

MOAGO
SPIROTECH
INTERNATIONAL
(Pty) Ltd



**MATERIALS
HANDLING**

Shaftless Spiral

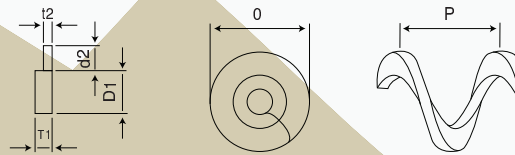


Spiral diam	Outa Spiral	Inner Spiral	Standard
0	D1 x T1	d2 x t2	Pitch P
160	40 x 16	30 x 10	140
215	50 x 20	40 x 16	190
280	60 x 25	40 x 16	250
315	60 x 25	40 x 16	300
360	80 x 25	50 x 20	340
420	80 x 25	50 x 20	370
440	80 x 25	50 x 20	470
480	80 x 25	50 x 20	500
560	80 x 25	50 x 20	540

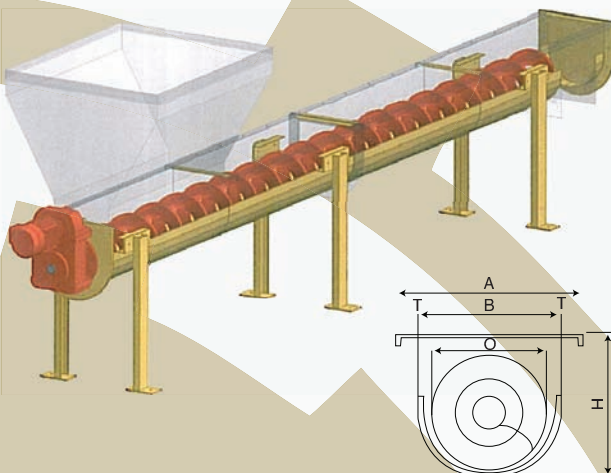
The Spirotech Shaftless Spirals are manufactured from the highest quality High Tensile Steel and can be used in extremely high torque applications up to 10 000 N.m. Spirals can also be manufactured in Stainless Steel AISI 304L and AISI 316L. Spirals can be rolled in both left and right hand configurations.

For abrasive conditions Spirotech Spirals can be treated by means of hard facing, nitriding, ceramic lining and various well recognized abrasion resistant treatments.

Spirotech Spirals also offer an additional service whereby spirals can be RP lined for extremely corrosive environments. Reinforced Spirals to handle long lengths and high torques are also available. Spirotech Spirals can offer design and turnkey solutions to all materials handling problems.



Shaftless Screw Conveyor



TYPE	A	B	H	O	T
U-120	194	124	136	100	2
U-200	292	200	226	160	3
U-260	372	260	286	215	3
U-320	432	320	346	280	3
U-355	468	355	346	315	3
U-420	557	420	449	360	4,5
U-500	637	500	530	440	4,5
U-600	740	600	633	480	6

The SPIROTECH SHAFTLESS CONVEYOR has the following benefits

- No hanger bearings means low maintenance
- No end bearings means no gravity chutes
- No centre shaft means high filling rate
- High filling rate means low rpm which means low maintenance
- Sealed construction means no dust

Spirotech International have supplied conveyor systems to almost every type of industry, including mining, mineral processing, agricultural, chemical, food, paper and pulp, waste water treatment, etc. The conveyors can be manufactured from carbon steel, 3CR12, 304 S/S and 316 S/S. The trough liners are designed for the particular product and comprise, ultra high molecular weight polyethylene, 400 Brinell steel liners and 3CR12. Spirotech can design a system for customer needs.

