

ISLE OF MAN: SUCCESSFUL START-UP OF A HUBER BELT DRYER BT 16

CASE STUDY



On the Isle of Man, up to 12,775 t sewage sludge per year will efficiently be dried from now on. HUBER received the order to build a belt dryer on the Isle of Man at the beginning of 2015. The customer wanted to reduce the energy expenditure for sludge drying and the resulting high disposal costs. The HUBER BT 16 achieves this most impressively.

OVERVIEW

The sewage treatment plant of the town Douglas does not have any sludge digestion facilities. There is therefore no exhaust air available for operating the dryer, and only a limited amount of gas and fuel oil is available and hence expensive. The contractor decided therefore to use a highly-efficient, electrically heated boiler for heat supply to the dryer.

As the site is located very close to the sea (approx. 300m), all components of the dryer had to be manufactured from V4A material, not only the dryer segments but also the complete outer shell and the insulation of the air and heating lines. For the cooling water supply for vapour condensation even titanium is used in this case because of the extremely high chloride



contents of more than 1,000 mg/l.

OUTCOME

After a construction time of about one year the belt dryer went into operation in June 2016. The HUBER Belt Dryer BT could be put into regular operation after only a very short start-up period.

This project shows how flexible and adaptable the HUBER Belt Dryer BT can be. The dryer easily copes with even the most difficult local conditions of a site on an island and offers the customer an efficient, robust solution to reduce operating costs.

Fact and Figures:

Site location	Douglas, Isle of Man
Size	HUBER Belt Dryer BT 16
Dryer length	19 m
Water evaporation	2,013 kg/h
Throughput	12,775 t/a or 2,500 kg/h
Operating time	5,110 h/a
Sludge Drying	from 18% DR to 90 % DR
Heat source	electricity-heated boiler, 140°C

