

# REEL COMPONENTS

## The Anatomy of a Hannay Cable Reel

### 1 Bearings

Weight of spool and cable is supported by bearings.

#### 1a Back bearing

#### 1b Front bearing

### 2 Disc

Rolled edges prevent cable damage and add rigidity to disc. Additional strength is provided by a concentric rib.

### 3 Drum

Roll formed steel with full-length weld.

### 4 Tie rods

Join discs and drum to form spool, reinforced with pipe spacers for rigidity and strength.

### 5 Chain and sprocket drive

Provides smooth positive rewinding on powered reels.

### 6 Hub assembly

Provides wiring access to the slip ring assembly and serves as the reel axle.

Cable is connected to the slip ring assembly, passes through hub and exits drum through a grommeted hole.

### 7 Collector ring

Provides electrical continuity through reel as cable is payed out or retrieved.

### 8 Collector ring cover

Provides protection from current carried through collector ring assembly as well as keeping out contamination.

### 9 Wiring junction box

Provides connection of reel to incoming power source.

### 10 Brake/Rewind Assembly

Bevel gear rewind has an adjustable tension brake. Rewind and brake devices vary with different models.

### 11 Rewind motor

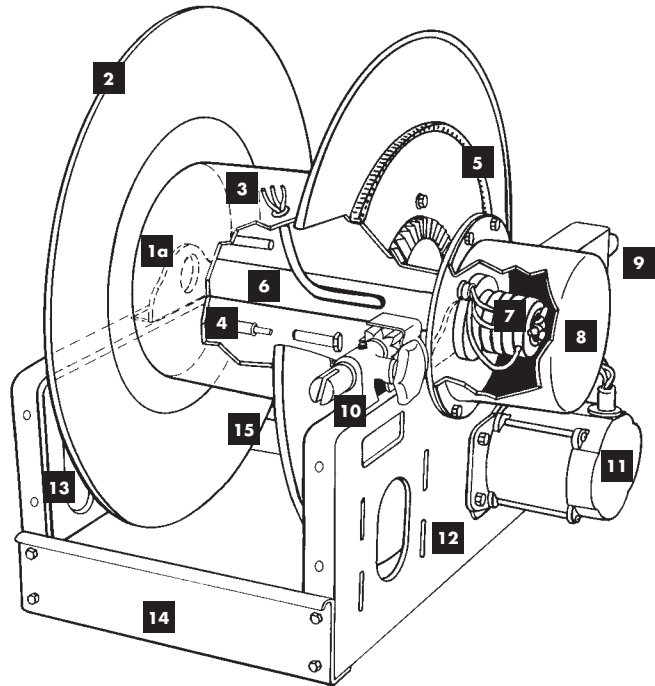
Electric rewind motor is shown. Compressed air or hydraulic motors can be used.

### 12 Front frame

### 13 Back frame

### 14 Front foot

### 15 Back foot



This cutaway illustration shows a typical power rewind reel with an optional auxiliary crank rewind mechanism. All Hannay Reels are assembled from combinations of the basic components shown here. Since components are taken from a large inventory, each reel is assembled to the buyer's particular requirements.

## General Specifications of Hannay Cable Reels

### Construction:

Frames, discs and drum are fabricated of heavy gauge steel. Bearings are self-aligning. Collector ring housings are ABS plastic or insulated steel, depending on model.

### Electrical Connections:

A pull wire is provided for installing cable through drum and hub. Connection from the electrical source to the reel is through a junction box or a preconnected wire lead, depending on the reel model.

### Collector Ring Assembly:

Reels to handle live electric cable are normally equipped with a 3-conductor collector ring assembly. Assemblies with additional conductors and for higher amperage are available at extra cost on most models. Be sure to specify your application.

### Standard:

45A 600V standard. Up to 300A available at additional cost.

