

ATAC™

Active Tuning Amplitude Controller



ATAC™ - Benefits

The ATAC™ is a cost effective, self-tuning controller for electromagnetically driven vibratory feeder systems. It is specifically designed to eliminate manual tuning while optimizing feeder performance and minimizing operational costs. The true closed loop controller maintains the desired vibration intensity while exciting the feeder at its natural frequency. The all-digital design results in a “**plug and play**” setup procedure and an intuitive interface. The ATAC™ easily interfaces to a photocell or PLC.

ATAC™ Simultaneously Performs Two Primary Functions:

- Amplitude Control – Maintains a desired vibration intensity.
- Active Tuning – Automatically excites a feeder at its natural frequency.

ATAC™ Benefits When Building A Feeder:

- Freedom to choose any vibration frequency (40-160 Hz).
- Mechanical tuning is drastically reduced if not eliminated.
- Often smaller and less expensive magnetic coils can be used with superior performance.

ATAC™ Benefits When Operating A Feeder:

- Vibration intensity is maintained over a wide range of loading conditions for consistent performance.
- Feeders in minor disrepair (broken springs, etc.) can still operate, eliminating the need for unscheduled maintenance.
- Sinusoidal output power for smooth, quiet operation.

- Input power isolation eliminates the effect of line voltage variations on bowl performance.
- Power Factor Correction.
- Many more feeders can be placed on the same electrical circuit without circuit overload.
- Operating frequency is continuously tuned to the feeder's natural frequency for perfect tuning.
- Compared to variable transformer or triac type controllers, the **ATAC™** controller typically requires half the power, minimizing operational costs.

Flexibility:

- Set point can be slaved to a PLC via an analog output.
- Easy interfacing to a photocell or proximity switch.
- Adjustable full-scale vibration intensity.

Options:

- 110 Volt and 220 Volt versions available.
- High Power (AT-2051H) 220 Volt. 12 Amps RMS model available.
- LCD Display for both frequency and feeder speed.
- Open frame versions available for panel mount applications.

ATAC™ Differs From Other Controllers:

- **ATAC™** generates true sinusoidal output power, minimizing coil heating and insures smooth, quiet operation.
- **ATAC's™** proprietary input power isolation eliminates the effect of line voltage variations on bowl performance.
- **ATAC™** uses precision motion sensor for reliable true motion feedback.

Specifications:

1000 Series (110 Volts)

Input

Voltage: 95-140 Volts AC
 Frequency: 45-60 Hz
 Current: 7 Amps RMS Max

Output

Voltage: 0-125 Volts AC
 Frequency Range: 40-160 Hz
 Current: 15 Amps RMS Max

2000 Series (220 Volts)

Input

Voltage: 190-250 Volts AC
 Frequency: 45-60 Hz
 Current: 4 Amps RMS Max
 (7 Amps RMS on AT-2051H Model)

Output

Voltage: 0-250 Volts AC
 Frequency Range: 40-160 Hz
 Current: 7 Amps RMS Max
 (12 Amps RMS on AT-2051H Model)