



Better.
Smarter.
Faster.



Charter

SENTRY PRESS™

THE NEXT GENERATION OF TOWER PRESS

The Sentry Press Is The Next Generation Of 3-Belt Press.

SENTRY PRESS: the same great features of the Tower Press... and even more!

How It Works Is Innovative. How It Performs Is Amazing.

Charter's three belt technology allows independent speed control of the gravity section and pressure section. Thus overcoming the difficulties in selecting through-put capacity or discharge cake solid concentration that standard two belt technology faces. The low profile gravity zone, tubular or channel steel frame, open or enclosed frame design, and pneumatic or hydraulic operation all provide easier viewing, operation, and maintenance.

- The Sentry Press easy maintenance, "hands-off" design reduces manpower hours and therefore over all operating costs.
- Optional filtrate recycle feature eliminates the need to utilize outside water sources for belt cleaning during operation.

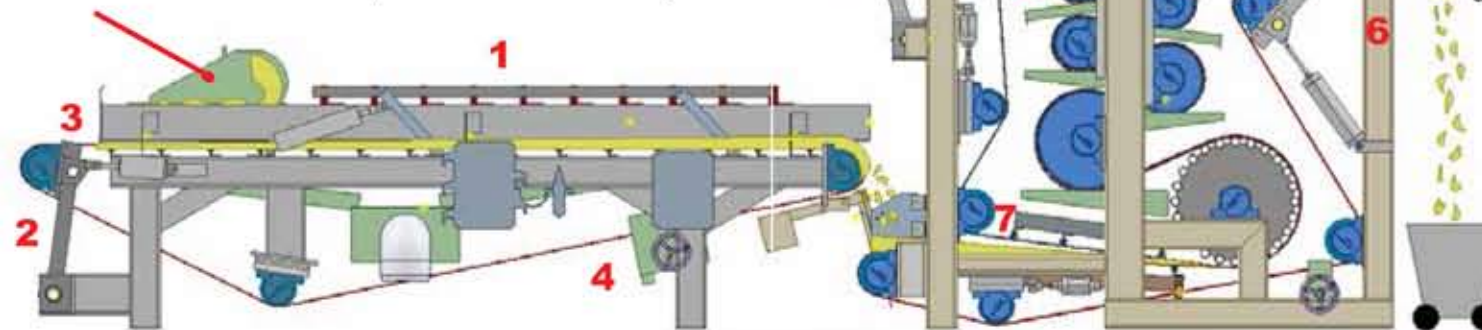
Sizes Available
1.2 meter
1.7 meter
2.2 meter



Charter can configure your press to suit your needs.

Pressure section available in 8, 10 & 15 roll configurations. As well as a High Solids version and 70 PLI version or both.

Feed box also available in upflow flocculation tank style.



1. Fully Automated Independent Gravity Zone containing individually adjustable UHMW polyethylene plows free floating but properly weighted to always maintain contact with the belt. More rows and more plows increase belt exposure to allow filtrate to escape.
2. Pneumatic / Hydraulically controlled rigid tensioning assembly adjusts and maintains belt tension with parallel movement for extended belt life.
3. Gravity Belt Thickener portion of combined 3 belt unit can be lengthened or shortened to accommodate facility footprint or to suit process needs.
4. Stainless steel belt wash station, internal brush system with

hand-wheel operated flush design.

5. Vertical Pressure Zone with Vertically arranged rollers provide more efficient dewatering and allows more square footage to be provided in the wedge zone.
6. The standard is hot-dipped galvanized to a minimum of 5 mil thickness. Tubular Frame or Channel Frame Construction is available in Carbon Steel, 304 or 316 stainless steel.
7. Adjustable Wedge Zone area for applies different amounts of pressure along with a sludge levelling bar for adjusting the amount and thickness of sludge entering the wedge zone.

Charter Machine's Model Sentry Three Belt Press has been engineered for paramount functionality to handle the highest flow rates at thin feed concentrations, providing maximum cake dryness. The Sentry Press combines its user friendly features, high quality construction, in house staff and support to contribute to lowering overall cost of operation.



Skid Mount Systems Are Also Available

The Regent Press

The Regent Press 15 Roll High Solids Press is an enlarged version of the standard 8 roll Sentry Press but with 15 rolls for increased cake solids. The 7 additional rollers provide maximum retention time allowing for additional shearing and pressure.

Unique Features And How They Work

Stacked Pressure Rollers

Charter Machine Company incorporates our tower press arrangement of rollers into the Sentry design. This enables every pressure roll to have a minimum of 205 degree belt wrap, which maximizes time under pressure and guarantees high cake solids.



