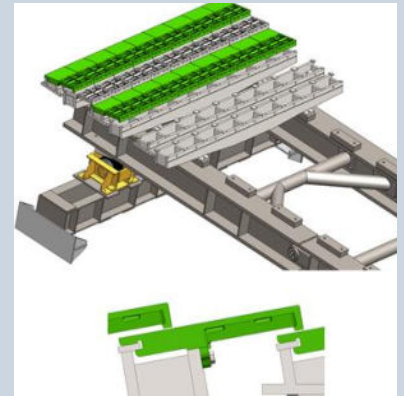




Repol RS clinker cooler diagnosed by Satarem



3D Modelling on SATAREM Cooler Upgrade

## Newsletter – August 2020

Another successful **SATAREM Cooler Diagnostic** has been completed on a 3000 TPD Polysius REPOL RS Clinker Cooler, and even more... after the proposed modifications from SATAREM, this cooler will increase its production at least 15%.

SATAREM new arrangement will sort out different issues such as:

- Red river on the cooler
- Frequent burns and damages on the plates and on the clinker breaker
- Low efficiency and heat recovery
- Clinker outlet temperature higher than 200°C
- Snowmen.

### Modification Objectives

1. Increasing heat recuperation
2. Decrease clinker outlet temperature
3. Decrease kiln line energy consumption
4. Decrease occurrence of snowmen
5. Ensure perfect sealing avoiding false air
6. Improving plates lifetime

### Scope of Diagnostic

SATAREM's multidisciplinary team integrated by European and Latam professionals together with Client's staff reviewed cooler operation, identifying main issues, and assessed mechanical and process conditions.

Short-term recommendations including adjustments in operation parameters according to SATAREM expertise.

Medium-term recommendations focused on overcoming the problems related to the inadequate mechanical design of the clinker

### Proposed Modifications

Our SATAREM solution include changing Hydraulic drive system, a modern Static Inlet, proper chamber aeration by installing adapted fans and resizing chambers for better cooling efficiency.

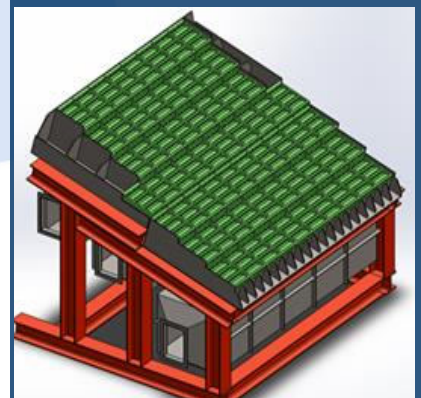
### High Quality components

All SATAREM clinker cooler parts, meet technical requirements and parameters to ensure equipment have high running time. This include using top brands such as Rexroth hydraulics, Siemens/Sew motors, ABB control components, among others.

### SATAREM modifications:

- High efficiency Satarem Static Inlet.
- Fans repositioning on chambers.
- Compartments resizing to improve clinker cooling
- Changing drive system

*These changes will allow higher running times, lower maintenance costs and higher thermal efficiency*



Satarem Static Inlet