WINDER REBUILD

TECHNICAL DATA (46-00)

Functional Data

Paper Grade	Lightweight Coated
Basis Weight	26 1/4 - 48# / 3300 Sq. Ft. Uncoated
Trimmed Width	
-Max.	170.0"
-Min.	146.0"
Drive Speed	5500 FPM
Design Speed	5500 FPM
Maximum Acceleration and Deceleration	100 FPM/sec.
Web Tension	2 PLI-Min./5 PLI-Max.
Maximum Wound Roll Dia.	60.0"
Side of Drive	Looking Downstream from unwind, Left Hand

TECHNICAL SPECIFICATION

Valmet's winder rebuild will be designed and manufactured to the following parameters:

GUIDE ROLL (46-44)

Guide Roll	Dia. 13.88" X 176.0" (by customer)
-vertical adjustment, ts.	± 1", manual
-drive	motor/belt

The paper web is led from the unwind to the slitter section over a plain surface guide roll. The bearing housing on the tending side of the guide roll can be vertically adjusted. This movement evens out the web tension in the cross-machine direction. The guide roll is dynamically balanced at a rotational speed corresponding to the design speed of the winder.

SLITTERS (46-42)

-number	20 pairs
-top slitters	Dia. 7.48" tool steeled slitters
-bottom slitters	Dia. 9.84" single edge carbide slitters
-on/off control	pneumatic, remote-controlled
-slitter - pressure regulation	pneumatic, common for all slitter pairs
-slitter motors	6 X 1.2 HP, inverter controlled squirrel-cage motors (KONE) (460V)

The paper is slit with rotating shear slitters. The bottom slitter band and adapter are mounted on the shaft on the AC drive motor, and its counter slitter is mounted on a separate top slitter holder. The top slitter holders are provided with pneumatic functions for on/off control of the slitters and slitter pressure.

SLITTER POSITIONING SYSTEM JET-SET (46-40)

-slitter positioning	JET-SET, manual positioning for each slitter pair
-minimum slit width	6.5"

The top and bottom slitter carriages are mounted on ball bushings and slides. To reposition a slitter, the operator releases the pneumatic slitter locking tubes. The operator then actuates a slide valve on the top slitter carriage that energizes a cylinder that ties the top and bottom slitter carriage assemblies together. The operator then repositions both units simultaneously to the desired position. He then presses the air release button and the cylinder retracts. The slitters are then locked in place by energizing the pneumatic slitter locking tubes.

Slitter assemblies are shear-type, consisting of individual pneumatically engaged and disengaged top slitter and bottom band. The shear angle and point-of-contact between top and bottom slitters is pre-set for optimum and minimum attention from operators. Bottom slitters are driven by individual AC motors. Motors are supplied by Valmet.

TRIM CHUTES (46-43)

-trim width	Max. 3" with oscillation Max. 5" without oscillation Standard trim chute width = 6"

Trim is guided by support and guide plates into customer supplied trim chutes located at the edge slitters, below the slitting section. From the chute, the trim is led through a customer supplied vacuum system.

SLITTING TABLE (46-41)

-before and after slitting	(2) rolls - sectionalized
-diameter/length	7.75" X 176.0"
-material	aluminum

The before and after slitter table consists of freely-rotating sectional rolls. The after slitter table roll is mounted on tension measuring load cells that measure the force directed from the web to the roll and transmit electric signals to the unwind drive to control web tension.

WEB HOLDER (46-68)

The full width web holder is located beneath the two drums. It is an air actuated tail holding device whose main purpose is to hold the web tight to the rear drum while the stock is cut. The rubber covered rollers hold the web secure while threading between the drums takes place.

WEB THREADING EQUIPMENT (46-68)

The paper is threaded through the winder with guide plates, air jets and rollers. The web threading devices are located in the middle of the winder. Web threading is accomplished when the winder is running at thread speed.

The guide plates, air jets and the rollers below the drum transport and lead the paper tail between the drums. The on/off control of the web threading equipment is accomplished with pneumatic air bags and cylinders.

THREADING SYSTEM ON GUIDE ROLL (46-68)

An assembly of pneumatically actuated rubber wheels acts as an aid in threading. This assembly is mounted above the guide roll and when in use, allows the operator to begin the threading process by placing the web into the nip caused by the guide roll and the nip threading assembly. From this point, the web is lead into the slitter section.

WEB SPREADING BEFORE SLITTING (46-46) (Customer Supplied)

A fixed bow spreader roll (with hard coat surface) is located between the lead-in guide roll and the before slitter table roll to ensure that the web enters the slitting section uniformly tight and wrinkle-free. This roll will be driven from the drive side with a motor and timing belt arrangement.

WEB SPREADING AND SEPARATING AFTER SLITTING (46-64)

Dual Spreaders

A dual spreader is located between the after-slitter table roll and the rear drum. The dual spreader is used for slit separation when a large number of cuts are required.

The dual spreader consists of two fixed bowed rolls mounted on a frame assembly supported on pivot shafts approximately mid-way between the rolls and supported from the slitter frames.

TENSION MEASUREMENT (46-38)

The slitter table is provided with sensors for measuring the web tension. The electronic tension measuring system delivers an electric signal to the unwind drive for controlling web tension. The tension values can be set and followed from the control desk.