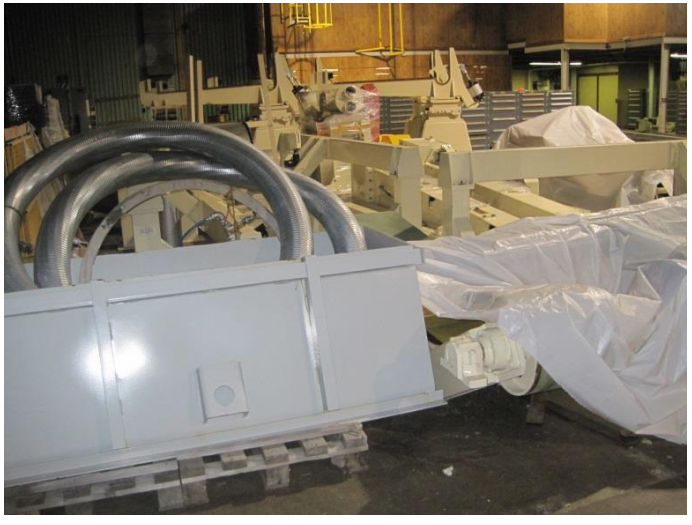
New 1500-T ABK Two-Drum 3-ply Tissue Winder

- New 1500-T ABK two-drum Tissue winder in original shipping boxes.
- Located in northern New Hampshire.
- 3-Ply combining capability.

Photos



Winder Specifications

Winder 1500-T 3Ply Combining Winder

Unwind Stands (12” cores)	3	
Cores Internal Diameter	3” and 6”	
Jumbo Roll Trim Width	2,750 mm	108.27”
Jumbo Maximum Roll Diameter (Back Stands)	2,800 mm	110.27”
Maximum Finished Roll Diameter	1,800 mm	70.87”
Number of Slitters	12	
Minimum Slitter Width	160 mm	6.3”
Balanced Speed	1,500m/min	4,921 ft./min
Drive Speed	1,400m/min	4,593 ft./min
Maximum Operating Speed	1,400m/min	4,593 ft./min

Slitters are Tangential Cut, Motorized Counter-Blades Units

Slitter Setting is Manual, with Digital Indicators

Unwind Section Details

UNWIND STANDS

Multiple unwind stands for multi-ply combining and winding. Jumbo rolls driven by tape drives.

Each back stand adjustable in the cross direction. Electrical geared motor. Machine direction manual adjustment.

Unwind stands built out of welded steel plate mounted on soleplates.

Unwind stands are reversible. Unwinds are provided with mechanical brakes used when winder stopped.

REEL SPOOL EJECTOR

The unwind stands are equipped with a pneumatically-operated reel spool ejector.

PAPER LEAD ROLLS

The paper lead-in rolls have a steel shell, grooved on the surface to avoid sheet blowing.

SHEET STABILIZER

The sheet is guided by paper rolls and stabilized by stainless steel sheet stabilizers located in the bottom sheet run between the unwind stands.

TAPE DRIVE

Each unwind stand has a tape peripheral drive for the parent jumbo roll. Drive tapes are loaded against the parent roll by an air cylinder.

Slitter Details

SLITTING SYSTEM – TOP SLITTERS

Quantity: 12 Diameter: 180 mm

The top slitters are pneumatically engaged. Hand wheel used for positioning. Mechanical brake of top slitter after positioning it against the counter-slitter sleeves (bottom slitters). The slitter assemblies are moved manually to the selected position using linear bearings along a rack-and-pinion system. A digital display indicates the position.

SLITTING SYSTEM--COUNTER-SLITTERS

Type: Expando Counter-slitter system Diameter: 250 mm

The system is driven by an AC motor. Complete with protection mover, and pneumatic position engagement.

TANGENTIAL CUTTING ROLLS

Quantity: 2 Diameter: 250mm

Materials: Carbon steel shell, carbon steel heads, Nodular iron bearing housings

Before and after the slitting section are two grooved steel sheet carrier rolls.

SHEET SPREADING

Before and after the slitting section are fixed box spreader rolls, driven by belt-and-pulley arrangement from one of the winder drums rolls.

Winding Section Details

The winding section is of the expanding shaft type, with two winder drums. All the main movements of the winder are hydraulic.

