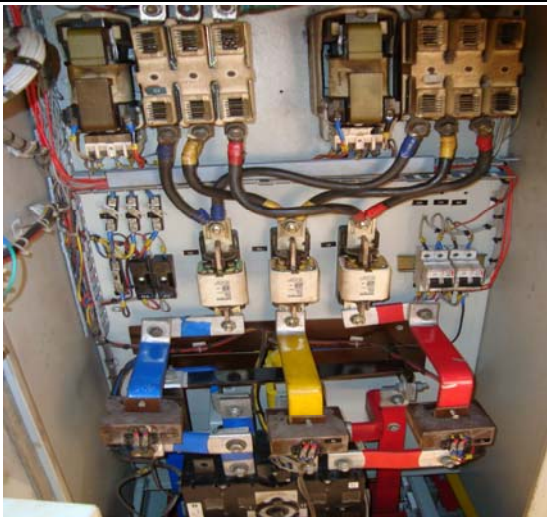



Energy Conservation Measure implemented in 2007-2008

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



ID to be filled by BEE	Title of the measure	Sector ...Compressed air system.....			
Year to be filled by BEE	Installation of VFD's for Air compressors	TechnologyVariable frequency drive.....			
Description of the energy conservation measure:					
<p>The company has Installed one no. of VFD with change over switch for their existing three no. of screw type air compressors, which were earlier run with soft starters. At any given time only one compressors runs. Average Power consumed by compressors after installation of VFD has reduced by approx 12%.</p>					
Picture/ sketch/ drawing before modification (if available)		Picture/ sketch/ drawing after modification			
 <p>(Compressor Panel with soft starter)</p>		 <p>(Compressor Panel with VFD)</p>			
Agency that executed the project (with complete address and email): In House Contractor Engaged: M/S R.K Electricals , Mumbai. (Phone No: 9850146534)					
Total investment, Rs.: 8.5 lacs		Year of implementation:2007			
First year energy cost savings, Rs.: 1.46 lacs					
First year other savings, Rs.: NIL					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	1241	NA*	NA	NA	NA
Energy consumption after	1095	NA	NA	NA	NA
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	3.01	NA	NA	NA	NA
Company complete address: Sesa Industries Ltd, Pig Iron plant, Amona Goa PIN:403507				We authorise Bureau to use this information for dissemination Signature Date	
Contact person who could be contacted for more information: N L Vhatte Mob. No: 9765565531					

Note: Please submit this sheet separately for each Energy Conservation Measure implemented in 2007-2008.

***NA – Not applicable**

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	SectorVFD & temperature control.....			
Year to be filled by BEE	Installation of VFD & Auto start/stop control for Cooling Tower fans	Technology VFD & temperature control.....			
Description of the energy conservation measure:					
Existing cooling tower installed in 2006, has 03 cells, out of which 02 are in operation and one is standby. One of the three cooling tower fans is fitted with a VFD with temperature feedback & operated in PID control mode. Based on actual temperature of water fan speed is corrected by VFD. The other fan which is provided with an auto start/stop control & comes IN/ OUT of circuit only when temperature control is out of VFD range. This allows the fan to remain off for almost 10 to 12 hrs in a day based on ambient temperature.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
(Panel with Star Delta operation)			(Cooling Tower Fan Panel with VFD)		
Agency that executed the project (with complete address and email): In House					
Contractor: M/S Elite Enterprises, Sanquelim – Goa.(Phone No: 9823883024)					
Total investment, Rs.: 1.50 lacs			Year of implementation:2007		
First year energy cost savings: 1.64 lacs/annum.					
First year other savings, Rs.: NIL					
On annual basis	kWh 000'	Coke (Tons/ THM)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	319.20	NA*	NA	NA	NA
Energy consumption after	164.8	NA	NA	NA	NA
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	3.01	NA	NA	NA	NA
Company complete address: Sesa Industries Ltd, Pig Iron plant, Amona Goa PIN:403507 Contact person who could be contacted for more information: N L Vhatte Mob No:9765565531				We authorise Bureau to use this information for dissemination	
				Signature	
				Date	

Note: Please submit this sheet separately for each Energy Conservation Measure implemented in 2007-2008.

