SMT STICHWEH

MORE SAND.
MORE GRAVEL.
MORE SUCCESS.

Jig Type 2500 SG, Location: Denmark
Output 170 t/h, Grain size 2 – 32 mm
Separation of constituents harmful to properties of concrete. The discharged light materials are drained through a dewatering mesh screen and conveyed to a tip.

SSS Jig
(Jig, approx. 2500 mm)
Location:
USA, South Dakota
The particular challenge:
separating shale and iron oxide from sand deposits where separation is difficult.
The jig manages to achieve values below 6%.

SSS Jig
(Jig, approx. 1100 mm)
Location:
Hawaii/Oahu
The particular challenge:
separating red pumice from black crushed basalt. It was only when a jig was deployed that it became possible to achieve very good material yields:
grain size approx. 6 – 38 mm at a throughput rate of 80 to 100 t/h.

A view of the material bed shows the process of separating the acceptable material (black crushed basalt) from the rejected material (red pumice).

Concentrated power for your business – through the successful technology transfer with our Partner **Snoby Separation Systems** (SSS) you will be able to benefit from more than three decades of experience with jigs in the USA plus STICHWEH quality workmanship MADE IN THÜSTE. We look forward to hearing from you – please get in touch with us.

WE WILL BE PLEASED TO ADVISE YOU –
EVEN DIRECTLY AT YOUR LOCATION.
PLEASE JUST GIVE US A CALL:
T + 49. 51 86. 94 14-0

OR FIND MORE INFORMATION AT:
smt-stichweh.com

LEARN MORE ABOUT THE STICHWEH PRODUCT RANGE:

WE SUPPLY:
drag scrapers · bucket wheels · log washers · screening machines · jigs · complete solutions and special solutions · pumps and (hydro)cyclones · electrical switching and control systems · spare parts

WE PROVIDE:
service engineering · installation service · maintenance and repair service

STICHWEH
Maschinen & Service GmbH
Am Schmiedebrink 4
31020 Salzhemmendorf / Thüste
Germany

T + 49. 51 86. 94 14 - 0
office@smt-stichweh.com
smt-stichweh.com

International representatives:
smt-stichweh.com/contact

FACTSHEET 05_2020

Jig Type 2500 SG
Location: Denmark

SMT STICHWEH

PREPARATION OF SAND AND GRAVEL

JIGS FOR EVEN BETTER CLASSIFICATION RESULTS THROUGH DENSITY-BASED SORTING

MORE SAND. MORE GRAVEL. MORE SUCCESS.

SMT STICHWEH

JIGS – FOR OPTIMUM RAW MATERIAL QUALITY

Modern preparation plants have to meet the increasing requirements with regard to raw material quality and the need to reuse primary or secondary raw materials.

Besides selecting the appropriate constituents during sorting, the new machines for classifying ensure the technical and, thus, also economic success.

If the substances responsible for the contamination have lower densities as compared to the saleable raw material then **density-based sorting** is a possible option. For this reason, **STICHWEH jigs** are increasingly being deployed for more and more preparation processes.

STICHWEH jigs are built in Thüste in cooperation with our partner, Snoby Separation Systems LLC.

YOUR BENEFITS

- **Throughput performance of up to 270 t/h**
- **High operating efficiency**
- **Use of accurate operating data for method selection and precalculation of raw material quality**
- **Low maintenance**
- **Broad particle range**
- **Smart control via mobile terminals**
- **Automatic discharge control with analogue measurement of layer height during normal operations**
- **Excellent material yields for subsequent industrial processing**
- **Machine solutions that can be individually configured for your needs**

BY PROFESSIONALS FOR PROFESSIONALS:

PERFECT IN FUNCTION AND USAGE.

Density sorting method: jigs.

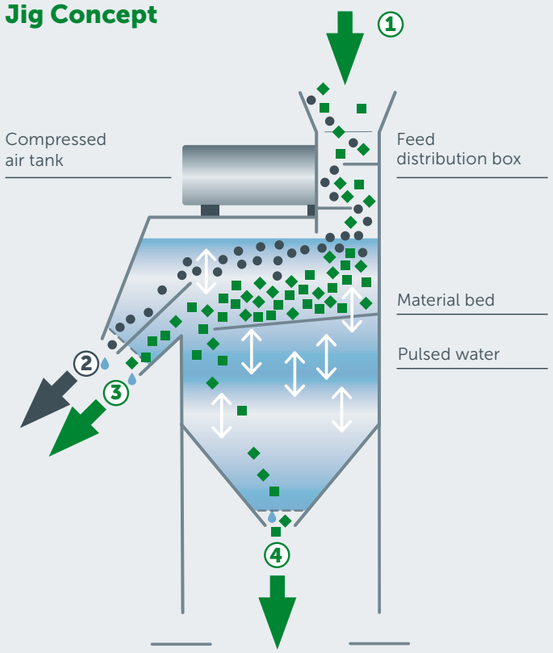
Jigs separate according to the key criterion of **"density"**. By deploying **STICHWEH jigs** you can meet the following requirements:

- The normal sorting process should remain as simple, economic and ecologically efficient as possible.
- The chosen sorting method should work across a grain size range that is as large as possible.
- The sorting method and the respective jig deployment have to be tailored to the needs of the site and the condition of the raw materials.
- It has to be possible to widely adjust the separation density.
- The integration of the sorting system has to ensure maximum operating safety and smooth running.
- The chosen system has to function with minimum costs for personnel, energy and wear and tear.

MUST SEE. How it works.
Snoby Separation Systems LLC

https://www.youtube.com/watch?time_continue=2&v=RDgZtTEhMVk&feature=emb_logo

Jig Concept



HOW IT WORKS: Basic process of jigging

SORTING

1) In order to remove light materials (unwanted particles, e.g. coal, shale, iron oxide, pumice, shells, ...) the material is fed into the jig.
2) A pulsating current of water raises the material and it sorts itself according to its density.
3) The layer of material is set into a loose fluidized bed-like state by the pulsating upflow of the water.
4) The light materials fall considerably more slowly than the heavy materials and thus stratification occurs according to the density – i.e. light materials come to the top of the material bed while the heavy materials are concentrated in the lower part.

DISCHARGE

The light materials are separated off in the upper area. The heavy materials are discharged from beneath the light materials. There are various options available here for the discharge depending on the particle size.

Fig. A: Material bed/jig bed prior to material feed
Fig. B: During the jigging process - the unwanted organic material (here: coal) collects at the top and will be discharged.

1 MATERIAL FEED

2 DISCHARGE for light materials/rejected material
Further transportation, e.g. to the tip.

DISCHARGE for heavy materials/acceptable material

3 Discharge for coarse-grained material, e.g., through a rotary valve (star gate). Then further processing via the dewatering screen/screening machine for classifying.

4 Discharge (e.g., in the case of sand) in the lower section through the bottom gate. Then further processing via the dewatering screen or a bucket wheel.

MORE SAND. MORE GRAVEL. MORE SUCCESS.