Verto Lift



Spirotech Vertical Conveyors offer new solutions to vertical conveying

- Compact Installations
- Minimum Wear
- Reduced Energy Consumption
- Vertical Conveying at Low Operational Speeds
- Vibration Free
- Minimum Noise

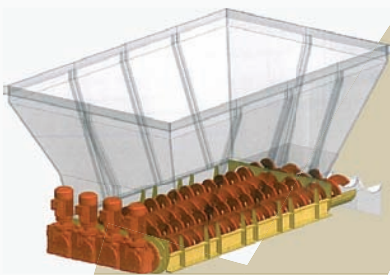
The Verto-Lift conveyor is a low maintenance, highly efficient, space saving means of conveying almost any type of material vertically, from fine powders to broken glass. Spirotech have applications in almost every industry with references available on request.

- 10 – 15m are normal lifting heights for the Verto-Lift conveyor
- Mild Steel or S/S are used as trough material
- Pulling or pushing drive units are used depending on the application and layout requirements

DESIGN

The Verto-Lift conveyor consists of a vertical conveyor and a feeding conveyor, which can be designed and adapted to match almost any type of space constraints.

Live Bottom

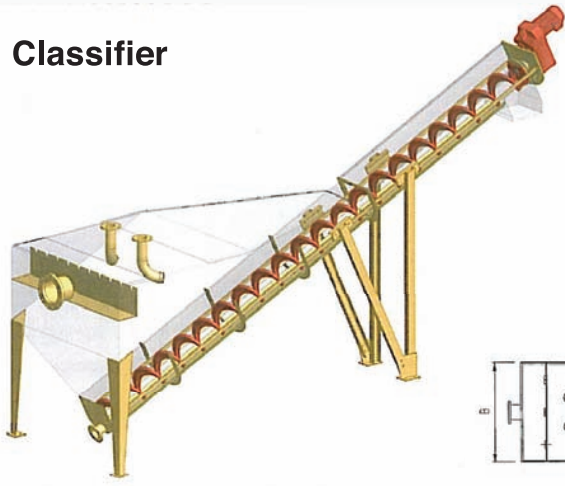


Type	Conveyor Size	Spiral Diameter	Spiral Pitch	Rpm Range	Capacity Range m ³ /h
SPLB 200	4 X U-200	160	140	1 - 10	0.5 - 5
SPLB 260	4 X U-260	215	190	1 - 10	1.5 - 15
SPLB 320	4 X U-320	280	250	1 - 10	2.8 - 28
SPLB 355	4 X U-355	315	300	1 - 10	4.5 - 45
SPLB 420	4 X U-420	360	340	1 - 15	6.6 - 100
SPLB 500	4 X U-500	440	470	1 - 20	14 - 100
SPLB 600	4 X U-600	480	525	1 - 20	18 - 365

The Spirotech Live Bottom offers the following

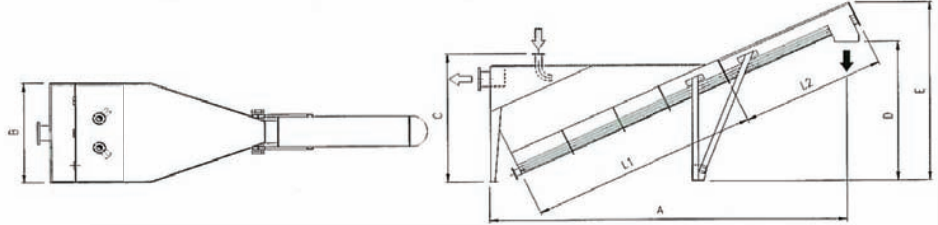
- Prevents bridging or arching in storage hoppers
- Shaftless spirals ensure true live bottom characteristics with no clogging
- Spirals are manufactured in left hand and right configurations, hand thereby ensuring mass flow characteristics
- Spirals can be manufactured with variable pitch to ensure mass flow characteristics
- Each spiral is driven individually thereby minimizing loss of production due to failure of any of the spirals
- No hanger bearings or end bearings
- Spirotech live bottoms are extremely versatile and can be manufactured to almost any length or width
- Capacity ranges from 1m /hr to 350m /hr
- The Spirotech Live Bottom system offers a cost effective solution to storage and conveying of problematic materials.