### Finish:

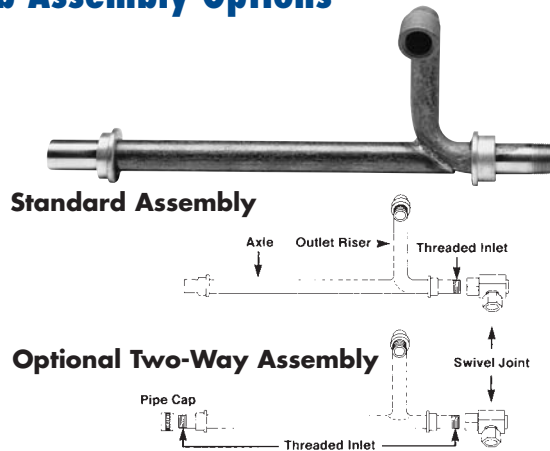
Standard finish is oven-cured enamel. Finishes other than our standard, such as special primers may be specified at extra cost.

### Shipping:

Reels are shipped completely assembled, ready to install. Installation instructions are supplied with each reel.

# ORDERING OPTIONS

## Hub Assembly Options

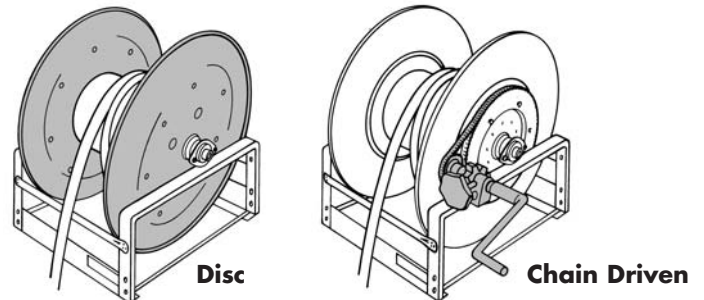


The hub assembly is the heart of the hose reel. It includes the outlet riser, the reel axle and the threaded inlet to which the swivel joint is attached. The swivel joint permits the reel to rotate freely while connected to the fluid source. The outlet riser is engineered to conform to the contour of the drum so the hose lies smoothly against the drum without kinking. Smooth interior surfaces are flow-contoured for unrestricted flow and minimal pressure loss through the reel. A two-way flow hub assembly is available on certain models as an option. On this assembly, the reel axle is threaded on both ends so the swivel joint can be attached at either end to match piping. A pipe cap is supplied to seal the opposite end.

## Rewind Options

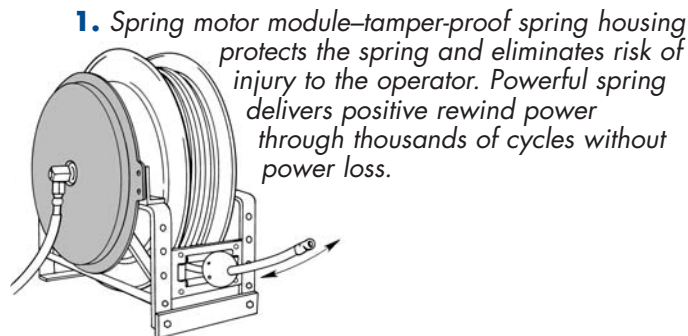
### Manual Rewind Reels

1. Gear-Driven Manual Rewind reels are equipped with a crank operated ring gear mechanism. This mechanism can be used to provide an auxiliary rewind capability on certain power rewind reels (not shown).
2. Disc rewind reels are rewound by manually turning the reel discs.
3. Direct Manual Rewind reels are equipped with either a permanently attached or removable crank (depending on model) which attaches to the reel axle to rewind the reel (not shown).



4. Chain-Driven Manual Rewind reels are equipped with a crank operated chain and sprocket mechanism parallel to the reel axle.

### Spring Rewind Reels



1. Spring motor module—tamper-proof spring housing protects the spring and eliminates risk of injury to the operator. Powerful spring delivers positive rewind power through thousands of cycles without power loss.

2. Ratchet assembly—locks the reel at any point when hose/cable payout stops. A pull on the hose/cable disengages the lock for instant rewinding. This assembly is deleted for automatic payout and rewind for constant tension applications.
3. Declutching arbor—disengages the spring to prevent damage from reverse winding.

Because they utilize self-contained rewind power, spring rewind reels are extremely versatile. No power connections are required and the reels can be installed in virtually any position and on all types of equipment.

### Power Rewind Reels

A chain and sprocket mechanism is used on reels with power rewind; the chain drive assures smooth, positive power transmission and minimum maintenance. A choice of electric, compressed air or hydraulic motors is offered for power rewind reels. Specific information on motors and operating controls are listed on pages 11 and 12.



