

wima.
SAND TRAP



**SAND:
RECOVERING
AND WASHING**



You can wait
and watch how
water and
sand separate
naturally ...

... but our Sand Trap
does it much faster!



Whether it's the treatment
of process water or the
purification of sands, WIMA
has the right solution for it!

Dewatering of Sand in Gravel and Crushed Stone Plants

Sand Traps manufactured by WIMA are mainly used in processing plants for dewatering the sand originating from the washing and screening plants. Washing of crushed sand is also possible with a modification of the machine. Another field of application is the fine sand recovery from the waste water coming from the plant. By recovering these usable grain groups, the sedimentation tank is relieved of solids.

TECHNICAL FACTS

WIMA Sand Traps are available from a capacity of 140 m³/h (20 t/h solids) up to 280 m³/h (100 t/h solids).

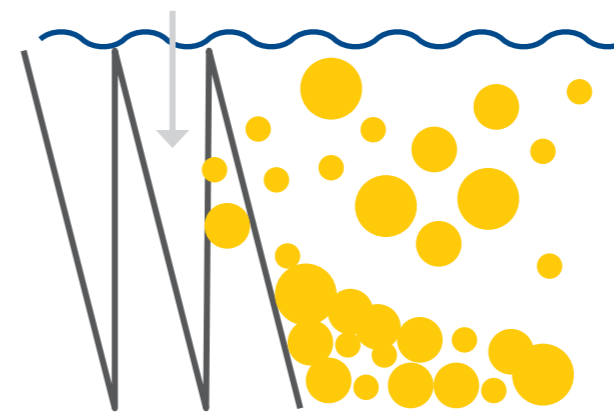


Sand Trap with double bucket wheel and a Dewatering Screen Machine

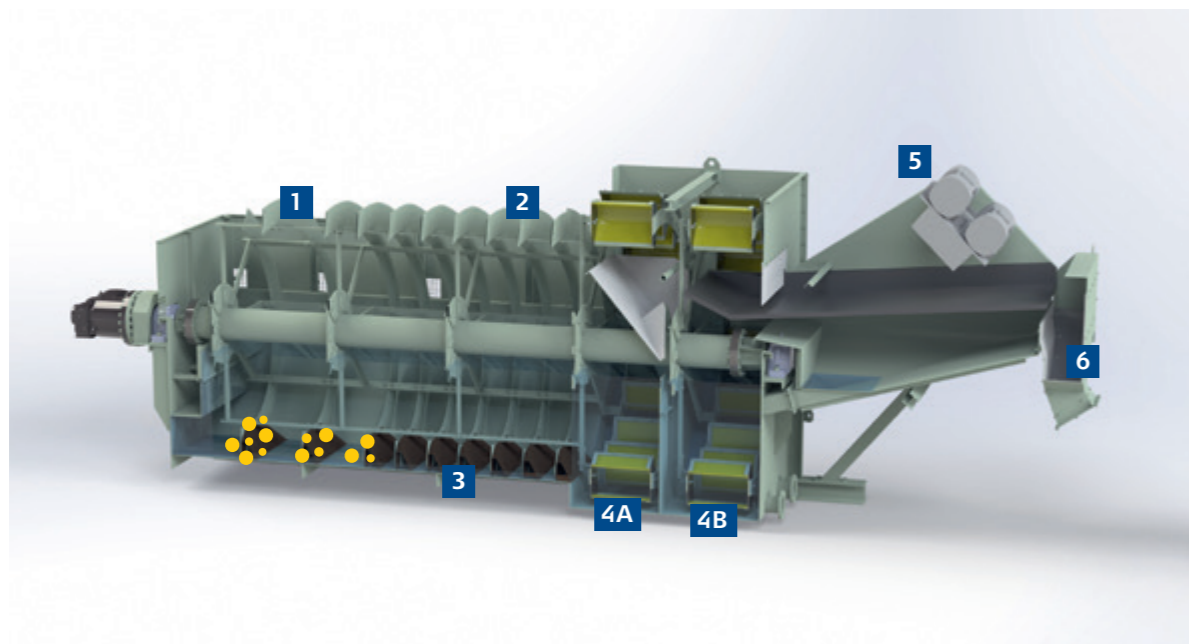
This Is How a Sand Trap Works

Once the sand-water mixture flows into the trough on one side, the wastewater is discharged again at the opposite end. During this crossing, the solid particles sink to the supporting soil. From this position, transport spirals convey the settled sand to the wheel. In order to ensure optimum dewatering of the sand, the buckets transfer the sand to the downstream Dewatering Screen. The waste water

from the Dewatering machine is returned to the bucket circuit via a chute, preventing the loss of fine sand. It is also possible to operate the Sand Trap without a Dewatering machine. In this case, the sand discharged has a correspondingly higher moisture content. For better utilization of the Sand Trap, a load-dependent speed control is possible.



• Sedimentation



The Sand Trap consists of transport spirals in a trough and one or two bucket wheels.

Sand Trap with all Options:

- 1 Transport spiral
- 2 Material infeed
- 3 Floor flushing
- 4A Washing wheel
- 4B Bucket wheel
- 5 Dewatering Screen Machine
- 6 Material outlet

Machine type	dimensions			power	Dewatering screen	weight
	Wheel diameter in mm	Wheel width in mm	Bucket length in mm	Power in kW	Incl. Dewatering Screen Machine width x length in mm	Empty weight (incl. Screen) in kg
