



VULCAN MACHINERY CORP.

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Engineering Makes The Difference™

**HORIZONTAL SPOILER COILER
 HSC Series**



Single Spindle Coiler



Dual Spindle Coiler with Reeless Winding Head Option

Single Model Number	Dual Model Number	Max. Package O.D. (Inches)	Max. Package Traverse (inches)	Standard Arbor Dia. (inches)	Max. Package Wt. (lbs.)	Drive Spindle Horsepower
SHSC16	DHSC16	16	14	1	75	1
SHSC24	DHSC24	24	14	1 ½	125	1
SHSC32	DHSC32	32	14	2	200	1 ½
SHSC40	DHSC40	40	14	2	200	1 ½
SHSC48	DHSC48	48	14	2 ½	250	1 ½

APPLICATION:

- The HSC Series Coiler has been designed for those on-line coiling applications where either the line speed is sufficiently low that the extrudate can be manually transferred from spindle to spindle, or with higher line speeds, where manual transfer will not adversely affect the quality of the coiled package of the product. The Single and Dual Spindle HSC Coilers are designed to have the exudate fed to the coiler under an ultrasonic sensor/dancer that locates the position of the extrudate loop and adjusts the speed of the servo motor-driven spindles to maintain a virtually tensionless coiling operation. The addition of low or high levels of tension can be provided if required. The spindle and traverser control is coordinated two-axis, fully programmable AC servo system. This allows for unprecedented accuracy and flexibility in the coiling of profile, tubing and hose. An important feature that the servo spindle adds to the Vulcan HSC Series Coilers is the ability to operate the coilers as let-off units.

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. with four ea. 3/8"-16 NC holes on 5" bolt circle
- One set of standard-size arbors for 14" traverse furnished

DRIVE TRAIN:

- Drive Motor are class H, low inertia, brushless AC servo motors
- Coiler drives are geared in at customer's desired maximum speed
 - Maximum to minimum 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 jacks
- 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



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