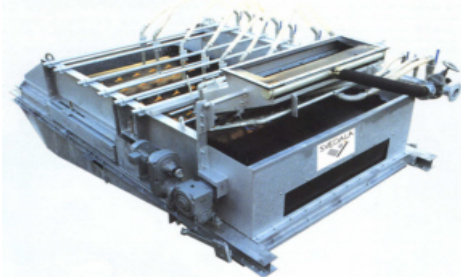




Processing Equipment

Aquamator® , Type AK (DBP) - with pulsation



Technical features Type AK

- Drive with adjustable geared motor or frequency control
- Low speed, no noise emission, low dynamic forces
- Belt plough with water flush pipe
- Feed chute, discharge chute and underflow through with wear-resistant rubber coating
- Minimum wear even for aggressive feed material
- Special version: 8 inch corrugated edge height
- Galvanized version

The Type AK Aquamator enables an efficient, cost-effective washing out of contaminants of lower specific weight from mineral granulates such as gravel, chippings, demolition rubble.

Construction and operation

The washing process takes place in a wash and separating bed formed by an endless belt of transverse stability with built-up vulcanized corrugated edges at both sides. The through-shaped cross section can be varied by means of adjustable idlers. The belt is led over a drive drum and a lower take up idler and runs against the upward slope. A rapper pulley located in the bottom part of the washing bed generates the pulsation.

The contaminated gravel fraction, with water already added, is fed via an adjustable feed chute into the separating and washing bed zone; feed direction is opposed to the direction of belt movement. Individually controlled, vertically and laterally adjustable spray pipes are located beneath the feed chute and also above the washing bed; these are equipped with flat- and round-profile spray nozzles.

Due to the wash water flowing off in the direction of the tension drum which is situated at a lower level, favored by the strong water spray of the nozzles and the frictional force on the belt in the opposite direction, a density separation occurs in the washing bed. The water pressure should be at least 45 psi. The pulsation zone at the end of the washing bed causes heavy contaminants already settled to be entrained by the flowing wash water and are thus better able to be discharged. The wash water can be recycled after foreign material has been screened off.

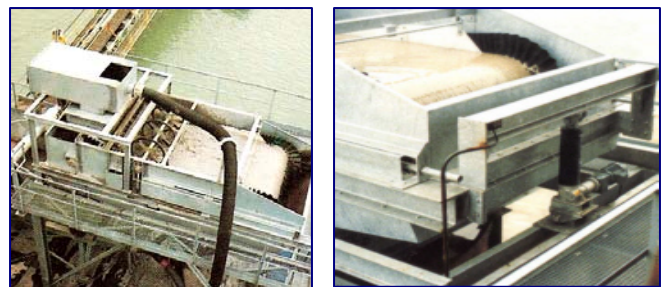


Hydrobelt separator, Types AS/ASE (DBP)

On the Hydrobelt separator, contaminated sand is washed and freed of components of lower specific weight (e. g. wood, coal, other contaminants). Moreover, this process enables a specified separation of fine sand for producing sand conforming to standards. In addition, the Hydrobelt separator ASE is equipped with a dewatering device which dewateres the sand product to obtain a conveyable product.

Design and operation

Also in these types of the Rohr Aquamator, the washing process takes place in a wash and separating bed formed by an endless belt of transverse stability with built-up vulcanized corrugated edges at both sides. The through-shaped cross section can be varied according to task by means of adjustable idlers. Against the direction of movement of the belt conveyor, the sand-water mixture is fed into the washing/separating bed via a flushing chute.



Sizing and sorting with one machine

The sizing effect is based on the selective effect of sedimentation. Due to its high settling velocity, the coarse fraction moves downwards on the belt and is discharged continuously from the separating zone against the direction of flow. Water which is liberated flows back into the washing bed at a lower level. Product is discharged over the variable speed drive drum equipped with a belt plough. The fines still dispersed in the liquid, owing to the low settling velocity, flow against the direction of the belt conveyor over the tension drum into the tub located below. The Hydrobelt separator is pivoted at the product discharge side. An electric fast-vertical adjustment enables a variable adjustment according to the different feed materials in order to obtain quality sand.



Processing Equipment

Depending on the respective adjustment of flow velocity, the residence time of the individual particle in the suspension can be varied and the cut point can thus be changed.

Simultaneously, the sizing process is superimposed by a dense-medium separation, in which the sand content as well as fines content act as medium solids. Components of lower specific weight suspended or floating in the suspension, are also discharged together with the wash water.

Optional equipment

•The installation of a separating paddle - also in combination with a subsequent sieve bend - enables a separation of organic matter from the fine sand suspension. For special applications, spray pipes can be installed in the feed flush zone as well as for washing bed spray.