# HOW TO SPECIFY HANNY REELS

## General Ordering Information

A precise and complete purchase order is your best assurance of prompt delivery of the exact reel you need. Your order should include all information listed. It is better to overspecify than to omit important information. When space permits, select a reel with greater capacity

than you actually need. This allows you to rewind the hose/cable with less care and keeps the hose/cable well protected within the disc dimension even if it is not wound in uniform coils. In most cases, the larger reel, in the same series, costs no more.

## Continuous-Flow Hose Reels

Orders for all continuous-flow hose reels should specify:

- Complete model number
- Type of rewind
- Length, I.D. and O.D. of hose(s)
- Maximum working pressures
- Size and thread of outlets
- Minimum bend radius
- 90-degree (standard) or straight swivel joint
- Liquid, gas or other product to be handled
- Oxygen/acetylene use
- Product temperature range
- Finish, if other than standard
- How reel will be installed and used
- Accessory items required

## Live Electric Cable Reels

Orders for live electric cable reels should specify:

- Complete model number
- Type of rewind
- Gauge, length, O.D. and weight of cable
- Cable voltage and amperage
- Minimum bend radius
- Number of conductors required
- Finish, if other than standard
- How reel will be installed and used
- Accessory items required

## Dry-Storage Reels

Orders for dry-storage reels should specify:

- Complete model number
- Length, O.D. and weight of hose, cable, rope or other material to be handled
- Bending radius, if material is not easily coiled
- Type of rewind
- Divider disc spacing, if required
- Finish, if other than standard
- How reel will be installed and used
- Accessory items required

## Power Rewind Reels

Orders for power rewind reels must also specify:

- Voltage and phase for electric motor
- Air or hydraulic rewind
- With or without auxiliary crank rewind

## Spring Rewind Reels

Orders for spring rewind reels must also specify:

- Roller position, SR, VR or TR
- Hose stop, if required [specify O.D. of hose(s) or cable(s)]
- Ratchet locking (standard) or without ratchet for automatic operation
- Height of lift, if reel is to lift hose/cable & weight
- Describe installation in terms of lift, stretch, drag or recovery (see page 8)

**INSTALLATION NOTE:** For the Hannay Warranty to be valid (1) A FLEXIBLE CONNECTOR MUST BE USED BETWEEN THE SWIVEL AND THE INLET PIPING, (see illustration on page 1 of this catalog), and (2) on DC electric rewind reels, a circuit breaker must be installed between the battery and the rewind motor.

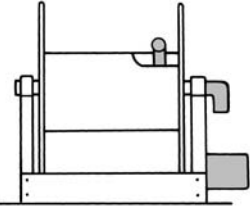
# HOW TO SPECIFY HANNY REELS

## Specifying Location of Components

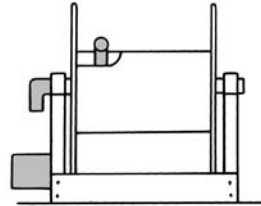
### Optional Location of Components:

Location of the inlet, outlet riser and rewind mechanism can be varied to meet your requirements and **must be specified on your order**. The drawings below show

the component locations. Unless otherwise specified, most reels will be shipped as **Right Top Rewind** with the inlet, outlet riser and rewind mechanism on the operator's right.

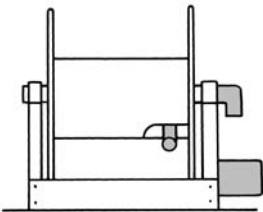


**Right Top Rewind (RT)** reels have the inlet, outlet riser and rewind mechanism on the operator's right. Hose unwinds from the top of the reel.

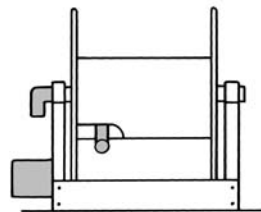


**Left Top Rewind (LT)** reels have the inlet, outlet riser and rewind mechanism on the operator's left. Hose unwinds from the top of the reel.

**Standard** – Always look at your reel from this position to determine right hand or left



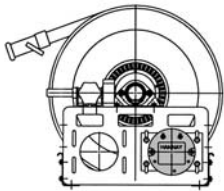
**Right Bottom Rewind (RB)** reels have the inlet, outlet riser and rewind mechanism on the operator's right. Hose unwinds from the bottom of the reel.



