information for dissemination Signature Date	

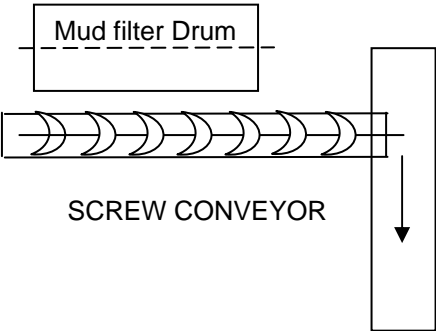
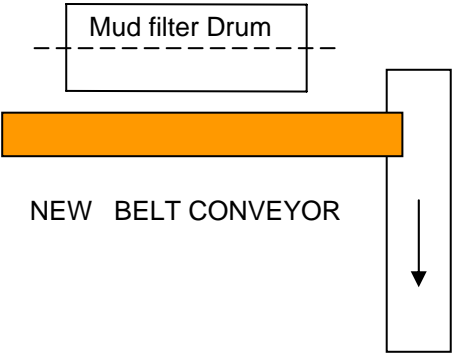
Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure Installation of 4 th stage Brown Stock Washer in RGP	Sector ...paper & pulp			
Year to be filled by BEE		Technology			
<p>Description of the energy conservation measure: In the washing stage the cooked pulp is washed in washers and the wash (Black Liquor) is collected in Seal Tanks and sent to Chemical Recovery section . By the addition of one more Brown Stock Washer concentrated Black Liquor could be sent to recovery section requiring reduced steam of 10.6 t/t of steam against the earlier requirement of 11.0 t/t.</p>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
<p style="font-size: small;">PULP FROM BLOW TANK PRESSURE WASHER 1,2,3 TO WASHED PULP CHEST SEAL TANKS PROPELLER PUMP 1,2</p>			<p style="font-size: small;">PULP FROM BLOW TANK PRESSURE WASHER 1,2,3 4 TO WASHED PULP CHEST SEAL TANKS 1,2,3,4</p>		
Agency that executed the project (with complete address and email):Hindustan Dorr Oliver, Mumbai					
Total investment, Rs.: 456 lacs			Year of implementation: 2006-07		
First year energy cost savings, Rs.:59.94 lacs					
First year other savings, Rs.:					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	-	93280	-	-	-
Energy consumption after	-	90040	-	-	-
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	Rs 2.0/kwh	Rs 1850/t	-	Rs 22500/t	-
Company complete address: Century Pulp & Paper,Ghanshyam dham, Lalkua, Distt. Nainital 262402 Contact person who could be contacted for more information: Mr S K Agarwal				We authorise Bureau to use this information for dissemination Signature Date	

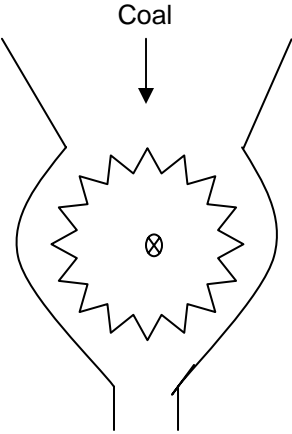
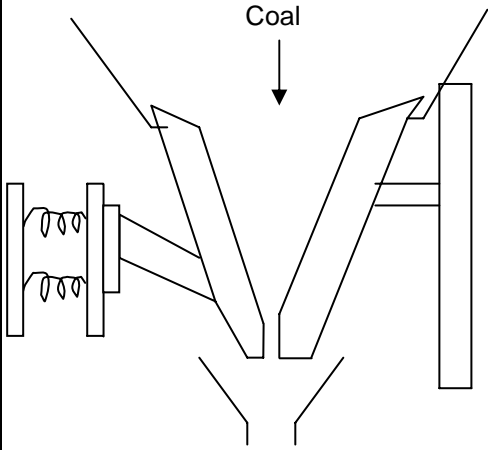
Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure Replacement of conventional Drum Filter with continuous cleaning (DOCC) type drum filter	Sector Paper & pulp			
Year to be filled by BEE		Technology			
Description of the energy conservation measure: Lime Mud Slurry is dried in a drum filter and fed to Lime Kiln for RECALCINING. Initially Vacuum type drum filter was used which was resulting into 45% dryness mud. In this filter the wire gets choked due to Lime mud and the dryness reduces after some time. Improved DOCC Filter was installed which had provision for continuous cleaning of wire and maintaining its porosity. This enabled feeding mud with 60% dryness in Lime Kiln requiring reduced fuel for recalcining					
Picture/ sketch/ drawing before modification (if available)	Picture/ sketch/ drawing after modification				
					