WINDER DRUMS

Quantity: 2 Diameter: 500 mm

Shell surface: Escapair grooved the wet roll Materials: Carbon steel shell, Carbon steel heads

Nodular iron bearings housings

The winder drum rolls have steel shells, heads, and journals, on anti-friction bearings in cast iron housings.

'Escapair' grooving (double spiral) is on the first roll surface. This reduces air entrapment, enabling the operator to maintain maximum traction as well as to minimize noise generation throughout the entire operating speed range.

Disk type brakes are installed on the drive side journals to facilitate rapid stopping.

CORE CHUCKS

The core chucks are mounted on carriages. Each carriage is equipped with four anti-friction, recirculating ball linear bearings, vertically sliding on hardened steel guides. A cross shaft ensures synchronous movements of the two carriages.

A set of pneumatically loaded sliding pads is installed for increased carriage stability and to avoid vibration. The core chuck assembly load is secured by modulating pressure in loading hydraulic cylinders controlled by the winder automation package and calculations incorporating roll diameter. The curves for load/diameter are set in the automation package. Employees can set different curves depending on the paper type.The hydraulic cylinders exercise a compensating effect on the roll to improve its quality. The operator can control the compensating effect depending on the type of paper being rewound.

Core chucks are suitable for 76 mm and 150 mm core shaft diameters. Core chucks are provided with clamping heads to wind rolls with expanding shaft.

Winding Section Details (cont.)

RIDER ROLL

Quantity: 1 Diameter: 216 mm

Materials: Carbon steel shaft. Carbon steel heads. Nodular iron bearings housings.

The rider roll is mounted on carriages, each carriage equipped with four anti-friction recirculating ball linear bearings, vertically sliding on hardened steel guides. A cross shaft will ensure synchronous movements of the two carriages.

Rider roll movement and loading are accomplished by hydraulic cylinders. Rider roll pressure varies per paper roll diameter.

Rider roll loading is controlled by the winder automation system. The load diameter curve is loaded into the winder automation system in the same way as the core chuck system. For large winding diameters, the rider roll is lifted after a certain diameter is reached.

ROLL EJECTOR AND PAPER CUTTING DEVICE

Finished rolls are ejected from the winding section onto the lowering table by a roll ejector actuated by a set of hydraulic cylinders. The roll ejector incorporates a core loader. New cores are manually positioned in the loader. When finished rolls are ejected, the core loader deposits the new cores into the gap between the winder drums. Rotating knives moving in the cross direction separate the web from the finished rolls, if needed.

ROLL LOWERING TABLE

Finished rolls are transferred from the winder via a roll lowering table. The table cradles ejected rolls and lowers them to the floor. The lowering table uses hydraulic cylinders.

After finished rolls are transferred, the table moves back to the working position. The operator can then easily position cores for the next set on the expansion shaft.

Winder Utilities and Accessories

HYDRAULIC UNIT

A hydraulic power unit is supplied and serves all the winding section movements. The main components are the (a) receiving tank, with gear pump, (b) filters, (c) heat exchanger to cool the oil, (d) oil heating and cooling, (e) stainless steel piping and (f) all necessary controls (valves, distributors, etc.).

TRIM SUCTION SYSTEM

Trim is removed by a suction fan, of mild steel construction, that chops the trims and pneumatically conveys it to a separator. The separator is the cyclonic type, and uses water to flush the chopped material. The air inlet and trim is tangential at the top, with discharge on the bottom and an air outlet (vent) on the top. A false-air system regulated by an automatic proportional damper regulates the air flow in function of the winder working speed. Required Fan/chopper motor: 15kW, 4 poles

SOLEPLATES

Cast iron soleplates with leveling screws are supplied, drilled and tapped. Hold-down and anchor bolts are also be supplied. The soleplates are plain, and will be drilled during erection.

HYDRAULIC POWER UNTIS

Once hydraulic power is supplied; the unit will be complete with all necessary controls. Note: all rolls are grease-lubricated.

CONTROL CONSOLES AND PANELS

Electrical, pneumatic and hydraulic controls as applicable are supplied in separate sections of each control console or panel. All consoles and panels are pre-piped and pre-wired, with piping, tubing and wiring grouped in rack with identification tags.