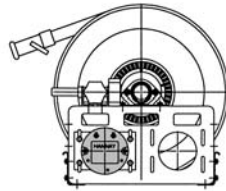
**Left Bottom Rewind (LB)** reels have the inlet, outlet riser and rewind mechanism on the operator's left. Hose unwinds from the bottom of the reel.

Note: Use position initials as suffix after model number, ie: **EF32-23-24-RT**

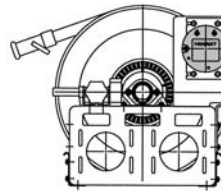
## Optional Motor Locations



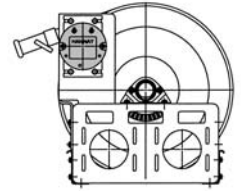
**Bottom Rear (Standard)**



**Bottom Front**



**Elevated 2 o'clock**

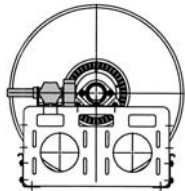


**Elevated 10 o'clock**

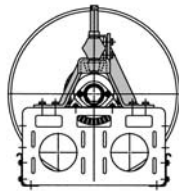
Electric rewind motors can be installed in any of the positions shown in these drawings. The **Bottom Rear** position is standard. The motor is installed inside the frame on

Model ESF reels (see Fire Fighting catalog), which are designed for installation in restricted space.

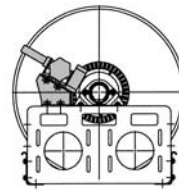
## Optional Auxiliary Rewind Positions



**Horizontal (Standard)**



**Vertical**



**30° Angle**

Horizontal ring and pinion gear crank rewind mechanism is the standard configuration. Optional positions include vertical and 30° above centerline, as shown in these

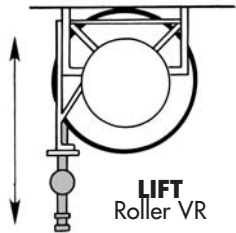
drawings. Both are available at extra cost and **must be specified**.

# HOW TO SPECIFY HANNY REELS

## Specifying Spring Rewind Reels

### Important installation guide.

For proper reel operation, rewind springs must be precisely matched to the job. Your order should include a detailed description of how the reel will be installed and used. This will also help to determine the best roller position.



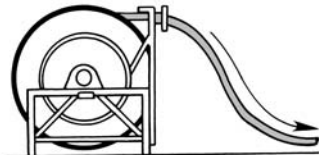
#### Vertical Lift-

Reel is installed overhead, on wall or ceiling, to lift hose/cable and product being handled. Spring must have power to lift total weight of hose/cable **plus any weight which will be attached to the hose/cable** such as a power tool. Reel can be manually operated or pay out and rewind **automatically**.

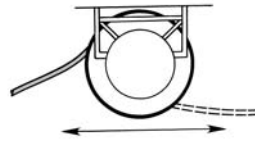
Specify height of lift and weight of hose/cable and attachments when you order.

#### Drag-

Reel is stationary and retracts hose/cable across floor or other surface. Spring must have power to compensate for friction. Reel can be manually operated or pay out and rewind **automatically**.



**DRAG**  
Roller TR



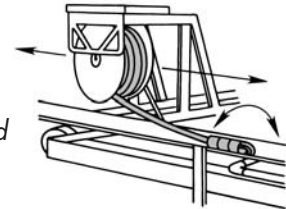
**STRETCH**  
Two-way payout  
No Roller

#### Stretch-

Reel is stationary and retracts suspended hose/cable attached to moving equipment. Reel pays out and rewinds **automatically**. Spring must have power to compensate for weight of unsupported hose/cable. Specify maximum hose sag allowable.

#### Recovery-

Reel is installed on moving equipment or at a fixed center point to retract and pay out hose/cable in two directions. Reel pays out and rewinds **automatically**. If reel travels, specify speed of travel, acceleration rate, and height of reel above recovery surface.



**RECOVERY (Pick up)**  
No Roller

Note: A rough drawing of your specific installation plans will be extremely helpful.

