

VULCAN MACHINERY CORP.

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Engineering Makes The Difference™

SONIC LOOP TURRET COILER SLC-PS Series



Model Number	Max. Package O.D. (inches)	Max. Package Traverse (inches)	Standard Arbor Dia. (inches)	Max. Package Wt. (lbs.)	Motor Torque Continuous (inch/lbs.)	Motor Torque Peak (inch/lbs.)
SLC18PS	18	14	1 ½	100	33	135
SLC28PS	28	14	1 ½	125	48	200
SLC38PS	38	14	2	150	48	200

APPLICATION:

• The Sonic Loop Turret Coiler is a two spindle, turret type unit in which the extrudate is fed to the coiler under an ultrasonic sensing dancer that locates the position of the extrudate loop and adjusts the speed of the servo driven spindles it maintain a virtually tensionless coiling operation. The unit is equipped with an automatic cut and transfer system that will rapidly transfer the product from the full reel to the new empty reel without disrupting the coiling process at speeds to 700 FPM. The addition of low or high levels of tension control can be provided, if required. The spindle and traverser control is a coordinated two-axis, fully programmable AC servo system. This allows for unprecedented accuracy and flexibility at greatly extended speed ranges.

PROGRAMMABLE CONTROLS:

- 4.1" LCD touch screen HMI
- Proprietary software driven display
 - Guides operator through set-up and prevents input errors
- Start pushbutton
- Emergency stop pushbutton
- Single turn line speed potentiometer (for manual operation)
- Reset traverser pushbutton
- Automatic/manual locking selector switch
- Manual counter override with counter reset
 - Pushbutton for reset after package

TRAVERSER:

- Traverser drive is servo motor driven
- Servo motor traverser is electronically coupled to spindle drive via integrated LAN communications network
- Traverser automatically slows down proprietary as RPM of spindle changes with package build-up or line speed changes
 - Pitch infinitely adjustable throughout range
- Multiple traversing patterns include instantaneous and delayed reversal, pancake winding and geometric end point control

ULTRASONIC DANCER:

- Loop detection by ultrasonic dancer making no contact with product
 - Sensors determine amplitude of loop by reflection of time-sequenced ultrasonic tones
 - Microprocessor computes loop position and adjusts coiler speed instantly, as required

PRODUCT GUIDE:

- · Product guide system provides close coupling to spool, resulting in precise lay-on with low tension
- One set of product guides furnished with coiler
 - Provisions for tensioning and tension control offered as optional features

SPINDLE CONFIGURATION:

- Spindles flanged 1" from machine housing
- Flange is 6" O.D.

DRIVE TRAIN:

- Drive Motor are class H, low inertia, brushless AC servo motors
- Coiler drives are geared in at customer's desired max. speed
 - Max. to min. coiling speed is over 2000 to 1

FRAME:

- Heavy wall tubing, steel plate and structural sections
- Two rigid and two swivel casters and hold-downs
- Screw type floor iacks
- Fully guarded drive train and electrical components

ELECTRICAL:

- Standard Electrical is 230 Volt/3 Phase/60 Hertz
 - Electrical other than the above is available as an option

OPTIONS:

- Custom winding heads for reeless packages
- Fully programmable cut length system
- Tension adding and controlling system for applications requiring tension
- Automatic storage and retrieval of process parameters based on part numbers
- Extra product guides

