

AMPEX HS-100/HS-100B CLEAN AIR PACKAGE

AMPEX

A new low cost accessory for HS-100's which improves operating performance.



FEATURES

- Creates an environment dramatically lower in dust and abrasives
- Allows heads to fly undisturbed above disc surfaces
- Maintains a constant temperature throughout head/disc area
- Costs considerably less than a complete set of head/disc replacements
- Field installable in less than two hours

The Clean Air Package is a specially designed blower which forces filtered air into the head/disc compartment of HS-100 disc recorder/reproducers. This constantly circulating air enables the heads to fly slightly above the disc surface (except on take-off and landing), creates a nearly dust and abrasion free environment in which the sensitive disc and head configuration functions at its optimum and maintains a more constant temperature.

CLEAN AIR: less than 10 particles .3 microns or larger per cubic foot!

It has been discovered that the highly tooled discs spinning at 3600 RPM create a pumping action around the spindle which causes an inflow of relatively dirty air (10,000 to 100,000 particles per cubic foot) into the disc area. Even more dirt is picked up as the air moves up through the bearings. This

debris can have abrasive, even catastrophic effects on the mirror-like discs and the delicate heads which fly 10 microinches above them.

The Clean Air Package generates filtered air having less than 10 particles .3 microns or larger per cubic foot and pumps it into the head/disc enclosure at the rate of 70 cubic feet per minute. This constant cleansing action prolongs head and disc life.

ADVANTAGES OF TEMPERATURE STABILIZATION

The normal disc cleaning process leaves a thin film of lubricant on the disc surface which guards against abrasions. Unfortunately, it evaporates at temperatures of 120°F. and above (normal operating temp. is between 120°F. and 130°F. without CAP).

When the Clean Air Package is installed, a more constant temperature is maintained (10°F. above ambient) by the circulating air, allowing the lubricant to fulfill its protective function.

A constant temperature also means a reduction in track mis-registration caused by gradual geometric distortion of the precision mechanical elements of the disc, stepper assembly, and base during the warm-up period. With the Clean Air Package the HS-100 is operative minutes after it is switched on.



SPECIFICATIONS

Clean Air Package available in two versions:

- a) 1374310-01 for 115V, 50/60 Hz operation
- b) 1374310-02 for 230V, 50/60 Hz operation

Size:

22 $\frac{1}{8}$ " wide

14 $\frac{1}{4}$ " high (excluding .88 thick feet)

23" deep

8 feet of 4" diameter flexible pipe between enclosure and clean air package.

Weight:

75 lbs.

Prefilter:

Prefilter is fitted in the perforated, detachable base of the unit: It is a foam filter and is cleanable and reuseable.

Absolute Filters:

Expected life — one year minimum under normal conditions.

Static Pressure:

2 $\frac{3}{4}$ " H₂O

Air Flow:

70 cfm with 1.3" H₂O pressurization inside HS-100 enclosure.

Particle Count:

Less than 10 counts/minute (particles/ft³) of particles .3 microns or larger.

Enclosure Temperature:

Limited to 10°F. above ambient.

**AMPEX**

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