## Hose and Cable Roller Positions

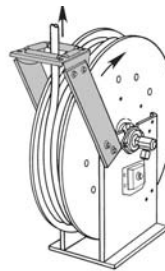
On standard spring rewind reels, the hose/cable pays out from the bottom of the reel and to the left when reel is viewed from the swivel joint or collector ring side.

**Hose/cable rollers are supplied with all spring rewind models and you must specify the roller position when you order.** (If roller position is not specified, reels will be shipped with rollers in POSITION SR.)

**Pricing Note:** When reels are ordered for automatic operation, ratchet assembly and, in some cases, hose rollers are not required. See price list for deductions.

#### Specify roller position SR when:

- Reel will be installed in the upright position at any point from floor to eye level.
- Reel will be installed on a wall with hose/cable to be retracted close to the wall.
- Reel will be installed on ceiling and hose/cable will pay out parallel to and close to the ceiling.



**POSITION VR**  
Swivel Joint Right, Position Standard

#### Specify roller position VR when:

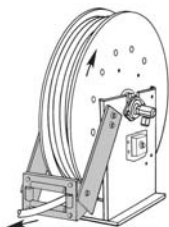
- Reel will be installed in the upright position and hose/cable will be pulled upright from the reel.
- Reel will be installed on ceiling to lift hose/cable.
- Reel will be installed on a wall with hose/cable to be pulled straight out.

#### Specify roller position TR when:

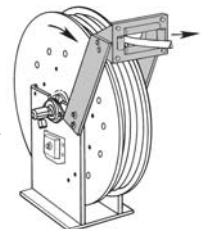
- Reel will be installed on floor.
- Reel will be installed on ceiling with hose/cable to pay out parallel to the ceiling.

#### BE SURE TO SPECIFY ROLLER POSITION WHEN ORDERING.

Arrows show direction of reel rotation and direction in which hose/cable unwinds.



**POSITION SR**  
Swivel Joint Right, Position Standard



**POSITION TR**  
Swivel joint Left, Position Standard

# HOW TO ORDER REELS

## Hannay Reels Order Worksheet

To order Hannay Reels, fill out this simple form (or a photocopy) and mail or fax to your Hannay Reels dealer.

### 1. Who's the reel for?

Company _____	Street Address _____			
Division _____	City _____	State _____	Zip _____	Country _____
Contact _____	(_____) _____	Telephone _____	Fax _____	Date ____/____/____

### 2. What is the reel for?

**HOSE** (check one):

Live     Storage only     Single hose     Dual hose

Inside diameter: \_\_\_\_\_

Outside diameter: \_\_\_\_\_

Bend radius: \_\_\_\_\_

Hose length: \_\_\_\_\_

Hose weight: \_\_\_\_\_

Flat hose dimensions: \_\_\_\_\_

Coupling spacing: \_\_\_\_\_

Type of product handled live application (check one):

Liquid (specify type): \_\_\_\_\_

Gases (specify type): \_\_\_\_\_

Oxygen/Acetylene: \_\_\_\_\_

Other (specify type): \_\_\_\_\_

Hydraulic fluid (specify type): \_\_\_\_\_

Temperature: \_\_\_\_\_

Pressure: \_\_\_\_\_

**CABLE** (check one):

Live     Storage only

No. of conductors required: \_\_\_\_\_

Outside diameter: \_\_\_\_\_

Bend radius: \_\_\_\_\_

Reel inlet type (check one):

90°     Straight

Special material (internal hub assembly)

Aluminum     Malleable iron     Stainless steel     Steel

Connector size: \_\_\_\_\_

Reel outlet type (riser):

Size: \_\_\_\_\_

Thread (check one):

National Pipe Thread (NPT)

Joint Industry Committee (JIC)

National Standard Thread (NST)

British Standard Pipe (BSP)

Other

Cable length: \_\_\_\_\_

Number of Connectors: \_\_\_\_\_

Cable weight: \_\_\_\_\_

Amperage (live application only): \_\_\_\_\_

Voltage: \_\_\_\_\_

### 3. What features does the reel need?

Check type of rewind:

**MANUAL**

Disc rewind (hand over hand)     Gear-drive crank

Direct crank (permanent or removable)     Chain-drive crank

**POWER**

Spring     Electric (voltage: \_\_\_\_\_)

Air     Hydraulic

Check type of installation:

