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## Soluzioni per il trattamento delle sabbie

Secondo la legge tedesca i rifiuti devono venire riciclati e valorizzati. Rifiuti ricchi di minerali come le immondizie stradali, fanghi provenienti dal risciacquo dei canali, e dalla depurazione dei bacini di acqua piovana, sabbie, gullys, pietrisco vario, sostanze di disturbo (p.es. materiali di imballaggio), sostanze grossolane (p. es. pietre, legno, ferro, vetro, parti metalliche) e sostanze organiche (p. es. terra, semi di frutta, piante, cespugli e resti di cereali).

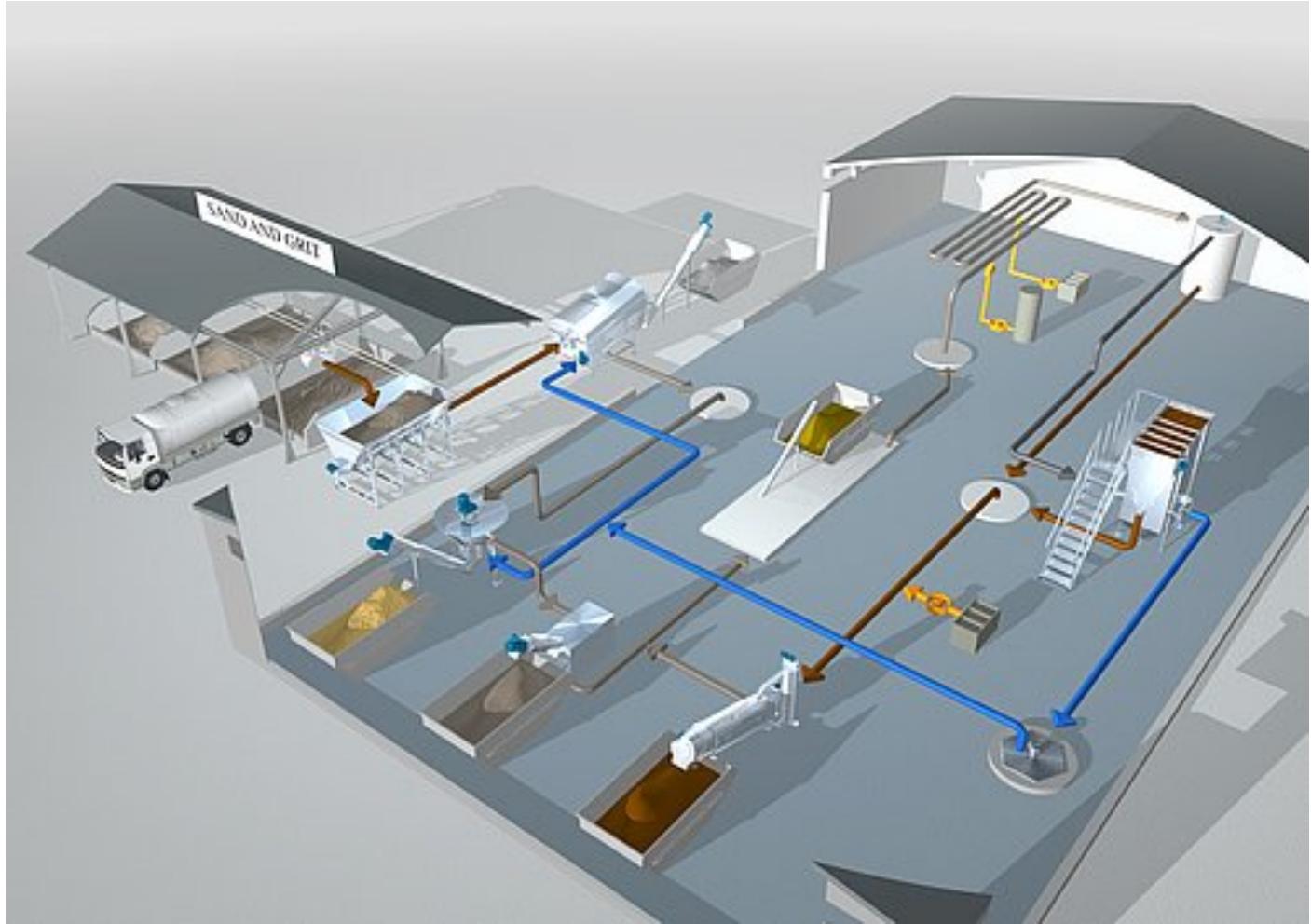
Noi mettiamo a disposizione la tecnologia Huber per il trattamento delle sabbie. Noi separiamo sostanze grossolane da sostanze di disturbo che vengono poi smaltite. Noi siamo in grado di generare una frazione minerale con una perdita limitata di incandescenza (< 3 %) e contenuto acqua(< 10 %), che è valorizzabile come sostanza costruttiva, p. es. nelle costruzioni di canali e strade. Noi siamo in grado di generare una frazione organica che diventa valorizzabile come materiale da pavimentazione, p. es. nella costituzione di paesaggi e ricoltivazione. Noi siamo in grado di ripristinare i cicli idrici.

Our systems are very economical because they produce valuable and reusable materials and minimize the amount of waste for disposal. Among our customers are not only operators of municipal wastewater treatment plants, but also waste management companies.

