

PRODUCT DATA SHEET

Grit Classifier (SAK)

water | wastewater | sewage



OVERVIEW

MAK Water's Grit Classifier (SAK) is used to separate grit (which can contain sand, gravel and other heavy solids) from municipal and industrial wastewater streams. The machine consists of a sedimentation hopper into which grit in the wastewater will settle under gravity, and a shaftless screw conveyor mounted in a U-section trough that transports the grit out of the hopper. Due to the inclined screw arrangement, the grit is partially dewatered before it is discharged via the discharge spout.

The grit containing wastewater enters the hopper via a flanged inlet, and the degrittied effluent travels over an internal baffle before being discharged under gravity via the flanged outlet. The low rotational speed and the special anti-wear plates fixed along the transport section assure very low wearing of the machine's internal parts.



ADVANTAGES

- Grit separation and dewatering in a single step
- Small footprint
- Low investment and low maintenance costs
- Widely accepted and proven technology

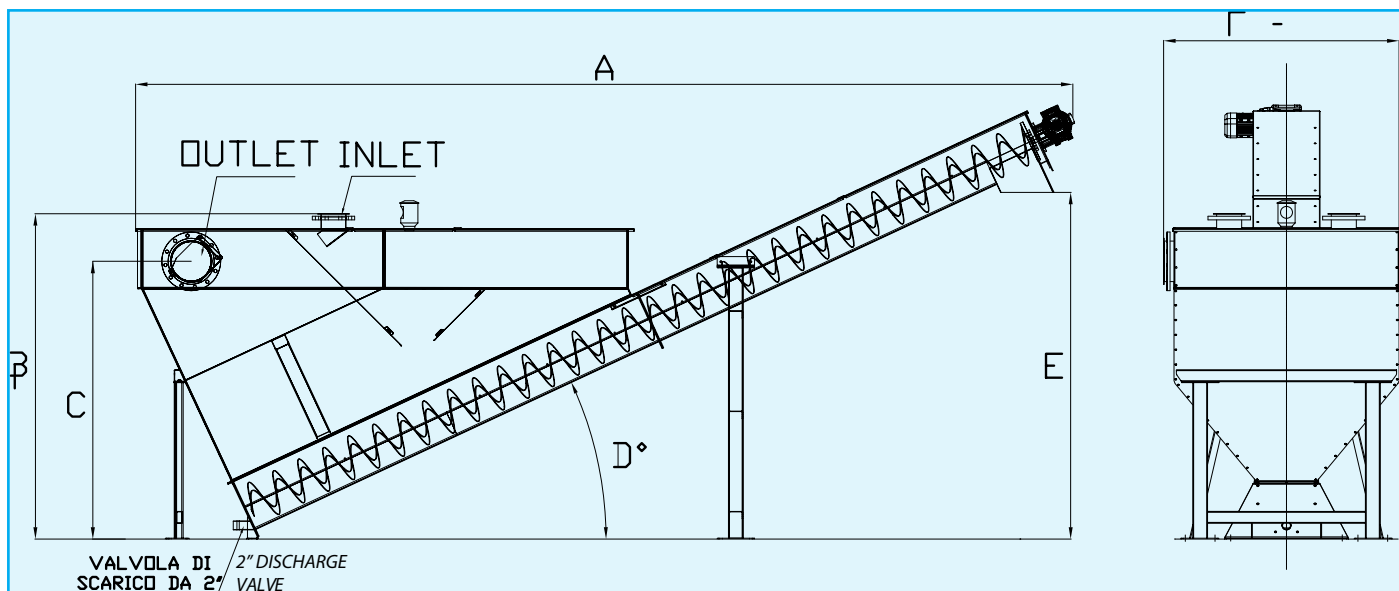
APPLICATIONS

- Municipal sewage treatment
- Industrial wastewater treatment
- Truck wash facilities
- Construction wastewater treatment