with Dewatering Screen Machine						
S 2445 ES	2400	350	4500	3	900 x 2000	6,800
S 2450 ES	2400	350	5000	3	900 x 2000	7,000
S 2640 ES	2600	500	4000	5.5	1000 x 2500	8,800
S 2650 ES	2600	500	5000	5.5	1000 x 2500	9,000
S 2860 ES	2800	500	6000	5.5	1200 x 2500	10,500
S 3060 ES	3000	600	6000	7.5	1500 x 3000	13,500
S 3075 ES	3000	600	7500	7.5	1500 x 3000	15,000
S 3270 ES	3200	600	7000	11	1500 x 3000	16,500
with double bucket wheel and Dewatering Screen Machine						
S 2650 DES	2600	2 x 500	5000	7.5	1000 x 2500	1,100
S 2860 DES	2800	2 x 500	6000	7.5	1200 x 2500	13,500
S 3060 DES	3000	2 x 600	6000	11	1500 x 3000	15,500
S 3075 DES	3000	2 x 600	7500	11	1500 x 3000	17,000

NOTE: In addition to our standard dimensions, special designs are also possible, e.g. to fit machines into your existing steel structure.

ES Model with Dewatering Screen Machine

In the ES version, a Screening Machine is additionally interposed between the bucket wheel and the sand discharge device, which ensures that the sand is dewatered. In order to completely clean the sand screened by the Screening Machine from adhering fine sand, a partial spraying system can be provided as an option.



Partial spraying system on the Screening Machine

RU Model with Chute

The RU model does not have a Dewatering Screening Machine. The discharged material from the bucket wheel is discharged by a chute.



Sand Trap with chute

DES Model with Washing Wheel, Bucket Wheel and Dewatering Screen Machine

The DES variant offers a second bucket wheel for washing the material. In this case, the washing wheel transfers the material into the bucket circuit. The material is then transferred to the Dewatering Screening Machine.



DES model with washing wheel, bucket wheel and Dewatering Screen Machine


OPTION

Load-dependent Control System

We recommend to equip the Sand Trap with a load-dependent control system in case different densities and/or different quantities are fed to the Sand Trap. Here, the speed of the conveying units is controlled electronically. This ensures that the buckets are always optimally filled.

The Complete System with WIMA

 DENSITY SEPARATORS

 SCREENING MACHINES

 TWIN SHAFT LOG WASHERS

wima.

 SAND TRAPS

 SERVICE

 LAMELLA SEPARATORS

 CONTRACT MANUFACTURING



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