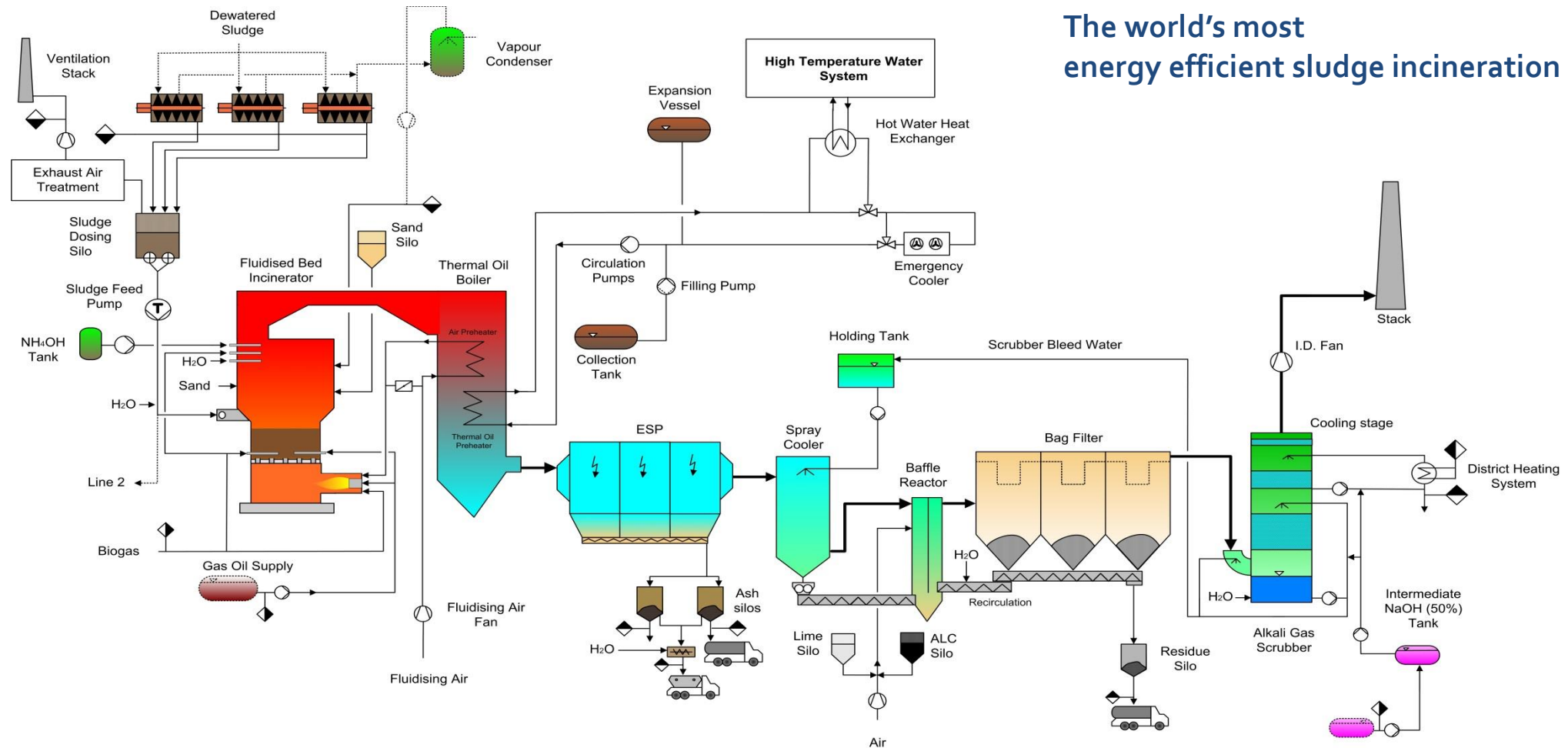


Sludge Incineration



The world's most energy efficient sludge incineration plant



The sludge will be incinerated in a **Stationary Fluidized Bed Incinerator**.

The fluidized bed incinerator consists essentially of a refractory-lined cylindrical vessel arranged above a nozzle grate. Preheated combustion air is blown up through the nozzle grate, keeping a bed of sand in suspension. The sludge is fed directly into the fluidized bed where it is broken up, mixed with hot bed material, dried and burned for the most part. Remaining organic components are burned in the zone above the fluidized bed.

The heat will be recovered in a steam boiler for power production or in a thermal oil boiler for district heating.

The flue gases were cleaned in a modern flue gas treatment plant to highest emission standards.

One of these plants is the new sewage sludge incineration plant in Copenhagen/Denmark. The objective was the construction of one incineration line equipped with a ENVIROTHERM stationary fluidized bed incinerator, a waste heat thermal oil boiler and a multi stage flue gas treatment system. The heat recovered from the boiler will be used for pre-drying of the sludge. The heat recovered from the flue gas cooling stage will be used for district heating. This plant has an incineration capacity of 2,35 t DS / h.

Other build sludge incineration plants are:

- Widnes / England: 5,7 t DS / h
- Belfast / North Ireland: 3,0 t DS / h
- St. Petersburg / Russia: 3,7 t DS / h
- Stuttgart / Germany: 4,0 t DS / h