Agency that executed the project (with complete address and email): Hindustan Dorr Oliver Ltd Dorr-Oliver House Chakala, Andheri(e), Mumbai hdoho@hind-dorroliver.com					
Total investment, Rs.: 220 lacs	Year of implementation: 2006-07				
First year energy cost savings, Rs.: 100 lacs					
First year other savings, Rs.: nil					
On annual basis	kwh 000'	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	-	24500	-	6425	-
Energy consumption after	-	24500	-	5670	-
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	Rs 2.0/kwh	Rs 1850/t	-	Rs 22500/t	-
Company complete address: Century Pulp & Paper, Ghanshyam dham, Lalkua, Distt. Nainital 262402				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information: Mr U K Saxena				Signature	
				Date	

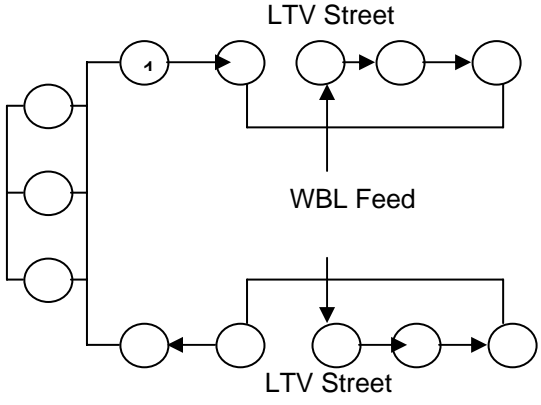
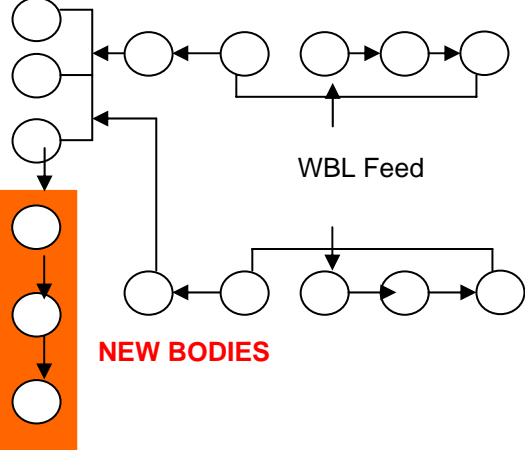
Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure Replacement of Screw conveyor with Belt conveyor for new Lime Mud Filter	Sector Paper & pulp			
Year to be filled by BEE		Technology			
Description of the energy conservation measure: The output of Lime Mud Filter was carried to Lime Kiln through a Screw Conveyor requiring a 11 kw motor. This was replaced by a Belt conveyor which is now driven by a 3.7 KW motor					
Picture/ sketch/ drawing before modification (if available)	Picture/ sketch/ drawing after modification				
					
Agency that executed the project (with complete address and email):CML Engineering Projects Pvt Ltd,S-18 Pratap Market,Janpura- B, N Delhi 14 rajputeng@rediffmail.com					
Total investment, Rs.: 3.0 lacs	Year of implementation: 2006-07				
First year energy cost savings, Rs.: 0.82 lacs					
First year other savings, Rs.: nil					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	84000	-	-	-	-
Energy consumption after	42000	-	-	-	-
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	Rs 2.0/kwh	Rs 1850/t	-	Rs 22500/t	-
Company complete address: Century Pulp & Paper,Ghanshyam dham, Lalkua, Distt. Nainital 262402 Contact person who could be contacted for more information: Mr U K Saxena				We authorise Bureau to use this information for dissemination Signature Date	

