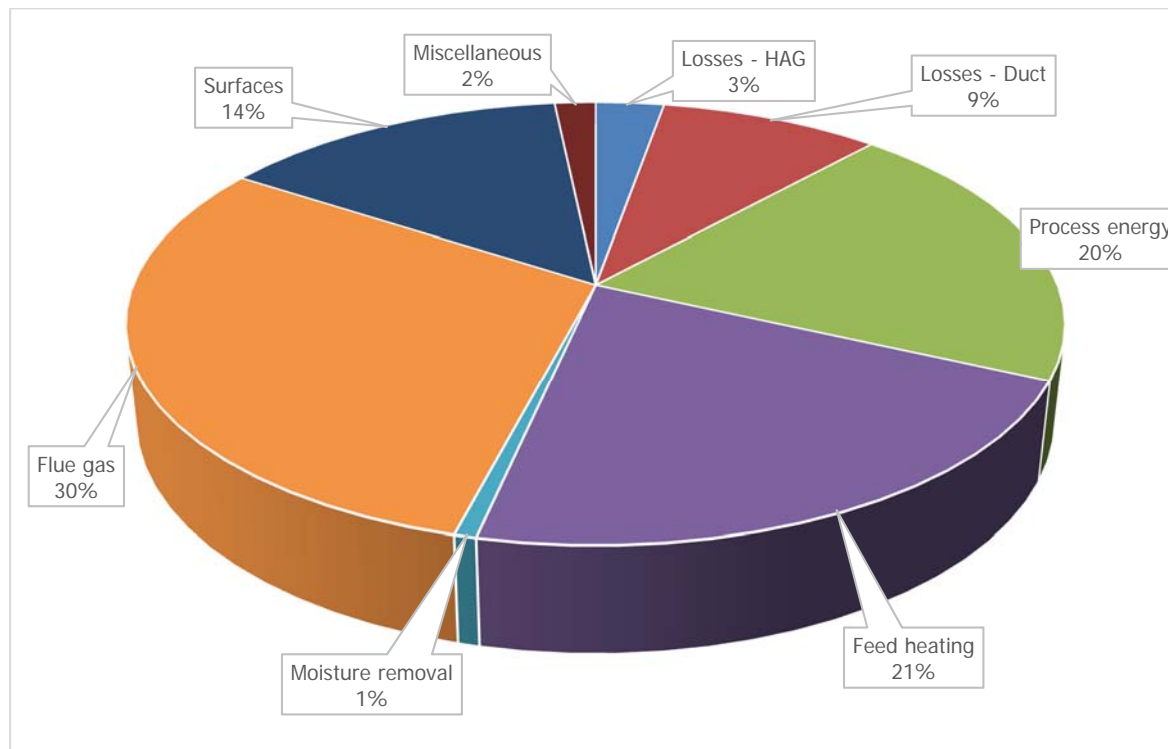


Case Study: Heat & Mass Balance Study: Calciner

SENERGY Consultants (P) Ltd

Background:

While conducting energy audit for the ceramic industry; the heat & mass balance study was carried out for a calciner. The typical breakup of the input energy is represented as under.



Scenario:

The system comprised of furnace oil fired hot air generator, supplying heat to the calciner, operating at 950 °C.

- The heat loss from the connecting duct was observed to be very high
- The heat losses through the exhaust were observed to be higher than design value.

Improvement Measures:

The above concerns and issues were addressed by taking the following measures.

- Redesigning the connecting duct
- Installing additional heat recovery system to preheat the combustion air.

Outcome:

- The overall furnace oil consumption reduced by 15%.

SCPL-CS-23

Helping You to Conserve Resources

03, Aastha II, B S Devshi Road, Govandi East, Mumbai 400 088, India.

Phone: ++91 22 2555 3297

Email: senergy@vsnl.com

Website: <http://www.senergy-india.com>