Special features of Type AS

- Shorter axial distance, flatter discharge angle.
- Additional water flush pipe with flat-profile spray nozzles for effective washing out sand still adhering on the corrugated belt edges.
- The product sand is dewatered to an optimum content on a downline screen.
- A fine sand recovery is recommended, to prevent slotted-hole screen losses.

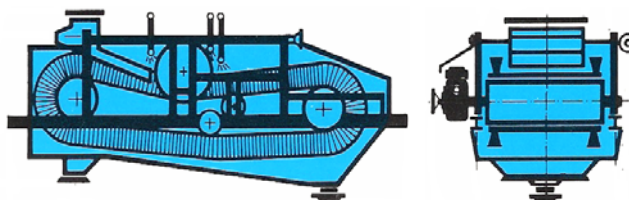
Special features of Type ASE

- Longer axial distance, more acute discharge angle.
- Vibration plate located underneath the ascending conveyor belt compresses the sand.
- A downline heavy compression roll compacts the sand cake.



Common technical features of Types AS and ASE

- Driven by adjustable geared motor or frequency control
- Low Speed, no noise emission, low dynamic forces
- Vibrating platform with adjustable double-imbalance motors (ASE)
- Self-adjusting lamella scraper (ASE)
- Water flush pipe with flat-profile spray nozzles (AS)
- Feed chute, discharge chute and underflow through with wear-resistant rubber coating
- Minimum wear even for aggressive feed material
- Galvanized version



Dimensions & Capacities

TYPE AK	Type	Output (t/h)	Water (gpm)	Motor (HP)	Static Weight (lbs)	Dynamic Weight (lbs)	Dimensions		
							Length	Width	Height
	AK 3.500 / 800 / 160	10 - 35	350	5	6,820	7,920	16' 7"	6' 0"	6' 10"
	AK 3.500 / 1.200 / 160	35 - 65	440	5	7,700	11,220	16' 7"	7' 3"	6' 10"
	AK 3.500 / 1.600 / 160	65 - 120	530	7.5	9,900	13,640	16' 7"	8' 8"	6' 10"
	AK 3.500 / 2.000 / 160	100 - 155	620	7.5	12,760	15,840	16' 7"	9' 10"	6' 10"
	AK 3.500 / 2.400 / 160	130 - 200	800	10	19,800	27,500	17' 4"	12' 0"	6' 11"

TYPE AS	Type	Output (t/h)	Sand & Water Mixture (gpm)	Motor (HP)	Static Weight (lbs)	Dynamic Weight (lbs)	Dimensions		
							Length	Width	Height
	AS 4.000 / 1.200 / 300	45 - 90	700	5.5	8,580	12,540	20' 6"	7' 3"	7' 4"
	AS 4.000 / 1.600 / 300	90 - 130	970	5.5	11,880	16,280	20' 6"	8' 7"	7' 4"
	AS 4.000 / 2.000 / 300	130 - 165 / 200	1,320	5.5	15,180	22,220	20' 6"	9' 10"	7' 4"
	AS 5.000 / 2.000 / 300	130 - 165	1,540	7.5	18,700	24,640	25' 5"	9' 10"	7' 4"
	AS 5.000 / 2.400 / 300	175 - 240 / 275	2,000	10	26,070	31,350	24' 11"	10' 5"	10' 8"
	AS 6.500 / 2.400 / 300	175 - 240 / 275	2,000	15	36,130	43,340	31' 10"	10' 10"	8' 3"

TYPE ASE	Type	Output (t/h)	Sand & Water Mixture (gpm)	Motor (HP)	Static Weight (lbs)	Dynamic Weight (lbs)	Dimensions		
							Length	Width	Height
	ASE 6.000 / 1.200 / 300	45 - 90	700	7.5	20,900	23,980	27' 8"	7' 10"	8' 9"
	ASE 6.000 / 1.600 / 300	90 - 130	970	7.5	22,000	26,180	27' 8"	9' 3"	8' 9"
	ASE 6.000 / 2.000 / 300	130 - 165	1,320	7.5	23,100	28,600	27' 8"	10' 6"	8' 9"
	ASE 7.000 / 2.000 / 300	155 - 200	1,540	7.5	26,400	32,560	27' 8"	10' 6"	9' 3"
	ASE 7.200 / 2.400 / 300	165 - 220	2,000	15	34,100	42,020	32' 6"	11' 9"	12' 7"

*The Aquamator is patented in the U.S. and EU (European Union) and various other countries.



WWW.ROHRCORP.COM

ROHR CORPORATION
6295 DRY FORK RD.
CLEVES, OH 45002

PHONE: 513.202.0800
FAX: 513.202.0888
EMAIL: INFO@ROHRCORP.COM

ROHR CORPORATION (WEST) PHONE: 925.687.9700
288 BUCHANAN FIELD RD. FAX: 925.891.3800
CONCORD, CA 94520