NA* Not applicable

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	Sector Boilers.....			
Year to be filled by BEE	Replacement of 5TPH boiler from Oil fired to BF Gas fired	Technology Gas fired Boiler			
Description of the energy conservation measure:					
<p>The Company has replaced the old inefficient 5TPH Boiler with a new Blast furnace gas fired boiler. The Boiler is required to be kept pressurized throughout the day as it caters to the process steam demand, which is uncertain. This would have required to use almost 200 Kg/hr,6 hours per day of furnace Oil, which is now taken care by the BFG, very low cost fuel (20 times cheaper than furnace oil)</p>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
(Furnace Oil Fired 5TPH Boiler)			(BFG fired 5TPH Boiler)		
Agency that executed the project (with complete address and email): In House Boiler Supplied by: M/S Transparent Systems- Pune. (Email: nishikantdw@gmail.com)					
Total investment, Rs.: 120 lacs			Year of implementation:2007-2008		
First year energy cost savings, Rs: 88.42 lacs (Projected)					
First year other savings, Rs. NIL					
On annual basis	kWh 000'	Coke (Tons/ THM)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	NA	NA	NA*	440	NA
Energy consumption after	NA	NA	NA	36	NA
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	NA	NA	NA	21700	NA
Company complete address: Sesa Industries Ltd, Pig Iron plant, Amona Goa PIN:403507				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information: N L Vhatte Mobile. 09765565531				Signature	
				Date	

Note: Please submit this sheet separately for each Energy Conservation Measure implemented in 2007-2008.

NA* Not applicable

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	Sector Furnaces & Kilns.....			
Year to be filled by BEE	Installation of Air preheater in Hot Blast stoves for preheating combustion air.	Technology Blast air Preheater.....			
Description of the energy conservation measure:					
The company has installed air preheater in Blast Furnace # 1, to utilize the sensible heat from the waste gases to preheat the combustion air & increase the combustion efficiency. This has resulted in metallurgical coke savings.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): In House APH supplied by: M/S ENMAX Global technologies ltd. –Tamilnadu(Email: enmax@vsnl.com)					
Total investment, Rs.: 30.5 lacs			Year of implementation:2007-2008		
First year energy cost savings, Rs: 35 lacs					
First year other savings, Rs.: NIL					
On annual basis	kWh 000'	Coke (Tons/T HM)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	NA	0.625	NA	NA	NA
Energy consumption after	NA	0.623	NA	NA	NA
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	NA	12523**	NA	NA	NA
Company complete address: Sesa Industries Ltd, Pig Iron plant, Amona Goa PIN:403507				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information: N L Vhatte – Mobile 09765565531 ** Coke rate in Rs./ton					
				Signature	
				Date	

Note: Please submit this sheet separately for each Energy Conservation Measure implemented in 2007-2008.

NA* Not applicable

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	Sector Power distribution.....			
Year to be filled by BEE	Installation of Power control centre(PCC) & 2000 KVA transformer	Technology PCC & Transformer.....			
Description of the energy conservation measure:					
<p>Existing PCC panel was 15 years old and most of the breakers used in this PCC were obsolete. Once we started using GEPL power supply in full swing, some of the PCC breakers became very critical for plant operations.</p> <p>In the existing scheme there were 2 separate lines feeding to the furnace. One from the Government grid and other from our 3 MW captive Power Plant. After commissioning of GEPL 30 Mw power plant, entire government grid line is being surrendered and the supply from GEPL has been connected to the TG line. Therefore, in case of any problem with the GEPL power plant/ feeding line, total supply to the Blast Furnace (BF) would be cut off and if power failure happens just before opening of tap hole, it can cause complete shutdown of BF for many days. Also GEPL was not able to draw complete BFG gas due to under sizing of pipe lines and fan (which they are replacing now). To utilize additional BFG, which otherwise would have been flared to atmosphere, It was decided to run 3 Mw TG and have two independent lines feeding to the furnace one from GEPL and other from 3 Mw TG. To have this arrangement additional equipment like feeder, bus coupler in PCC and transformer, were procured & installed.</p> <p>Apart from saving on grid costs, diesel generators need not be run, thus saving on diesel cost also</p>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
(Not Available)					
Agency that executed the project (with complete address and email): In House PCC supplied by: M/S Manshu Comtel- Satara.(Phone No: 9322932492)					
Total investment, Rs.: 95 lacs			Year of implementation:2007-2008		
First year energy cost savings, Rs: 64.5 lacs (For 03 Months i.e January 08- March 08)					
First year other savings, Rs.: NIL					
On annual basis	kWh 000'	Coke (Tons/THM)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	NA	NA	NA	NA	NA
Energy consumption after	NA	NA	NA	NA	NA
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	NA	NA	NA	NA	NA
Company complete address: Sesa Industries ltd, Pig Iron plant, Amona Goa PIN:403507 Contact person who could be contacted for more information: N L Vhatte (Mob. No: 9765565531)				We authorise Bureau to use this information for dissemination	
				Signature	Date

Note: Please submit this sheet separately for each Energy Conservation Measure implemented in 2007-2008.

NA* Not applicable