

## VERTICAL SPIRAL SCREW CONVEYORS STCV

### VERTICAL Shaftless Screw Conveyors

#### MACHINE DESCRIPTION

**R.E.M.** range of screw conveyors is a broad and wide selection where units for every application can be found. **R.E.M.** screw conveyors are multipurpose transport systems. The range includes:

- Vertical Shaftless Screw Conveyors model **STCV**.

The models are all based on the same technology; screw conveyors are made of the following sections:

- Screw.
- Trough.
- Inlet.
- Discharge.
- Drive.
- Support.

**R.E.M.** offers this type of machine, that can treat the following materials:

- dewatered, conditioned or thickened biological sludges.
- screenings.
- solid urban waste.
- floating substances from civil or industrial plants.
- waste deriving from food processing (both animal and vegetable foodstuffs).



**R.E.M. STCV** conveyor is a system analog to the **STC**; this conveyor differs from standard for its vertical installation which allows an installation in a tight space. The footprint is very small as it has a tubular body which contains the screw.

The tubular construction ensures that no leaks or odours may occur. The screw contained in the conveyor has the characteristic of not being equipped with an internal shaft. This allows the machine to be able to process materials whose entangled or thread-like nature doesn't succeed in clogging up the processing zone on the whole length of the conveyor.

Inside the tube of the conveyor there is a combined **HDPE** and **AISI304** liner material that are adapted at the tube diameter and fastened to it by external nuts and bolts. This liner is totally antifriction and wearproof.

The machine is completely closed; this, clearly, makes it possible to operate without any leaking and bad smells that can be given off by the treated material.

#### WORKING LOGIC FOR VERTICAL SHAFTLESS SCREW CONVEYORS STCV

The vertical shaftless conveyors are equipped with a round inlet which requires to be flanged to a horizontal screw feeder which screw enters the inlet until reaching the tube of the vertical unit. The feeder ensures that the materials are always conveyed upwards without falling backwards. From the inlet the materials are conveyed toward the outlet at the top end. The vertical shaftless conveyors are units suitable for handling different type of materials.



#### MAIN FEATURES FOR VERTICAL SHAFTLESS SCREW CONVEYORS STCV

The shaftless vertical screw conveyors, mod. **STCV**, are offered in several configurations, all of them do not require intermediate supports or hangers. The **STCV** conveyors have the following characteristics:

1. Standard execution in st. st. **AISI 304/AISI 316**.
2. Body made of st. st. **AISI 304/AISI 316**.
3. Spiral made of high resistance micro-alloy carbon steel, st. st. **AISI 304/AISI 316** (optional).
4. Liner made of **HDPE** or (optional) wear strips made of st. st. **AISI304/AISI 316** (optional).
5. No mechanical parts in direct contact to conveyed product.
6. Low speed.
7. No blocking or clogging even when conveying fibrous material.
8. Entirely sealed unit for leakage and odour-free environments
9. Possibility to discharge in bags.
10. Complete absence of emission of bad smells, as completely closed.
11. Minimum overall dimensions and maximum versatility.
12. High processing outputs.

**GENERAL DIMENSION DATA FOR VERTICAL SHAFTLESS SCREW CONVEYORS STCV**

The data in the chart is to be considered approximate; since the machine is able to process materials of different types and therefore of different organic compositions, take these values as illustrative references that must be clarified and requested from our Engineering - Sales department.

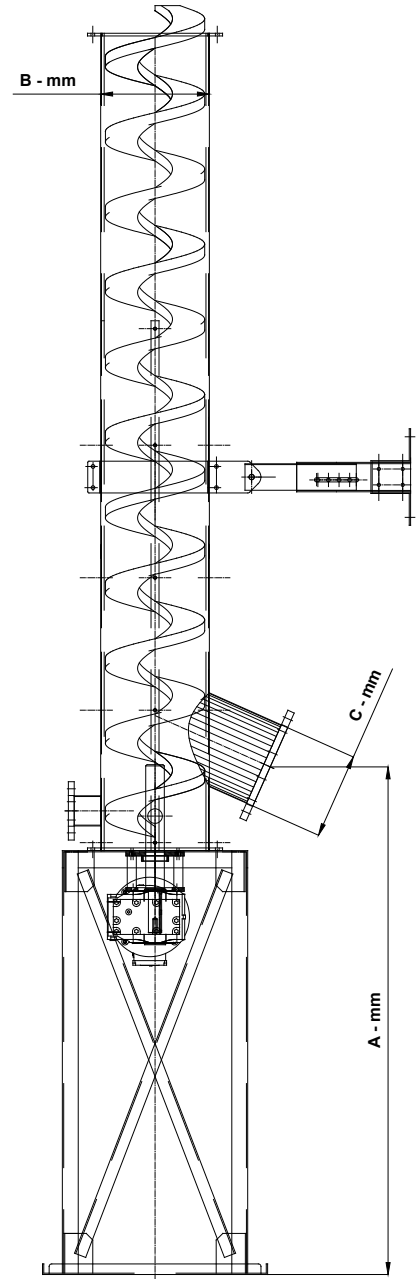
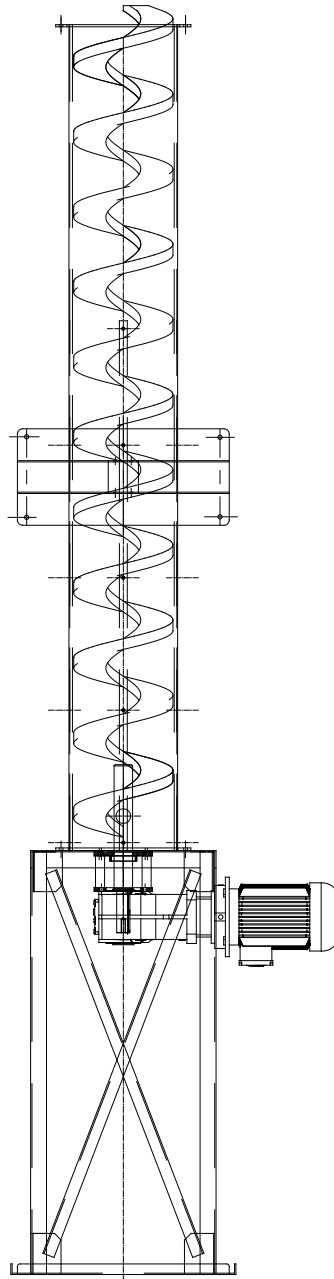
STCV MODELS	STCV200	STCV250	STCV300	STCV350	STCV400	STCV500
A - mm	1200	1200	1200	1200	1200	1200
Ø B - mm	219	273	323	355	406	508
C - mm	300	350	420	460	500	600
Flow rates - m³/h	2.5	5	8	10	12	20

**Materials of construction for fabricated parts:**

- \*Stainless Steel AISI304
- \*Stainless Steel AISI316

**Materials of construction of spiral:**

- \*Stainless Steel AISI304
- \*Stainless Steel AISI316
- \*High resistance steel HRS



**ATTENTION THE MACHINE CAN BE USED ONLY IN VERTICAL POSITION**  
**n.b.: the manufacturer may modify some dimensions or sizes without prior information**