STANDARD SPECIFICATIONS

Parameter		Units	SAK 40	SAK 90	SAK 140	SAK 200	SAK 300	SAK 400
Treatment Capacity		m³/h	20	30	60	80	100	130
Sand Removal Capacity*¹			0.3	0.8	0.8	0.8	0.8	1.3
Hopper Capacity		m³	0.4	0.9	1.4	2.0	2.9	3.9
Dimensions	A	mm	4500	4575	4930	5330	6260	6600
	B		1150	1430	1610	1790	2190	2330
	C		1000	1150	1350	1540	1870	1985
	E		1500	1585	1750	1900	2330	2365
	F		950	1065	1325	1590	1590	2550
Shafless Auger	Diameter, Ø		180	280	280	280	280	280
	Conveying Trough Width		225	325	325	325	325	325
Screw angle	D	°	25					
Inlet connection, flanged *²		DN	80	100	125	150	200	300
Outlet connection, flanged *²			100	150	200	200	250	350
Drain with manual valve		inch	2					
Installed motor power, 3ph, 50Hz		kW	0.25	0.25	0.25	0.37	0.37	0.75
Screw gear reducer speed		rpm	6	5	5	6	6	9
Empty weight		kg	540	640	730	950	1150	1380

*¹ Removing up to 90% of particles >200 µm, and density >1.65 kg/dm³, *² Flanges are lap joint max 10mm thick with holes PN16 according to AS4087.



STANDARD INCLUSIONS + OPTIONS

Equipment		Standard Supply	Optional Supply
Grit Classifier	Free standing	S	
	PE breathing valve on the hopper	S	
	Flanged inlet/outlet connections, Drain valve	S	
	Supporting legs	S	
	Lifting eyebolts	S	
	Motor	3-ph 50 Hz, IEC – TEFC – IP55 – CLASS F	
	Gearbox	NORD Drive AG, parallel shaft gearbox	
	Cover over drive unit	S	
Machine carpentry, inlet & outlet flanges, supporting legs, drive guards and anti-wear bars for screw. All bolts A4 (SS316)	SS304L	S	
	SS316L		0
Shaftless Screw	High carbon steel painted	S	
	SS304L		0
	SS316L		0
Automatic Longopac bagging system	Continuous bagging system with 1 x 80m long bag		0
Washing bar	For washing of grit, fitted with 1/2" solenoid valve		0
Surface treatments *1		S	

*1Stainless steel parts: stripping with acid solution, passivation with glass particles, final surfaces cleaning with anti-dust oil. Carbon steel parts: sandblasting SA 2.5 for external anti-rust paint RAL 5015

Instrumentation & Controls	Standard Supply	Optional Supply
Control panel to AS/NZS3000, 316SS enclosure for outdoor installation, supplied loose, field wiring between control panel and equipment by others		0
Solenoid valve kit 24V DC with optional washing bar		0



MODEL SELECTION

- 40 Capacity - up to 20 m³/h
- 90 Capacity - up to 30 m³/h
- 140 Capacity - up to 60 m³/h
- 200 Capacity - up to 80 m³/h
- 300 Capacity - up to 100 m³/h
- 400 Capacity - up to 130 m³/h

- 4 Machine carpentry, flanges, drive guard, anti-wear bars for screw 304L SS (standard)
- 6 Machine carpentry, flanges, drive guard, anti-wear bars for screw 316L SS
 - X Shaftless Screw in high-carbon steel HCS (standard)
 - 4 Shaftless Screw in 304L SS
 - 6 Shaftless Screw in 316L SS
 - X Automatic bagging system, without (standard)
 - L Longopac automatic bagging system
 - X Washing bar with solenoid valve, without (standard)
 - W Washing bar with solenoid valve
 - X Control panel, without (standard)
 - C Control panel, included
 - X Specification, standard
 - C Specification, custom

SAK - - - - - - -

NEED A QUOTE?
 COMPLETE THIS TABLE
 AND EMAIL TO...
info@makwater.com.au

Disclaimer: MAK Water is continuously updating and improving its products and services, so please contact us for more detailed information or to confirm specifications. MAK Water takes no responsibility for any errors resulting from the use of information contained within this document.