Depending on local conditions, our solutions may include the following process steps:

- Waste reception and storage
- Removal of debris
- Screening, washing, dewatering and compaction of coarse solids
- Suspending fine solids
- Separation, washing and dewatering of the mineral fraction
- Screening, dewatering and compaction of the organic fraction
- Treatment and recycling of process water

## Concetto impiantistico



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

## Descrizione processo

### System Description

A HUBER Reception Bunker serves for raw waste storage. A conveyor screw is integrated in the bunker and serves for controlled waste feeding.

In our ROTAMAT® Wash Drum the fed waste is submerged and homogenized. Coarse solids (> 10 mm) are screened out and washed, while fine solids (< 10 mm) are suspended in the wash water and drained through the drum. Washed coarse solids are discharged at the drum's end and dewatered and compressed in our Coarse Solids Compactor.

The drained suspension is pumped to a HUBER COANDA Grit Washer. In its fluidized bed mineral solids are separated due to their high specific weight. The mineral fraction is intensively washed and then dewatered (volatiles < 3 % and water < 10 %). Coarse grit can be screened out and recycled as road grit.

Organic solids (> 1 mm) are removed from the remaining suspension with a HUBER wege wire ROTAMAT® Rotary Drum Fine Screen. They are simultaneously dewatered and compacted (> 30 %DS).

The screened water is re-circulated as wash water to our Wash Drum. Surplus can be treated in a ROTAMAT® Longitudinal Grit Trap for removal of very fine sand (< 0.2 mm) and, after flocculation, in a sedimentation tank and a HUBER Dissolved Air Flotation Plant (DAF) for removal of colloids. The DAF's effluent is recycled as process water to the Grit Washer and Wedge Wire Screen. Removed sludge is dewatered in our ROTAMAT® Screw Press; solids contents of over 50 %DS can be achieved.

If the system is located at a sewage treatment plant, the organic suspension is generally discharged into its headworks and the plant's effluent is reused as process water. Special process water treatment is then not needed.

When we implement our solutions, we also provide other top-quality stainless steel components, such as Screw Conveyors, Manhole Covers and Stairways, Platforms and Guardrails.

## Applicazioni

- La sabbia fine nel mirino: Il dissabbiatore GritWolf® supera la prima prova di resistenza in Texas
- Trattamento professionale degli inerti nel sistema fognario
- Il nuovo dissabbiatore HUBER GritWolf® stabilisce nuovi standard: Separazione della sabbia sotto i 100 µm

- Sistema di nuova concezione per la separazione e al rimozione del grasso per i nostri impianti di dissabbiatura "Hydro Duct"
- Gli impianti di depurazione puntano in misura sempre maggiore sulla tecnologia HUBER nel trattamento di materiali di provenienza esterna
- Reliable grit treatment with the use of HUBER machines
- First complete treatment plant for sewer grit installed in China
- Multifunctional Complete Plant installed on STP Ortenburg
- New plant in Switzerland for innovative sewer grit treatment with process water recycling
- 4 HUBER VORMAX Vortex Grit Chamber screens in Saudi Arabia
- Grit washing in grit trap: Complete Plant plus grit washing plant
- 1000 COANDA Grit Washing Plant installations

## Downloads

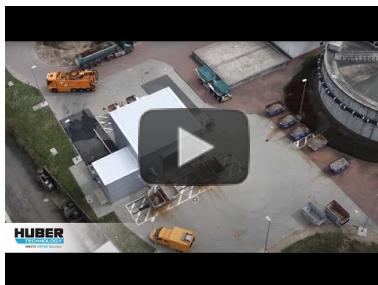
 Opuscolo: HUBER Grit Treatment Systems (inglese) [pdf, 1.32 MB]

## Prodotti

- HUBER Processo per il trattamento di Sabbie RoSF 5
- Accettazione sabbie
- HUBER Tamburo Rotante RoSF9
- Impianti di lavaggio sabbie
- HUBER Rotostaccio ROTAMAT® Ro2 / RPPS / STAR
- Separatori sabbie longitudinali
- Separatori sabbie circolari
- HUBER Pressa a Coclea S-PRESS
- HUBER Coclea di trasporto Ro8 / Ro8 T
- Allestimento pozzetti

## Photos





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WATER & ENERGY

Video: HUBER Grit Treatment System RoSF5 at WWTP Frankfurt-Niederrad

<https://www.youtube.com/watch?v=ZVP2aWdm9AE>



**HUBER**  
WATER & ENERGY

Video: HUBER Grit Treatment System RoSF 5 at major WWTP "Emschermündung"

<https://www.youtube.com/watch?v=Spqlkl361Sc>



**HUBER**  
WATER & ENERGY

Video: HUBER Grit Treatment System RoSF 5 - grit recycling at WWTP Schwarzenberg

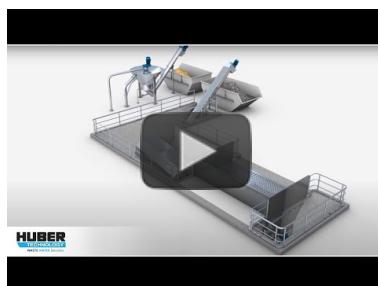
<https://www.youtube.com/watch?v=a2fl9eGOEsk>



**HUBER**  
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Video: HUBER Grit Treatment System RoSF 5 in disposal industry

<https://www.youtube.com/watch?v=nNstEvZA-24>



**HUBER**  
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Animation: HUBER Grit Treatment System RoSF 5

<https://www.youtube.com/watch?v=MGrAG0bs4xQ>



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Three Projects, One Goal:  
Highlighting Stormwater Management in New England

<https://www.youtube.com/watch?v=JeUYOhHtJUY>