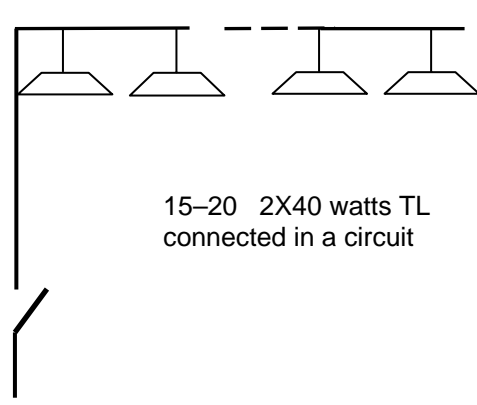
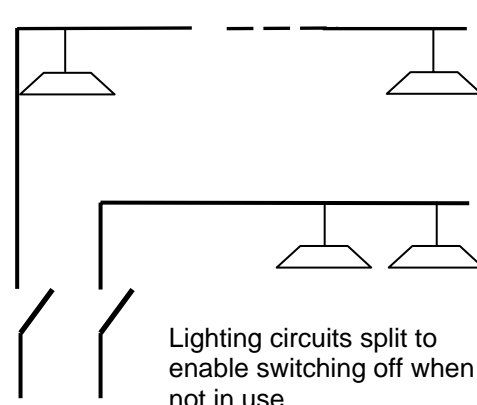
Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure Replacement of roller type coal crusher with Jaw Crusher for Producer Gas plant	Sector			
Year to be filled by BEE		Technology			
<p>Description of the energy conservation measure: For our Vertical Gassifiers of Producer Gas Plant coal required was of 40-50 mm size and Roller coal crusher was installed. The output of crusher had a good quantity of over sized coal which was carried to ash as unburnts. Installation of Jaw type coal crusher resulted in 50 mm size coal and the unburnts have been reduced.</p>					
Picture/ sketch/ drawing before modification (if available)	Picture/ sketch/ drawing after modification				
 <p style="text-align: center;">Teeth Roller Crusher</p>	 <p style="text-align: center;">Jaw Crusher</p>				
Agency that executed the project (with complete address and email):					
Total investment, Rs.:	5.00 lacs	Year of implementation: 2006-07			
First year energy cost savings, Rs.: 3.85 lacs					
First year other savings, Rs.:					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	-	23800	-	-	-
Energy consumption after	-	23625	-	-	-
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	Rs 2.0/kwh	Rs 1850/t	-	Rs 22500/t	-
Company complete address: Century Pulp & Paper, Ghanshyam dham, Lalkua, Distt. Nainital 262402 Contact person who could be contacted for more information: Mr U K Saxena				We authorise Bureau to use this information for dissemination Signature Date	

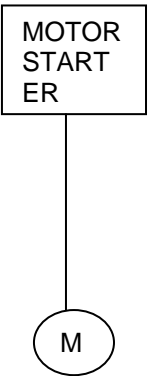
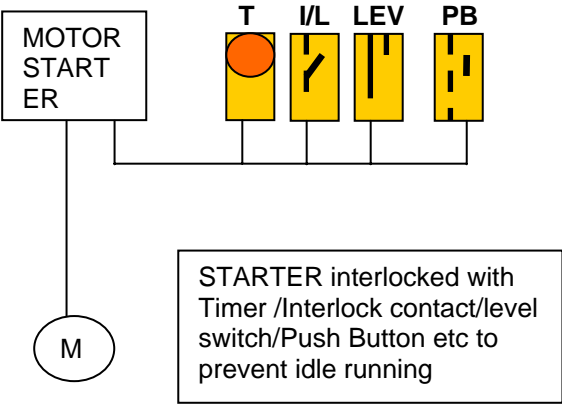
Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure Installation of three bodies of falling film Evaporator	Sector ...Paper & pulp			
Year to be filled by BEE		Technology			
Description of the energy conservation measure: Three additional Falling Film Bodies have been added in the existing Evaporators to improve Steam economy in Evaporators					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email):Andritz Pulp and paper mill services, P O Box 184, VARKUS, FINLAND 78201, panta.koponen@andritz.com					
Total investment, Rs.: 250 lacs			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 60.55 lacs					
First year other savings, Rs.: nil					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	-	29454	-	-	-
Energy consumption after	-	26181	-	-	-
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	Rs 2.0/kwh	Rs 1850/t	-	Rs 22500/t	-
Company complete address: Century Pulp & Paper, Ghanshyam dham, Lalkua, Distt. Nainital 262402 Contact person who could be contacted for more information: Mr U K Saxena				We authorise Bureau to use this information for dissemination Signature Date	

