

# SALSNES FILTER

PILOT PROJECT  
MARENGO, ILL  
2007

# Mar engo WWTF

Population	7,500
WWTF Design Flow	900,000 GPD
$\frac{3}{4}$ Screen and Grit removal	
No Primary Clarifiers	
Oxidation Ditch	
Solids Handling upgrade in 2000	
Last Plant upgrade 1986	

# Mar engo Loading Data

Influent Flows

80-85%

TSS Loadings

120 – 130%

BOD Loadings

112 - 120%

Design stage for Facility Upgrade



# SALSNES FILTER OPERATION

Cloth travels through wastewater collecting solids as the water passes through cloth

Cloth transports solids to the air cleaning devise where compressed air blows the solid down into the screw compartment

# Salsnes Filter operation

First stage of dewatering is done by gravitation during transport to screw compartment

Screw presses the solids forward to a press cylinder where further dewatering is done before being discharged.

# SALSNES Filter operation

Cloth speed adjusted by Level Indicator

Flow rate through Salsnes Filter is  
determined by solid content of influent

# Saltnes Filter operation

Rated at 900,000 GPD

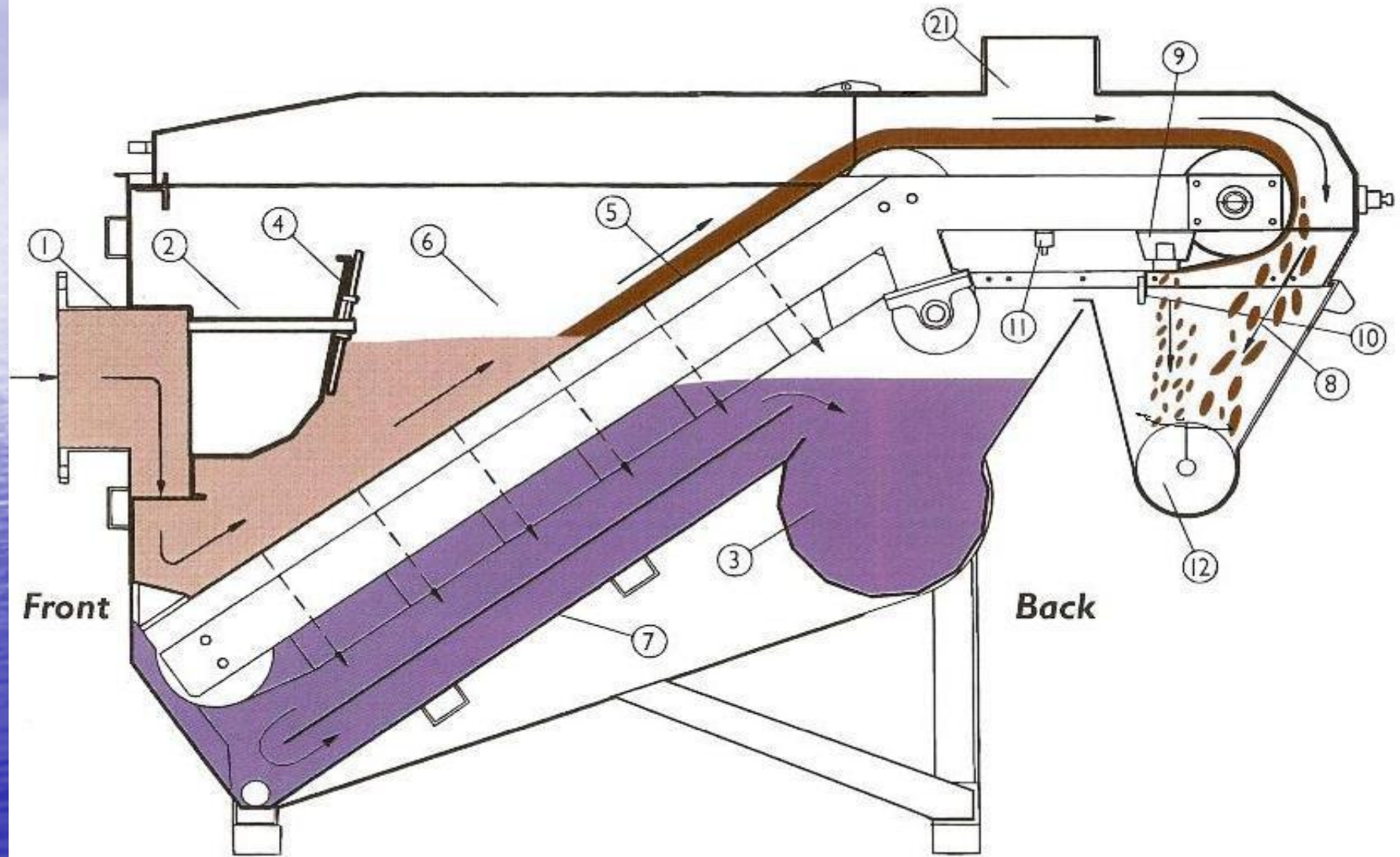
Cloth size 300 micron

40 – 80% TSS Removal

20 – 40 % BOD Removal



# Cut View from Right Side



# Mar engo Pilot Project

January 2007 thru May 2007

24 hour per day / 7 day per week operation

24 hour sampling of influent and effluent

TSS sampled daily

BOD two time per week

Samples sent out for verification of results

# Mar engo Pilot Test Results

40 to 65% reduction in TSS

30 % reduction in BODs

# Operational Problems

- Air Knife
- Ventilation
- Hot Water
- Grease Build-up on Cloth
- Auger

