

CFV-Vertical Screw Screen w/Compaction



The CF – SCREW SCREEN offers the waste water filtration and the transport of the effluents for the stocking, in a practical and efficient package.

The CFC – SCREW SCREEN COMPACTOR is the more complete variant, with a compactor zone next to the discharge, which allows an important reduction in weight and volume of filtered waste (up to 50% less).

The machine can be installed inclined (between 35 ° and 45 ° depending on the needs) into a concrete channel or in a stainless steel tank to receive the wastewaters from a fixed pipe; this version is called CFT-C -SCREW SCREEN COMPACTOR IN TANK.

The CFV – VERTICAL SCREW SCREEN COMPACTOR is the variant developed for vertical installation and offers the same efficient and durable functions of the CFC – SCREW SCREEN COMPACTOR.

The filtration zone for all the variant of the SCREW SCREEN is made up by a holed sheet (circular holes from 2 to 6mm) or in trapezoidal profile Wedge Wire net (spacing 0.25mm – 2mm) which filters the wastewater holding back the waste. Into this zone, the shaftless screw is equipped with brushes for the cleaning of the filtration. There is also a washing system activatable by a manual valve or through solenoid valve (optional).

The transport zone is composed by an auger and the continuation of the shaftless screw. The screw, when activated by gear motor, rotates on itself picking and transporting waste until the discharge outlet

DESCRIPTION

- Manufacturer: FLUITECO
- Model: CFV/CFV-C
- Material: Stainless Steel
- Surface Treatment: Pickled & passivated

APPLICATIONS

- Screening and dewatering for pumping station
- Industrial wastewater treatment

WORKING PRINCIPLE

Wastewater flows into screen drum with screening surface at 360° where the solids stop instead of the water across the screen. The blinding of the screen section causes an increase of the level of the effluent before the screen. A level sensor gives the signal to start the screw conveyor designed with shafted spiral to lift up the screenings and to dewater it during the conveying. The lower section of the spiral is equipped with brushes to clean the drum screen during the rotation. The cleaning of the screen causes the reduction of the level and the level sensor gives a signal to stop the rotation of the screw.

Spiral pitch reduction and compaction drum present before the discharge outlet were installed to obtain the compaction of the screenings to reduce the volume/weight of the solids until 60% and to reach a dryness of 35-40%.

CFV vertical screw screen is usually supplied with washing system in the screen and compaction zone. The same unit can be supplied also with washing system in the conveying zone to reduce the fecal matter present in the solids and to resend it in the wastewater for the next process.



FEATURE

Fluiteco CFV vertical screw screen is supplied with anti-lock device of screenings in the compaction area. This system gives full warranty that all the screenings lifted up by the conveyor will be discharged without any problem of blockage before the discharge

FEATURE

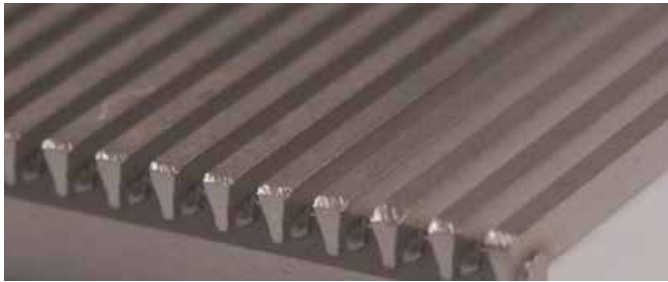


CFV Vertical screw screen compactor can be connected directly with the uncoming effluent pipe. The unit can be supplied with a special pipe quick connection.

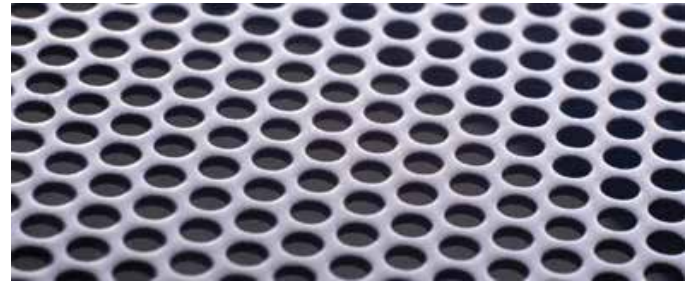


Spray washing in the conveying zone with manual and/or solenoid valve

SCREENING MESH TYPE



Wedge wire from 0,25 mm to 2 mm



Perforated holes from 2 to 10 mm

THEORETICAL FLOW RATES (*)