Maximum Efficiency Perforated Roll

Charter's Perforated Roll is unique in it's design in that it allows for more water to pass through the belt for better dewatering performance. With over 89% open surface area it leads the industry. The industry standard is only 33% opening or less.

Positive Pressure Wedge Zone

Sentry Press employs an adjustable wedge zone capable of providing positive pressure on both belts.

One Piece Bearing Housing

The Sentry Press utilizes a one-piece pillow block housing with a gasketed and bolted end plate. All bearing housings are coated with a standard 20 mil thickness of Rilsen Nylon utilizing the electro static fusion bonding process.



Individual Drain Pans

The Vertical Arrangement allows every drop of water removed by the belts to cascade through a series of stainless steel drip pans positioned under each roller, which eliminates the rewetting of any sludge cake between the belts.

Bearing and Shaft Design

All bearings are self aligning double roll spherical roller type and provided with quadruple lip seals. All shafts are machined and polished. Each shaft is held in place with a lock ring to guarantee alignment and eliminate any slippage or misalignment that can occur with other arrangements.



Elevated Discharge

The Sentry Press features an elevated discharge that's more than 6 feet from the base of the press frame making it easier to design, install and maintain conveyor.



Doctor Blades

Doctor blades are pneumatically / hydraulically actuated for easier operation and cleaning.

Center Pivot Tracking

The unique center pivot design improves belt alignment by adjusting both sides of the belt simultaneously. This eliminates one sided belt stretch and promotes even stretching over the entire length of the belt to provide more constant performance during the life of the belt.

Pneumatic or Hydraulic Design

Pneumatic or hydraulic control station capable of up to 70 pli design. The anodized aluminum cylinders with stainless steel shaft, tie rods, teflon seals and graphite bearings require no lubrication.

Plow Grid Assembly

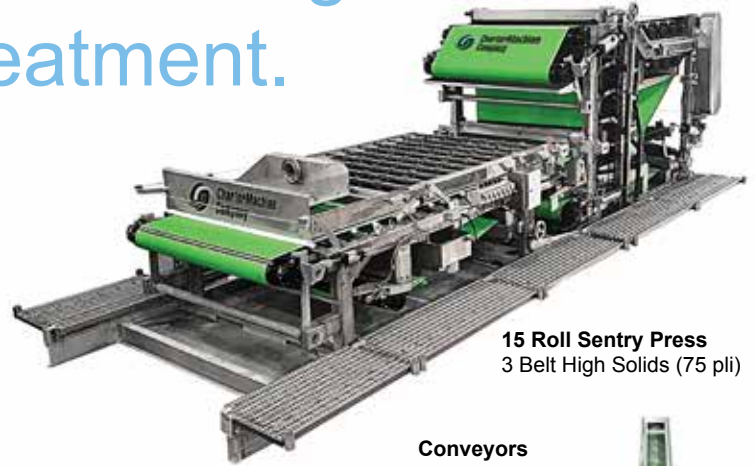
Pneumatic / hydraulic actuator lifts or lowers the entire plow grid assembly for easier cleaning, eliminating manually lifting each row of plows.



Seamless Solutions for Biosolids Handling and Treatment.



Sentry Press
The Next Generation of 3 Belt Press



15 Roll Sentry Press
3 Belt High Solids (75 pli)

Rodrum RF90
Drum Spun Thickening



Gravity Belt Thickener
Highly Efficient And Effective



Dewatering Trailers
The All In One Solution



Conveyors
To Suit Your Needs



TP7.4 Tower Press
Smaller Capacity, Big Capabilities



L-2 Polymer
Simple Cost Effective



Roedos VI
Customized Dry Polymer System



Roemix LFS 1200
Lime Storage Feeder



Roemix RM 240
Paddle Mixer Unit For Even Drier Solids

Whether its dewatering, thickening, polymer addition, conveyance or lime stabilization, Charter Machine provides customized and integrated biosolids solutions.

With our in-house staff of design engineers, we have complete control over the design, fabrication and start-up of biosolids systems perfectly suited to your operation. As a result, we can provide seamless total system responsibility -- from sludge testing, to design assistance to equipment start-up and training.

Occasionally our equipment will need servicing. At Charter Machine Company we maintain a complete inventory of replacement parts ready for immediate shipment. Assistance is a phone call away with help in troubleshooting and problem solving. Technicians are available for on-site visits. Charter also offers parts and full rebuild capabilities for all existing Roediger presses and other manufacturers.

We strive very hard to meet all your biosolids processing needs and would welcome the opportunity to be of service.

Over six decades of precision machine manufacturing.



55 Wester Avenue, Metuchen, New Jersey 08840
732-494-5350 • FAX 732-494-4596 • www.chartermachine.com