Scraper Flight Distribution Conveyor
Introduction

Serpentix Conveyor Corporation specializes in the design and manufacture of conveyor systems. Since our founding in 1969, we have undergone almost constant expansion as a result of customer demand for our products, three-dimensional continuous path™ conveyors. Our current manufacturing/production facility is located in Westminster, CO.

Operating over a continuous, three-dimensional path, Serpentix easily out performs – at less cost – conventional conveyors which can only operate along a straight line. The ability to incline steeply and to make continuous horizontal, helical and vertical curves, permits a single Serpentix conveyor to replace multiple conventional conveying devices, eliminating troublesome transfer points and reducing energy, space and maintenance costs.

The unique capabilities of the Serpentix belt, and other design features of the various models offered, permit a single Serpentix conveyor to perform the work of multiple conventional conveying devices. Many older, space-crammed plants have utilized Serpentix conveyors to modernize existing facilities without increasing plant size. In addition, the wide range of Serpentix capabilities, applied to new plant construction, has provided lower construction and operating costs, reduced installation costs, and safer and cleaner plants.
Chain/Scraper Flight Assembly

2” x 2” x 1/4” Angle A36 Structural Steel Hot Dipped Galvanized to ASTM-123/A 123M-02 Specifications

Internal Mounting Hardware- 304SS

14 Tooth Cast Iron Sprocket

Travel Direction

Replaceable 1/2” Thick UHMW-PE Scraper Flight

Carbonized Press Fit Pin

Cotter Pin Lock

Outer Chain Link Through Hardened

Inner Chain Link Through Hardened

S188 Engineered Steel Chain
Chain/Scraper Flight Assembly

Typical Scraper Flight Spacing every 31"

2” x 2” x 1/4” Angle A36 Structural Steel Hot Dipped Galvanized to ASTM-123/A 123M-02 Specifications

Internal Mounting Hardware- 304SS

Replaceable 1/2” Thick UHMW-PE Scraper Flight
5HP Motor
Inverter Duty Rated

7 Tooth
Nylatron Sprocket

1" Dia.
Intermediate Shaft
416SS

14 Tooth
Cast Iron Sprocket

2 3/16" Dia.
Main Shaft
416SS

Pillow Block
Heavy Duty Bearing

Flange Bearing

Dodge Quantis
Reducer

Typical Exploded View
without Running Gear
Chain Adjustment

- Pillow Block Heavy Duty Bearing
- 2 3/16" Dia. Main Shaft 416SS
- Bearing Adjusting Screw
Basic Conveyor Body Assembly

Top Panel with Input Chute

End Panel

Intermediate Sprocket Nylatron

Side Panel

End Panel

Pillow Block Heavy Duty Bearing

Side Panel

Flange Bearing

Motor

Reducer

Replaceable Slide Liner 1/2" Thick UHMW-PE

Bottom Panel
Slide Gate

Slide Gate 304SS

Pneumatic Cylinder

Internal Mounting Hardware - 304SS

Clamp Plate UHMW-PE

Spacer Bar UHMW-PE

Support Bracket

Slide Gate Frame
A36 Structural Steel
Hot Dipped Galvanized to
ASTM-123/A
123M-02 Specifications

3.25" x 19" Lg. Stroke
Pneumatic Cylinder
PLANT VIEW OF FLIGHTS

ELEVATION VIEW OF FLIGHTS

WISCONSIN DISTRIBUTION CONVEYOR
SCRAPE FLIGHT CONVEYOR

DESIGN: "FD" FLUTE MORTAR 24"" SPACED SUGAR 10 FT/HR
LENGTH OF CONVEYOR: 100'
DENSITY: 45#/CUBIT
MAXIMUM CYCLINDER 0'
MAXIMUM CONVEYOR 0'
MATERIAL: HAMBURG SLUDGE
FLUKE SPEED 50 FT/MIN

5 FT ETHOS WATER

DESIGN: R.E. NISEN
DRAWN: 02-13-2011
CHECKED: Q5231
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