

BOW Industries Incorporated

Model 432 Magnetic Tape Conditioner



FEATURES

- **Efficiently Cleans ½-inch or 1-inch Instrumentation, Computer, Audio & Video reel tapes**
- **Four cleaning stations clean both sides of the tape**
- **Variable cleaning tissue speed control**
- **Self-test feature for easy trouble shooting**
- **Various hub types available**
- **Blade Life Indicators**
- **Optical Inspection option**
- **Hub Conversion Kits available**

The BOW Model **432 Series** of tape cleaners are economical magnetic round reel tape cleaners with high quality wind for 1-inch and ½-inch NAB, IBM or EIAJ spindle reels. The Model 432 was designed to handle tape reel sizes from 10 ½-inches to 16-inches in diameter, all computer/data reels (432C) up to 10 ½-inches, as well as video tape (Model 432V) 5 and 7 inches in diameter.

An optical inspector option is available that allows the user to establish a fail criteria to weed out bad tapes and save valuable reusable tapes. Perfect for conditioning old tapes for archives, restoration, or to ready the tape for media transfer. In conjunction with the optical inspector, a stop on defect feature allows the operator to visually inspect any physical defects found on the tape.

For the best high quality wind magnetic reel-to-reel tape conditioner for your valuable tapes, the BOW Model 432 is the solution.

FEATURES

CLEANING EFFICIENCY

The BOW Model 432 incorporates the safest and most effective method of cleaning tape, with a sapphire blade for removing dirt adhered to the tape, and cleaning tissues stations for removal of any loose dirt. BOW's unique pivoting cleaning blade design simplifies blade contact with a double-edged sapphire blade for scrapping the tape in both directions of travel. If desired, the operator can retract the cleaning blade from the tape path entirely for 'tissue only' cleaning. The automatically advancing tissue stations are made of non-shedding nylon material that are placed such that both the oxide and back sides of the tape are cleaned, both upstream and downstream of the sapphire blade. For optimum efficiency, the BOW Model 432 allows the operator to select tissue speeds (FAST, MEDIUM or SLOW) according to the amount of dirt on the tape.

PACK ROLLER

A frequent problem for tape users is edge damage caused when protruding layers of a scattered wind contact the reel flanges. The Model 432 features a large pack roller that prevents scattering and centers the tape uniformly on the reel hub without touching either flange.

SPEED

Because of aerodynamic effects of the tape at the cleaning blade and tissue stations, the best speed for cleaning effectiveness is approximately 300 ips (inches per second) in both forward and reverse direction. If tape stiction is an issue, we offer the Selectable Speed Modification (SSM) that allows the tape speed to be lowered and selectable between 75 ips and 150 ips.

HUBS

The NAB hubs require a simple push-in motion, which extends three fingers that push the tape reel back securely against the hub's back flange. This assures straight alignment and safe seating for every reel. The IBM hubs function the same except they use bands that swell to hold the IBM reels securely. The spindle hubs (EIAJ) used for ½-inch video reels (432V) use a two piece sliding mechanism that allows for quick and easy installation and removal from the hubs.

BLADE LIFE INDICATOR

The sapphire cleaning blade will stay sharp for at least six million feed of tape. The Model 432 keeps track and indicates in percentage the amount of life remaining so that a sharp edge is always assured.



432 Control Panel

SPECIFICATION	
Dimensions	432 C,H,T,V: 20" H x 24" W x 17.25" D overall; 432 I & W: 26" H x 34" W x 15.75" D overall.
Weight	432 C,H,T,V: 50 lbs. (approx.); 432 I & W: 75 lbs. (approx.).
Power	110-240 VAC +/-10%, 50/60 Hz (6.25 amps @ 115 VAC; 4 amps @ 220 VAC)
Controls	Pushbuttons for POWER, LOAD, FORWARD, REVERSE, CYCLE, STOP, SYSTEM TEST and TISSUE SPEED.
Indicators	REPLACE BATTERY, SYSTEM TEST, BLADE LIFE (NEW, 1/3 & REPLACE), TISSUE SPEEDS. (FAST MEDIUM & SLOW), LOAD, FORWARD, REVERSE, STOP and CYCLE.
Footage Counter	4 1/2 digit counter display, 1% accuracy, 1 ft. resolution.
Tape Low Sensing	Senses when tape is low on supply reel to allow tape to slow before stopping or reversing direction. This is adjustable.
Cycle	Automatically returns tape to left reel.
Tape Absence Sensing	Stops tape drive when tape is not present in tape path.
Pack Roller	Presses air from tape layers to provide uniform stack on left reel.
Hubs & Guides	Precision locating, positive locking, and maintenance free guides. Guides rotate on ultra precision bearings to provide minimum tape wrap and maximum guiding.

ORDERING INFORMATION

MODEL	HUB TYPE	REEL DIA. (MAX)	TAPE WIND	WIND TENSIONS
432C	IBM	10 1/2 inch	1/2-inch	8-10 oz.
432H	NAB	10 1/2 inch	1/2-inch	6-10 oz.
432T	NAB	10 1/2 inch	1-inch	10-14 oz.
432I	NAB	16 inch	1/2-inch	6-10 oz.
432V	EIAJ Spindle	7-inch	1/2-inch	6-7 oz.
432W	NAB	16 inch	1-inch	10-14 oz.

OPTIONAL FEATURES

- CKC** Conversion Kit from 1/2-inch NAB to IBM
- CKV** Conversion Kit from 1/2-inch NAB/IBM to 1/2-inch Video (EIAJ)
- SSM** Selectable Speed Modification - Allows tape speed to be lowered and selectable between 75 ips and 150 ips.
- OI** Optical Inspector with Stop on Defect - In-line quality control device opto-electronically scans entire surface of tape detecting physical defects (pin holes, damaged or folded edges, stretched tape, nicks, oxide voids, etc.)
- SDS** Stop Distance Select - Stops machine at selected distance from either end of tape in hundreds of feet (3 ft. accuracy).

Manufactured and Sold by
BOW Industries, Incorporated
 10349 Balls Ford Road
 Manassas, Virginia 20109 U.S.A.
 Tel: 703-361-7704
 Fax: 703-361-7369
 E-mail: sales@bowindustries.com