

[Home](#) ■ [Soluzioni](#) ■ [Trattamento fanghi](#)

Soluzioni per il trattamento dei fanghi

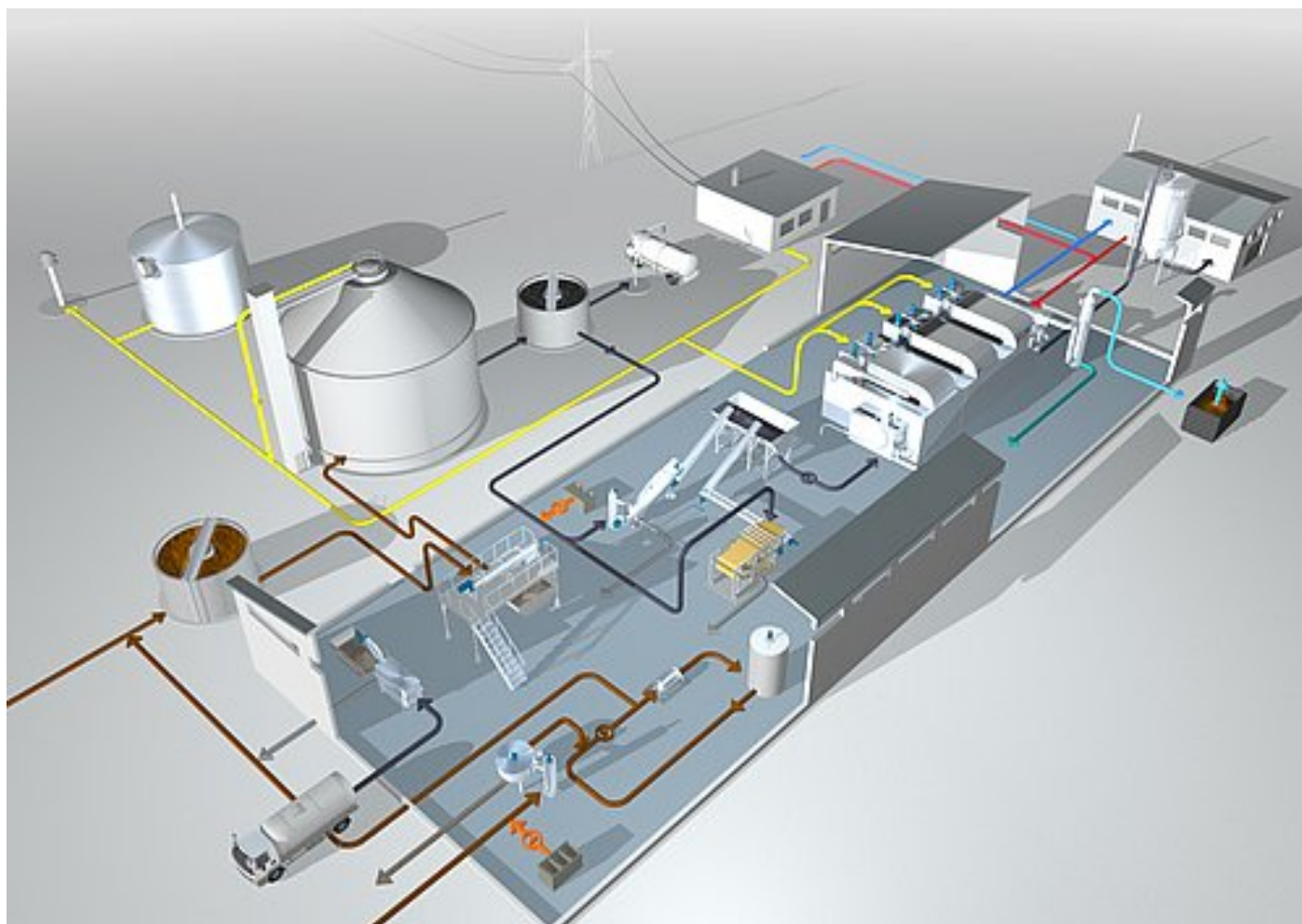
Migliore è il trattamento delle acque reflue, minore è la produzione di fanghi. Le sostanze solide contenute nelle acque grezze vengono separate nei fanghi primari, mentre i fanghi secondari contengono biomassa (fanghi in eccesso), la quale viene prodotta nel corso del trattamento biologico. A questo si aggiungono eventualmente i fanghi terziari, provenienti da un ulteriore trattamento chimico-fisico.

I compiti principali del trattamento dei fanghi sono:

- **Grigliatura** per la rimozione delle sostanze interferenti
- **Ispessimento** by attraverso la concentrazione delle sostanze solide
- **Omogenizzazione** attraverso lo sminuzzamento delle sostanze solide
- **Disinfezione** attraverso l'uccisione dei batteri patogeni
- **Disidratazione** attraverso la separazione meccanica dell'acqua
- **Essiccamento** attraverso la separazione termica (evaporazione) dell'acqua
- Incenerimento attraverso l'ossidazione termica delle sostanze organiche

Offriamo efficienti soluzioni HUBER per il trattamento fanghi, dal pretrattamento meccanico attraverso la grigliatura fino al riutilizzo dei fanghi.

Concetto impiantistico



Clicca sull'immagine per avere un'apparizione più grande ed interattiva con informazioni dettagliate e link mirati.

Dettagli

The main waste generated in a municipal waste water treatment plant is the wastewater sludge that is removed from mechanical, biological and chemical wastewater treatment processes.

The amount of sludge depends on the type of treatment, the connected population and population equivalents, and wastewater characteristics. Wastewater characteristics and specific sludge production vary from country to country and from region to region. There is even a difference between urban and rural areas. Sludge production figures range from 20 to 45 kg of dried solids per person per year.

There are several sludge characteristics that have a great influence on the costs of sludge treatment. The water content is very important as it determines the sludge volume and therefore feasibility and costs of transportation and disposal. The solids and water content of sludge depends on the type of sludge (e.g. primary sludge, waste activated sludge, chemical sludge) and the type and quality of its treatment (e.g. sludge digestion) and on the method of sludge thickening and dewatering.

The chemical composition of the sludge also depends on wastewater characteristics and the wastewater treatment method. Of particular importance is the content of heavy metals as their concentration is a limiting factor for land application of biosolids. Despite the fact that land application within the limits set by European biosolids regulation is not only a safe and beneficial reuse of valuable nutrients, there are politically motivated concerns endangering the long-term continuation of land application. The existence of endocrine substances in biosolids is also an additional concern though these pharmaceutical substances are unlikely to be taken up and incorporated into plants.

European regulations specify that only waste with a volatile solids (organic) content of below 5% may be landfilled. This means the end of the sludge landfilling only the ash from sludge incineration plants may be landfilled. The combination of sludge drying and incineration is about energy neutral. Dried sludge has approximately the same thermal value as brown coal. If dried sludge is incinerated, the generated heat is sufficient for sludge drying.

HUBER offers a virtually complete chain of sludge treatment processes.

Foto

