

CASE STUDY

SKELLEFTEÅ - SWEDEN

INNOPLANA

A low energy consumption and flexible solution

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SKELLEFTEÅ

The municipality of Skellefteå decided in 2000 to add a house garbage digestion in the immediate vicinity of their Waste Water Treatment Plant, which already had sludge digesters, as well as to dry the sludge for agricultural use.

After a longer period of engineering and consultations, the municipality in 2004, ordered the INNODRY® 2E for drying the dewatered sludge from the WWTP and the new garbage digester. As Skellefteå is situated in the far north of Sweden the granulate needs to be stored over the winter months. This is the reason that the granulate is dried to 90% DS.

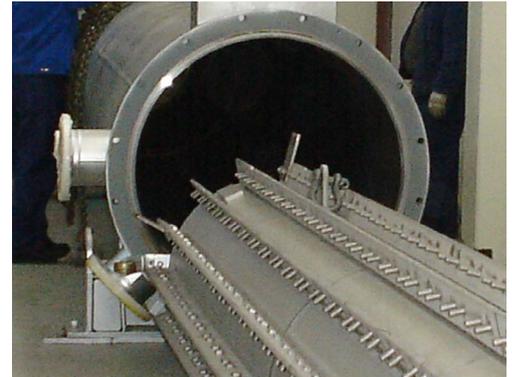
WHY INNOPLANA

The INNODRY® 2E main features of a dust free drying and very low energy consumption where the reasons why the INNODRY® 2E was chosen.

A wood pellets fired district heating plant was part of the new complex. This cogeneration unit produces the necessary saturated steam to heat the INNODRY® 2E. Since the steam does not come into contact with the sludge within the plant, it is returned to the boiler thereby saving water for the whole plant.

PROVEN RESULTS

All the system parameters have been tested by the client during a measurement program. All the results met the initial values such as extremely low power consumption, low dust content and fully hygienized granules.



Opened TFE during erection



The Chopper with its grid exchange system

TREATMENT STAGE	DIGESTION (PRIMARY & SECONDARY MIX)	DEWATERING	DRYING
SLUDGE DRYNESS	6% DS	22% DS	90% DS
SLUDGE VOLUME	8.8 T/h	58 T/day	586 kg/h



The belt dryer : direct drying stage

INNOPLANA

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