CFV MODEL Ø		200	300	400	500	600	700
SCREEN BASKET		m3/h					
WW	0,25 mm	20	35	55	120	200	290
	0,5 mm	45	60	85	190	275	370
	1 mm	75	90	120	265	360	530
	2 mm	85	105	150	310	415	670
Φ	2 mm	44	68	79	101	165	212
Φ	3 mm	100	125	180	320	465	740
	5 mm	140	162	268	396	590	950
	6 mm	160	198	300	435	600	980
	8 mm	180	220	350	480	650	1000

OPTION



Insulation against low temperature in the compaction and transport zone



Bagging system with continuous plastic bag

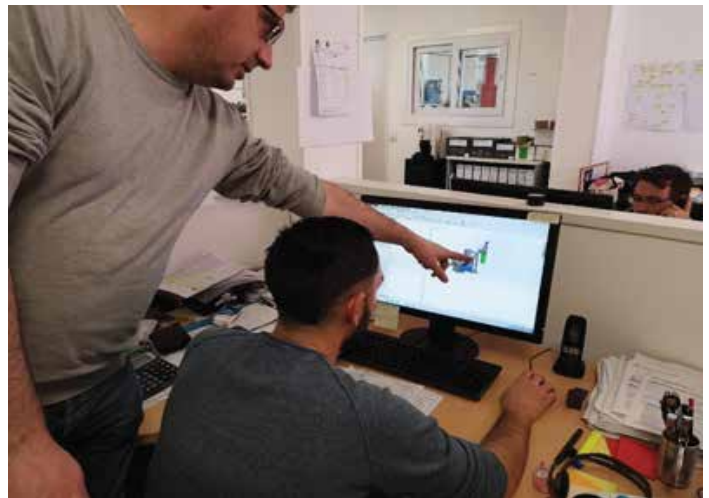
CFV - Technical specification	
Equipment type	Vertical screw screen compactor
Equipment model	CFV
Inlet pipe	From DN 150 to DN 600
Inlet flow	Up to 1000 mc/h
Screen meshes	From 0,25 mm wedge wire to 10 mm holes
Total height	Max 12.000 mm from effluent inlet to solids discharge
Screen diameter	200-300-400-500-600-700 mm
Screw conveyor type	Shafted
Spiral thickness	6 mm in the screening zone, 15 mm in the conveying zone
Screw conveyor diameter	195 mm (CFV 200-300-400-500) 295 mm (CFV 600-700)
External pipe diameter	219 mm (CFV 200-300-400-500) 323 mm (CFV 600-700)
Liner	Wearing bars bolted inside the pipe thickness 8 mm
Washing on the screen area	Included. Pressure necessary 5 bar (1,2 lt/sec)
Washing on the compaction area	Included. Pressure necessary 5 bar (1,2 lt/sec)
<i>Compaction chamber with dewatering drum 2 mm perforation, flexible liquid return pipe,</i>	
Gearmotor type	Parallel shaft
Power installed	0,55 Kw(CFV 200-300-400-500) 1,1 Kw (CFV 600-700)
Screw rotation speed	10 rpm
N°1 Support to fix the machien to the ground + lateral support to fix the pipe to the wall.	
Result in term of screenings dryness- 35%	
Result in t erm of screenings volume reduction- 65-70%	



FLUITECO design and manufacture equipment for wastewater and Industrial markets. FLUITECO srl. was established in 2002 with a different name, but in the year 2013 a new partnership with twenty years of experience on this business, joined the Company expanding business and mission. The business had enjoyed considerable success throughout the last two years it was felt that the company would benefit from its own identity and branding.

A staff of experienced and specialized Engineers has been involved in designing, working initially in solutions that could match the interest of the market in term of high level of quality and

Step on step, a large proportion of FLUITECO's business consists of up to 80% export sales. This reflects well on FLUITECO, as this is a market where quality, reliability, product knowledge, service and back-up is ultimate. The equipment present in our range are designed by our Engineering department consists of four engineers two of which are mechanical engineers, an environmental engineer and a hydraulic engineer.



Different specializations covering the entire field of intervention of the equipment made in Fluiteco. We are therefore able to design both the structural and mechanical that the part relating to the process and the calculation of the hydraulic performance of each device produced. It starts of course by international standards, and if necessary, implement these standards by using our skills.