



John Meunier SAM[®]

GRIT DEWATERING SCREW

WATER TECHNOLOGIES

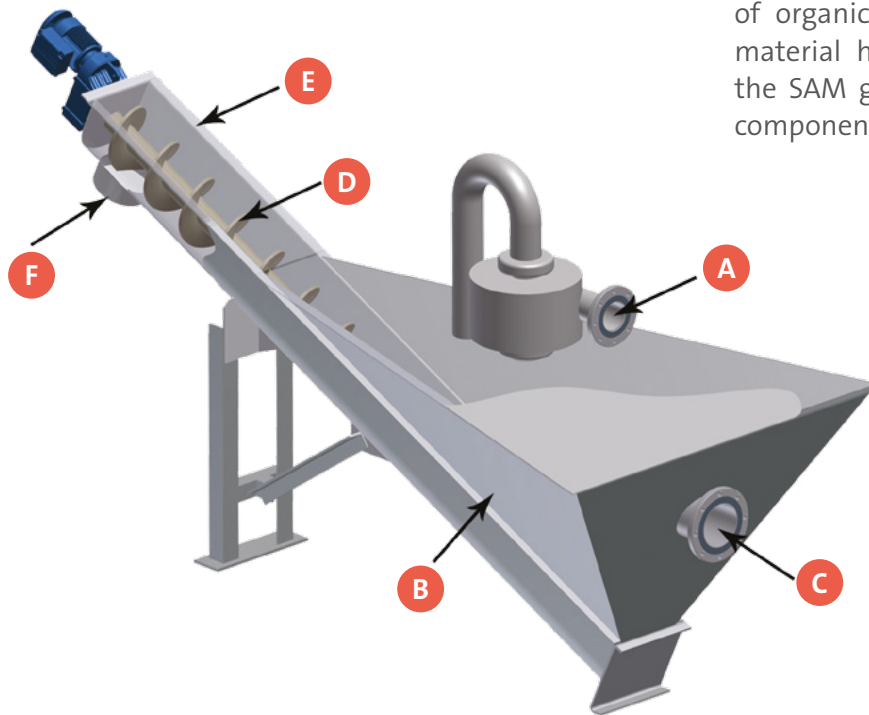
John Meunier SAM[®] Grit Dewatering Screw

Principle of operation

The SAM dewatering screw is designed to separate the grit from the grit / water mixture coming from the grit chamber.

The mixture enters the system through an air separator (A) or cyclone separator (A), and falls into the inlet hopper (B, where a constant volume of water is maintained via an overflow weir. This area acts effectively as a classifier letting the grit settle to the bottom. An overflow pipe connection (C) is provided to return the degritted water to the grit chamber influent channel.

The slow rotation of the shafted Archimedes screw (D) dewateres the accumulated grit as it moves it up the trough (E) to the discharge outlet (F).



- A** Inlet
- B** Hopper
- C** Overflow
- D** Screw
- E** Screw trough
- F** Grit discharge

SAM[®]

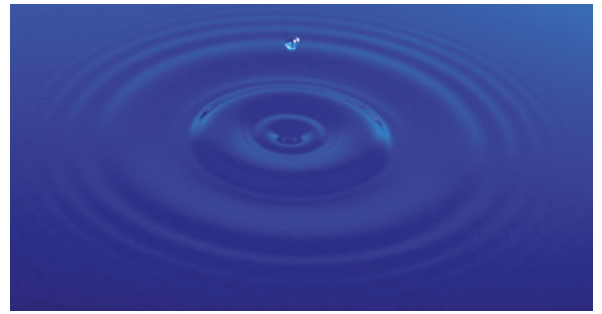
When extracted from a grit chamber via pump or air lift, the grit slurry contains a high percentage of water and may include some measure of organic material. The SAM grit dewatering screw is designed to return water and organics to the process stream while delivering dry, clean grit at the discharge. Pumped applications incorporate a hydro-cyclone to reduce water content by up to 90% while also serving an organics separation role.

The resulting concentrated grit slurry is then deposited into the SAM dewatering screw which further cleans the grit and reduces water content. In air lift applications, an air separation valve is used in lieu of the hydro-cyclone. The SAM grit dewatering screw produces dewatered grit containing a minimum of organic material, reducing odor and facilitating material handling. With over 200 units in service, the SAM grit dewatering screw is a proven, reliable component of John Meunier's grit removal systems.

