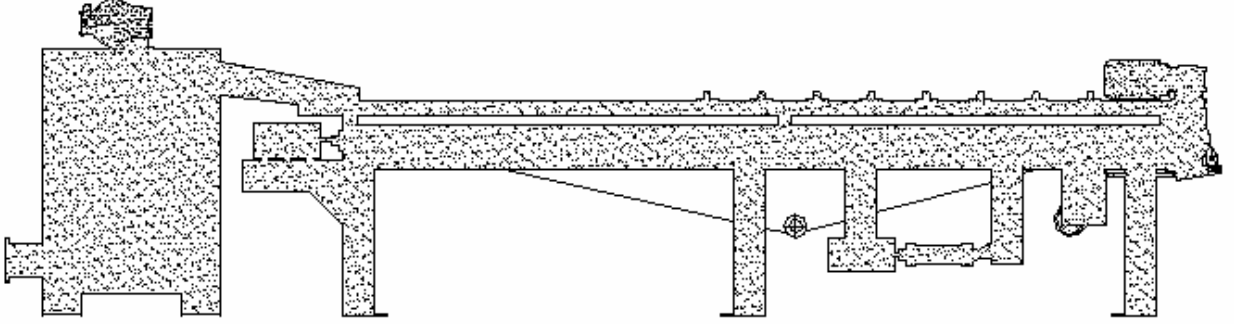


GRAVITY BELT THICKENER



TECHNICAL DESCRIPTIONS

MODEL ARGBT 1000/3000

GRAVITY BELT THICKENER ARGBT 1000/1500/2000/2500/3000

The Gravity Belt Thickener are used to reduce the water content of the sludge hence reduce the sludge volume and cost of hauling.

Gravity Belt Thickener ARGBT, due to its cost effective performance, is widely used in different sludge dewatering systems.

Sludge volume can be reduced almost 90% with low consumption of operating agents such as polymers.

ARGBT's are suitable to use in line with ARGBFP Belt Filter presses and increase the filtering efficiency of the Belt presses.

With the help of 5 different sizes of ARGBT small to large capacities of sludge can be handled. Huge capacities can be handled by using more than one unit.

1.PROCESS AND THE OPERATING PRINCIPALS

Sludge before entering to the belt Thickener is mixed with operating agents such as polymers in the mixer tank and distributed on to the polyester belt which continuously moves by means of rollers on the supports made out of plastic.

Water contained in the sludge is drained by means of gravity while it moves on the polyester belt.

Sludge, while moving on the belt is agitated via 10 rows of plows to maintain improved thickening performance.

Sludge remaining on the belt is scraped by a doctor blade which is kept touch with the belt by an adjustable spring system.

2.PARTS OF THE GRAVITY BELT THICKENER

2.1. Mixer

Cylindrical shaped self standing mixer tank is made out of stainless steel and equipped with motorized mixing impeller.

The speed of mixer can be arranged by electronically controlled speed variator.

Operating agent can be injected at the inlet of the mixing tank and while sludge is moving upward in the tank a complete mixing is maintained.

2.2 Supporting Frame

Frame is made out of heavy sections to prevent the vibration and any deflections.

As standard frame is made out of carbon steel and hot deep galvanised, as requested frame can be manufactured as stainless steel.

2.3 Sludge spreader

Sludge coming out from the mixing tank is spreaded evenly on to the belt via spreader. The vanes in the spreader can be arranged easily as to have the best spreading on the belt.

2.4 Plows

Ten rows of triangle shaped plows agitates the sludge while it moves on the belt. Plows can easily be replaced vertically to have a better agitation.

2.5 Plastic Support

Belt moves on the plastic grid structure so that under any sludge load the deflection of the belt is prevented

2.6 Belt Traction System

Belt movement is controlled via pneumatic sensors and any side movement of the belt is settled by the pneumatic cylinders

2.7 Polyester Belt

Belt is manufactured from Polyester filaments and is a product of wellknown European manufacturer. All physical and chemical properties of the belt can be given as requested.

2.8 Belt Tensioning System

When the Thickener will be operated the pneumatic tensioning system automatically operates and evenly tensions the belt.

When the Thickener stops, pneumatic cylinders retract and belt is let free. That protects the working life of the belt.

2.9 Sludge Scraping System

Sludge at the end of the track is scraped by plastic doctor blades which is pushed on to the belt by a spring system.

2.10 Belt Washing System

Belt when it is cleaned from the sludge is washed from the back side with non clogging water sprayer system.

2.11 Water Tray

Wash water is collected in the stainless steel trays and can be used for cleaning by optional booster pumps.

2.12 Pneumatics

Belt tracking and tensioning is effected by means of pneumatics as soon as the machine is stopped the tensioning pistons releases the belt and unnecessary tensioning of the belt is presented.

2.13 Control Panel

Electrical control of side switches, mixer and belt drive are all collected in one weatherproof control cabinet. Emergency stop of the belt drive can be reached from both sides of the thickener via a rope.

TECHNICAL SPECIFICATIONS AND DIMENSIONS

MODEL	ARGBT1000	ARGBT1500	ARGBT2000	ARGBT2500	ARGBT3000
SLUDGE CONCENTRATION	%0,8	%0,8	%0,8	%0,8	%0,8
FLOW M ³ /HR	40	63	85	106	120
BELT WIDTH	1000	1500	2000	2500	3000
BELT SPEED M/MIN	2-10	2-10	2-10	2-10	2-10
WIDTH	1360	1860	2360	2860	3360
LENGHT	6215	6215	6215	6215	6215
HEIGHT	2000	2000	2000	2000	2000
WASH WATER CONSUMPTION M ³ /HR	4-5	5-6	7-8	9-10	11-12
WASH WATER HEAD bar	5	5	5	5	5
AIR CONSUMPTION LT/MİN	15	20	25	30	35
DRIVE MOTOR POWER kW	0,55	0,76	0,76	1,1	1,5
MIXER DIAMETER MM	600	800	800	1000	1200
MIXER HEIGHT MM	2000	2000	2000	2000	2000
MIXER DRIVE MOTOR POWER kW	0,55	0,76	0,76	1,1	1,5