

## DOUBLE SPIRAL SCREW CONVEYORS STCD

### Double Shaftless Screw Conveyors



#### MACHINE DESCRIPTION

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

- **Double Shaftless Screw Conveyors model STCD.**

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

- **Twin Screw.**
- **W-shaped Trough.**
- **Inlet.**
- **Discharge.**
- **Twin Drive.**
- **Supports.**

**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).**

The **STCD** double shaftless conveyor is dedicated to convey large quantity of material and/or bulk material that might get stuck in between the flighting. With the double spiral any long part may sit between the spiral and be conveyed by the spirals toward the outlet allowing to convey even very long or large parts.

The counter rotating spirals can be sincronized or independent based upon the installation needs. Dimension and thickness of the spiral is related to the working conditions. The design of the unit allows to handle long fibrous material that may get wrapped around shafted elements.

The shaftless design allows to remove easily any material that may get caught as it would "unscrew" along the flighting toward the discharge with the natural rotation of the unit. The spirals are sitting on an **HDPE** liner that reduces friction and prevent sticking material to build-up in the trough. All bolts used to hold the liner are removable from outside. The discharge is a front fully-open outlet to allow large parts to be discharged without obstruction. The conveying section is equipped with bolted raised covers to increase inner space and avoid odours or splashing. Vents can be fitted onto the covers.

#### WORKING LOGIC FOR DOUBLE SHAFTLESS SCREW CONVEYOR STCD

The double screw conveyors are equipped with an inlet zone that, depending on the flow rate requirements of the incoming material, can have three different sizes, i.e.:

1. **SQUARE INLET.**
2. **RECTANGULAR INLET.**
3. **INCLINED INLET.**

The material is conveyed from the inlet zone to the outlet. The screw conveyors are perfectly adaptable machines, in length, to the transport requirements of the material.

#### MAIN FEATURES DOUBLE SHAFTLESS SCREW CONVEYOR STCD

The double shaftless screw conveyors, mod. **STCD**, are offered in different variants that do not need intermediate bearings. **STCD** screws have the following characteristics:

1. Standard execution in st. st. AISI 304/AISI 316.
2. Inlets and outlets having square, rectangular or inclined (15°/30°) shape.
3. Trough made of st. st. AISI 304/AISI 316.
4. Spiral made of high resistance micro-alloy carbon steel, st. st. AISI 304/316 (optional).
5. Liner made of HDPE or (optional) wear strips made of st. st. AISI304/AISI 316 (optional).
6. No mechanical parts in direct contact to conveyed product.
7. Low speed - 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. Extremely easy to transport materials even of difficult composition.

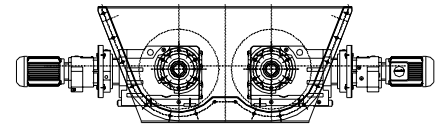
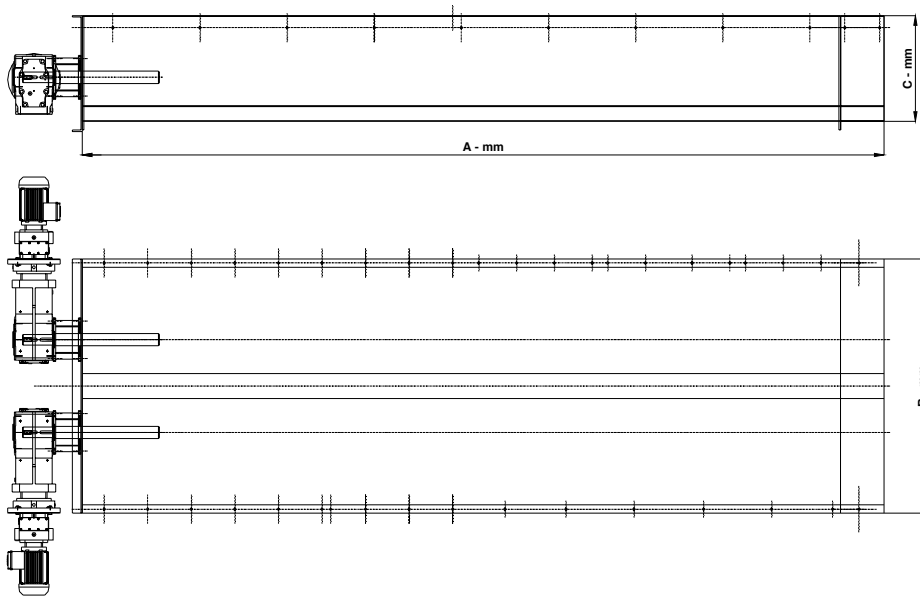


**GENERAL DIMENSIONAL DATA FOR DOUBLE SHAFTLESS SCREW CONVEYORS STCD**

The data in the chart are 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.

STCD MODELS	A min. - mm	A max. - mm	B - mm	C - mm	Flowrates m <sup>3</sup> /h	CAPACITY RATE ANGLE 30° MAX.
STCD200	1000	8000	231	250	10	60%
STCD250	1000	8000	281	280	15	60%
STCD300	1000	12000	331	380	20	60%
STCD400	1000	12000	431	500	35	60%
STCD500	1000	12000	531	606	50	60%

**ATTENTION THE MACHINE CAN BE USED IN THE INCLINATED POSITION UP TO A MAX.**

**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



**n.b.: the manufacturer may modify some dimensions or sizes without prior information**