



- a strong solution for the environment



CASE: ReTec Miljø ApS Denmark, December 2015

Cemex Latvia Broceni Plant installs ReTec Bale-opener for SRF line

When Cemex Latvia wanted to increase their AF substitution rate, they went looking for bales. Good quality, high calorific SRF is available in bales on the international market. In this case the source is UK. Cemex Latvia plant is located only 100KM from the local port of Liepaja, so logistics is straightforward with bales being shipped as cargo with 2.000-3.000 tons per ship.

The challenge

Once at the plant the bales are stored in a large roofed hall, where the debaling and handling is also done.

Cemex Latvia feed approximately 20 tph through their AF system to the pre-calciner. The bales are mostly tied in plasticnet and always wrapped in several layers of wrapping. The challenge was multitude:

1. SRF must be fed continuously meaning the flow must be continuous and homogenous. I.e. the bale must be loosened completely.
2. Wrapping, netting and wires larger than 50 mm must be removed.
3. Capacity to be minimum 20 tph.
4. A solution that is single to operate and very reliable.

In Cemex case the plant already had a smaller drum screen in place that originally was used as a bale-opener. The capacity was insufficient and the quality of the screening poor, plus the solution could not handle 1000 kg + bales without critical operational issues.

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The solution was simply to install the ReTec bale-opener in front of the existing drumscreen-opener, and convert it to a conventional drum-screen. With the SRF completely loosed, the screen can now very effectively screen the wrapping from the fluff. The output is very clean and homogenous flow of fluff, and the waste fraction is very pure, i.e. contains very little SRF.

Operational the solution is extremely reliable and with very low operating cost. The bale-opener itself needs only 30 kW on average and the wear-parts are limited to the hardox ripperplates that can last up to 1.000 hrs. There is no issues with cleaning or wrapping getting stuck anywhere or around the bale-opener's ripperdrum. The system is operated by 1 operator who is also feeding the bale-opener with his wheel-loader.

And then reality checks in

Bales are not just bales, it seems. Density varies, wrapping method and strength varies, not to speak of size and shape. This we all know, and therefore our bale-opener is constructed to be 100% versatile, i.e. it automatically open any kind of bale without



any pre-adjustment mechanical or otherwise.

However during commissioning in February, it was minus 20°C inside the hall, and we suddenly had solid, hard frozen bales. Hard like rock. At first we were a bit anxious to see how the ripper coped, and it was a

relief to see it just chipping away effortlessly. The infeed speed reduced a little-bit, but whit a nominal capacity of 60 tph, there is a long way to the needed 20 tph. Good to know, our bale-opener does the job!



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