Model	Dimensions		H.P	Capacity		Shipping Weight		
	GDS	Screw Length		Screw Diameter	Feed		Discharge	
09-10-25	120"	3048 mm	9"	229 mm	1	165 gpm - 37 m ³ /h	60 ft ³ /h - 1.7 m ³ /h	2100 lb - 950 Kg
09-16-25	192"	4877 mm	9"	229 mm	1.5	165 gpm - 37 m ³ /h	60 ft ³ /h - 1.7 m ³ /h	2600 lb - 1180 Kg
14-12-25	144"	3658 mm	14"	356 mm	2	240 gpm - 55 m ³ /h	120 ft ³ /h - 3.4 m ³ /h	3200 lb - 1450 Kg
14-18-25	216"	5486 mm	14"	356 mm	3	240 gpm - 55 m ³ /h	120 ft ³ /h - 3.4 m ³ /h	3800 lb - 1720 Kg

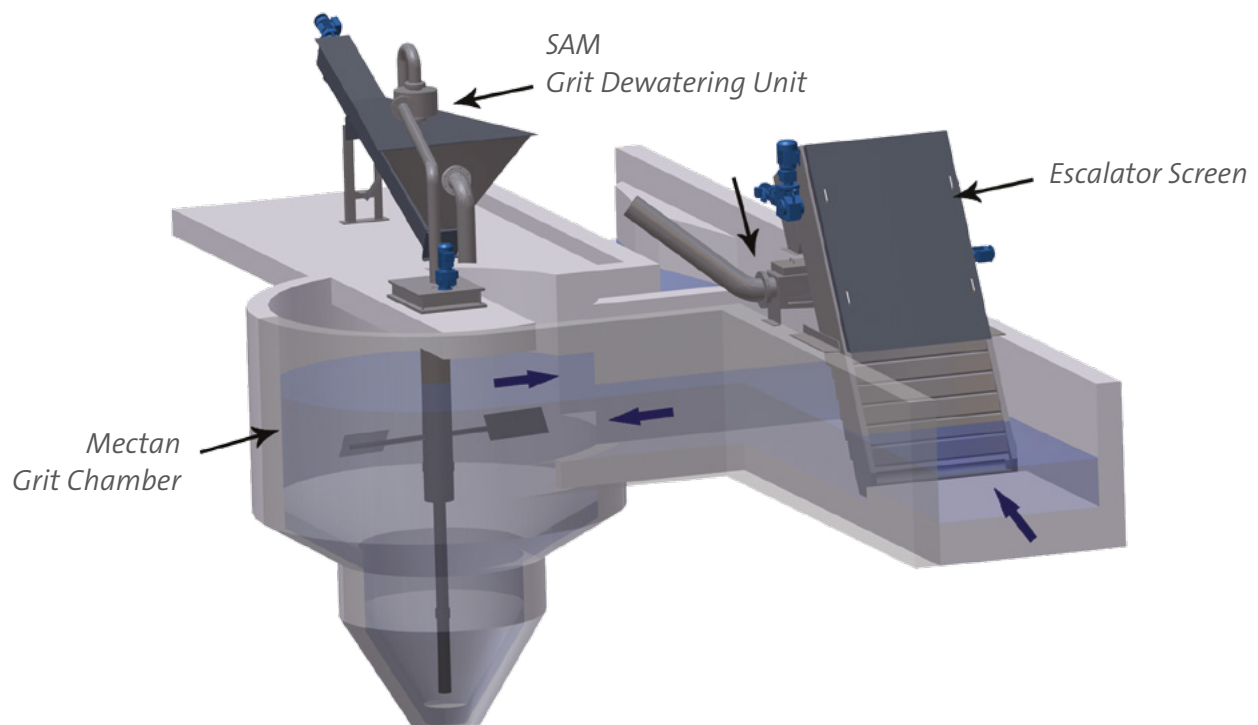
Features of the SAM[®]

- Totally pre-assembled and tested.
- Very simple and robust design.
- Provides grit with very little free water.
- Uses Archimedes screw with shaft.
- Minimum operating and maintenance costs.
- No screw to trough contact eliminates need for liner.
- Available in epoxy painted carbon steel and stainless steel construction.
- Completely enclosed system controls odor.
- Supplied with air separator or cyclone separator.
- Unique trough design promotes high level dewatering.
- Veolia Water Technologies Canada's superior application engineering, support and service.



Your pretreatment specialist

A complete line of John Meunier headworks solutions



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