Floor     Wall     Overhead     Vehicle

Temperature Range: \_\_\_\_\_

Environment: \_\_\_\_\_

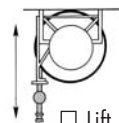
Accessories (if any): \_\_\_\_\_

Finish (if other than standard): \_\_\_\_\_

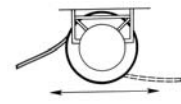
Roller Assemblies: \_\_\_\_\_

Hose/Cable Stop:  Yes     No    Specify Hose/Cable O.D. \_\_\_\_\_

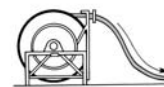
Check type of installation and roller position for spring reels:



Lift



Stretch (no roller)



Drag



Recovery/Pick-up  
No roller

Roller

Position VR  
 Position TR

Position SR  
 Constant tension

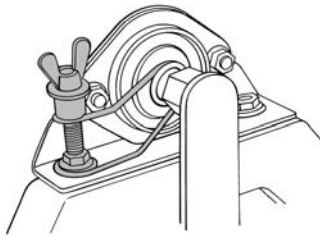
### 4. Please note size and/or weight limitations for your installation

Length \_\_\_\_\_ Width \_\_\_\_\_

Height \_\_\_\_\_ Weight \_\_\_\_\_

For custom applications not found in our catalogs, call the Inside Sales Group at (518) 797-3791.

**Brakes and Locks**

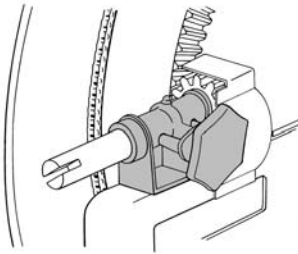


**Drag Brake**

Adjustable spring tension brake applies drag pressure to axle on some direct crank rewind reels.

**To order**, specify part number (see Price List H-0415-OAL).

**For factory installation**, specify Drag Brake with reel order.



**Pinion Brake**

Adjustable spring tension applies braking pressure to pinion shaft on reels equipped with ring gear rewind mechanism.

**To order**, specify part number (see Price List H-0415-OAL).

**For factory installation**, specify Pinion Brake with reel order.



**Comet Brake**

Adjustable steel strap lined with brake pad material applies drag pressure to reel axle to control payout speed of the reel.

**To order**, specify part number (see Price List H-0415-OAL).

**For factory installation**, specify Comet Brake with reel order.

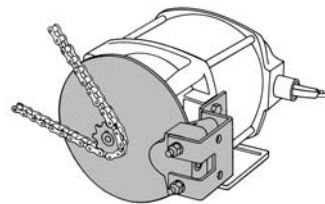


**Cam Lock Drag Brake**

Molded plastic drag brake with cam lock lever designed for 1/2" manual reels. Corrosion proof and does not harm the hub. Infinitely adjustable for the desired drag tension to prevent cable or hose overrun. Instantly releases with the flip of a lever for drag free rewind.

**To order**, specify part number (see Price List H-0415-OAL).

**For factory installation**, specify Cam Lock Drag Brake with reel order.

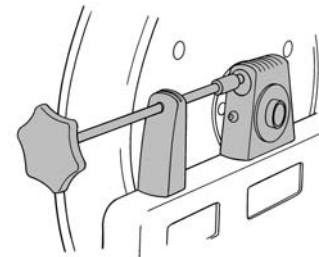


**Caliper Brake**

Clamps a disc on the motor shaft for positive locking of reels with power rewind. Can be operated manually, hydraulically or by compressed air.

**To order**, specify part number (see Price List H-0415-OAL).

**For factory installation**, specify Caliper Brake with reel order.



**EH-820 Bearing/Brake Assembly**

This assembly provides an alternate method of braking control on certain model reels. Assembly is installed in the back bearing position. Brake applies pressure to the reel axle to slow or lock the reel.

Can be factory installed, when specified with reel order, or supplied in kit form for field installation.

**To order**, specify part number (see Price List H-0415-OAL.)

**For factory installation**, specify Bearing Brake/Assembly with reel order.

**PL-1 Pin Lock**

A positive, spring-actuated pin lock to prevent free-wheeling or recoil from pressure surges. May be factory-installed when specified on your reel order.

**To order**, specify part number (see Price List H-0415-OAL).

**For factory installation**, specify Pin Lock with reel order.