Classifier



THE SPIROTECH CLASSIFIER operates on the principle of minimum inlet turbulence combined with optimum settling thereby extracting maximum solids.

Solids settle to the bottom of the trough and are extracted using a shaftless spiral operating at very low rpm. Spirotech also have a specially designed outlet weir and all classifiers have quick release lids.

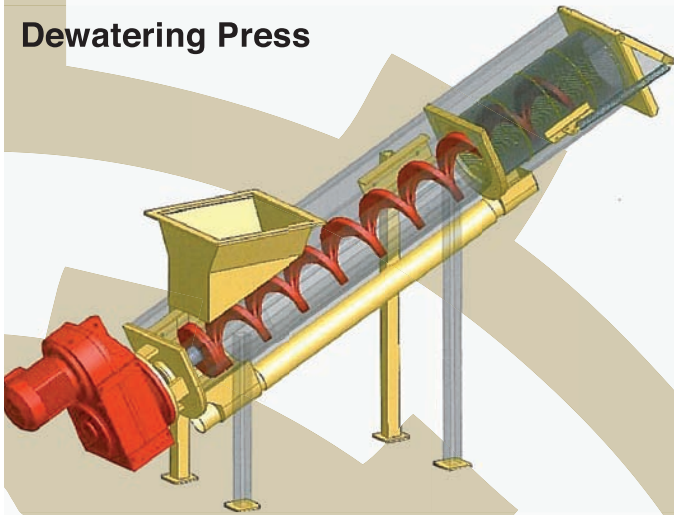


The efficiency of separation is dependant on the particle size, relative density and solids concentration. It is important to note that classifiers are designed to operate on a cycle and not continuously.

Type	Flow Rate (l/s)	Water Area (m ²)	Water Volume	Inlet Ø (mm)	Outlet Ø (mm)	A	B	C	D	E	L1	L2
SPCL 200	1-5	1	0.4	80	100	2850	710	1250	1290	1620	2000	1000
SPCL 260	5-12	2	1.2	100	150	3840	1020	1700	1600	2060	3000	1000
SPCL 320	12-20	3	1.8	150	200	4300	1400	1800	1900	2350	3000	1500
SPCL 355	20-27	4	3.3	200	250	5890	1420	2300	2400	3050	4000	2000
SPCL 420	27-35	5	4.2	2X100	250	6290	1720	2360	2550	3280	4000	2500

Classifiers can be manufactured from carbon steel, 3CR12, grade 304 and grade 316 stainless steel. Non standard sizes for larger applications available on request.

Dewatering Press



The Spirotech Dewatering Press combines the efficiency of the Spirotech conveying system with the effectiveness of the dewatering compaction zone. The system comprises a shaftless conveyor that transports the material into the compaction zone. The compaction occurs within the wedge wire zone at the end of the conveyor.

A plug of material is formed in the screen that is compacted due to the outlet door being spring loaded. Some advantages are:

- The shaftless spiral ensures no tangling and plugging of stringy materials
- An automatic spray system to keep the screen clean
- Adjustable tension on discharge door
- Variable screen apertures to cater for all product sizes
- Highly efficient dewatering
- Primary drainage zone

Type	Capacity Solids m ³ /hr	Conveying Length (mm)	Press Zone Length (mm)	Plug length (mm)
SPCL 200	1	1200	500	125
SPCL 260	1-2	1600	600	175
SPCL 320	2-4	2400	700	225
SPCL 355	4-7	2800	900	300
SPCL 420	7-15	3200	1000	350



CONTACT INFORMATION

TEL: (011) 955 4690

FAX: 086 509 2786

E-mail: sales@spirotech.co.za

www.spirotech.co.za

A wholly owned subsidiary
of Moago Krew (Pty) Ltd

19 Resnick Street
Factoria, Krugersdorp
South Africa

GPS

S 26°06' 52.6"

E 027°48' 40.0"