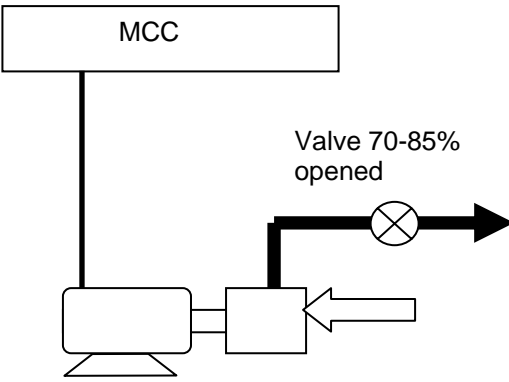
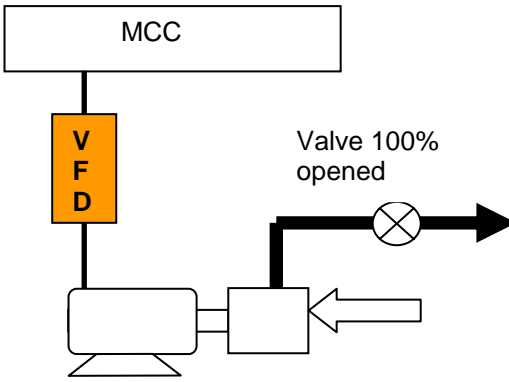
Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure Enabling switching off lights when not in use by splitting circuits.	Sector paper&pulp			
Year to be filled by BEE		Technology			
<p>Description of the energy conservation measure: Initially 15-20 luminaries were controlled by one switch. The requirement was studied in 22 locations. It was observed that in MCC/PCC rooms complete lighting was required during maintenance only. Accordingly the lighting circuits were modified to enable switching of lights when not in use. Similar exercise was done for some process areas also.</p>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
 <p>15-20 2X40 watts TL connected in a circuit</p>			 <p>Lighting circuits split to enable switching off when not in use</p>		
Agency that executed the project (with complete address and email):					
Total investment, Rs.: 27000.00			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 208000					
First year other savings, Rs.: maintenance expenditure on fittings					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	227000	-	-	-	-
Energy consumption after	122000	--	-	-	-
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	Rs 2.0/kwh	Rs 1850/t	-	Rs 22500/t	-
Company complete address: Century Pulp & Paper, Ghanshyam dham, Lalkua, Distt. Nainital 262402				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information: Mr S L Goyal				Signature	
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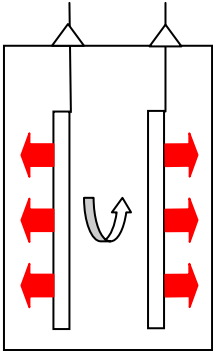
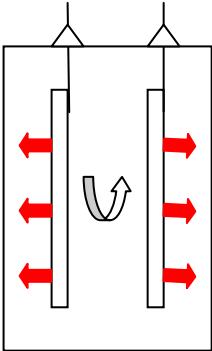
Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure Prevent idle running of equipment through Timers/ Interlock contact/Level switch/Push Button	Sector paper & pulp			
Year to be filled by BEE		Technology			
<p>Description of the energy conservation measure: In a process plant several equipment are used for a certain function only and are operated for a short duration only. Ideally such equipments should be switched off when not in use but due to manual involvement at times such equipments are left running resulting in wastage of power. In our plant 9 such equipments like agitators, chippers, pumps, conveyors etc were identified and provided with interlocks to ensure switching off when not in use.</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. 1.3 lacs	Year of implementation:2006-07				
First year energy cost savings, Rs.:3.47 lacs					
First year other savings, Rs.: better control of process parameter					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	395998				
Energy consumption after	200998				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	Rs 2.0/kwh	Rs 1850/t	-	Rs 22500/t	-
Company complete address: Century Pulp & Paper, Ghanshyam dham, Lalkua, Distt. Nainital 262402				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information: Mr S L Goyal				Signature	
				Date	

Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure Installation of Variable Frequency Drive's	Sector ...paper&pulp			
Year to be filled by BEE		Technology			
<p>Description of the energy conservation measure: For variable flow conditions conventionally constant RPM motor's were used and the flow was controlled through throttling of valves. For 10 such requirements now we have installed VFD's the output of which is controlled through a closed loop by providing a sensing element and the valve is 100% opened. This has not only resulted in power saving but has also given accurate control of process parameter. 4 equipments were operating with 15-30 % valves throttled. VFD's were provided operated at reduced RPM and valves are 100% opened.</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.: 13.91 Lacs	Year of implementation: 2006-07				
First year energy cost savings, Rs.: 15.58 lacs					
First year other savings, Rs.:nil					
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 ...	Rs 2.0/kwh	Rs 1850/t	-	Rs 22500/t	-
Company complete address: Century Pulp & Paper, Ghanshyam dham, Lalkua, Distt. Nainital 262402 Contact person who could be contacted for more information: Mr S L Goyal				We authorise Bureau to use this information for dissemination Signature Date	

Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure Replacement of excess loss Power factor correction Capacitors. .	Sector ...paper & pulp			
Year to be filled by BEE		Technology			
Description of the energy conservation measure: Capacitors are installed for improving the Power factor of electrical system. We had 38000Kvar capacitors installed out of which 1200 Kvar(12 banks of 100Kvar) were found to have excessive losses and instead of pumping reactive power in the system they were drawing power in the form of losses. These Capacitors were replaced.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
 <p style="text-align: center;">HIGH LOSS 2 – 7 KW/100 KVAR</p>			 <p style="text-align: center;">NEW CAPACITOR LOSS 0.5 KW/100KVAR</p>		
Agency that executed the project (with complete address and email):					
Total investment, Rs.: 5.76 lacs			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 10.75 lacs					
First year other savings, Rs.: nil					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	588840	-	-	-	-
Energy consumption after	51840	-	-	-	-
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	Rs 2.0/kwh	Rs 1850/t	-	Rs 22500/t	-
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