



## OPERATING MANUAL

### Accu-Max Spinning Riffler SP-245 & SP-245F



Rev: 12/16/2015

## SAFETY INSTRUCTIONS

Whether you are the owner, employer, operator, or maintenance person for this machine, safety is your responsibility. You are responsible for operating and maintaining this equipment in compliance with these instructions and for using common sense. You should always review and completely understand these safety and operating instructions before using this machine.

### WARNING!

**This machine operates on electric current. Improper operation could result in electric shock, electrocution, injury by explosion, or even death.**

1. **ALWAYS** check electrical wiring for loose connections and for pinched or frayed wiring before connecting your machine to the available power source.
2. **ALWAYS** make sure the motor and other electrical components are appropriate and properly configured for your intended use and your available power source.
3. The SP-245 Accu-Max Spinning Riffler is normally wired for 110V/60Hz and is supplied with a power cord and plug. **ALWAYS** use a properly-wired, three-pronged plug, and connect the machine to a properly-wired, three-pronged grounded receptacle with appropriate electrical current for the machine. Make sure the cord is located where no one will trip or get tangled in it.
4. If your machine has a different voltage, have it installed by a qualified electrician in compliance with local and national wiring codes. A wiring diagram for your machine is provided. **ALWAYS** properly ground your machine.
5. **ALWAYS** disconnect and lock out power supply before performing maintenance and repairs.

### WARNING!

**DO NOT use the Accu-Max Spinning Riffler in an explosive or hazardous atmosphere. It is NOT explosion-proof or approved for operation in hazardous locations. Before using an Accu-Max Spinning Riffler in your operation, make sure it is appropriately designed for your application.**

**WARNING:** Operate only in a properly ventilated area.

**WARNING: NEVER** operate this device without having all guards and covers in place.

**WARNING:** Keep body and clothing away from the moving parts when operating.

**WARNING: ALWAYS** wear safety glasses, protective clothing and hearing protection when operating, maintaining, or repairing this machine. Wear approved NIOSH/MSHA respirator as required by the sample to prevent inhalation of any dust which may be considered hazardous.

**WARNING: ALWAYS** be sure the machine is level before operation. Stop and re-level if excessive vibration and machine movement occur.

## FORWARD

The Accu-Max Spinning Riffler is designed for accurate sampling of large quantities of free-flowing bulk materials up to 2in (51mm) topsize. The hopper holds up to 1.8cft (51L) of starting material which is sampled into eight collection pans. Pans of 1/4 size, which are also available, may be intermixed with the 1/8th pans.

## INSTALLATION & SET-UP

The SP-245 is shipped mounted on a skid and enclosed by a wooden crate. If there is visible damage to the crate when you receive the machine, unpack it immediately, and note any concealed damage on the freight bill.

Remove the wood screws which secure the crate to the skid, and lift off the skid with a hoist or forklift.

Choose an operating location with a level floor and adequate ventilation. Use a forklift to move the SP-245 to the operating site. Remove the lag bolts which secure the machine to the skid. Pass lifting straps under the framework at the top of the hopper, and use a hoist or forklift to raise the machine off the skid and place it where it will be used.

**LEVEL** the SP-245, and fasten it to the floor using anchor bolts or other fasteners and the holes by which it was mounted to its skid.

Install the hand crank on the gate stem and tighten with a wrench.

### ***Provide Electric Power for your Machine:***

The SP-245 Spinning Riffler is normally wired for 110V/60Hz and is supplied with a power cord and plug. The SP-245F model is wired for 230v/50Hz operation and is supplied with a power cord. Connect only to a properly-wired, grounded receptacle with appropriate electrical current for the machine.

If your machine has a different voltage, have it installed by a qualified electrician in compliance with local and national wiring codes. A wiring diagram for your machine is provided. **ALWAYS** properly ground your machine.

## OPERATION

**NOTE:** Read and understand ALL safety and operating instructions before operating your Accu-Max Spinning Riffler.

### ***Observe the Control Panel:***

The dial increases and decreases the vibration rate of the feeder.

The toggle switch turns the vibration on and off.

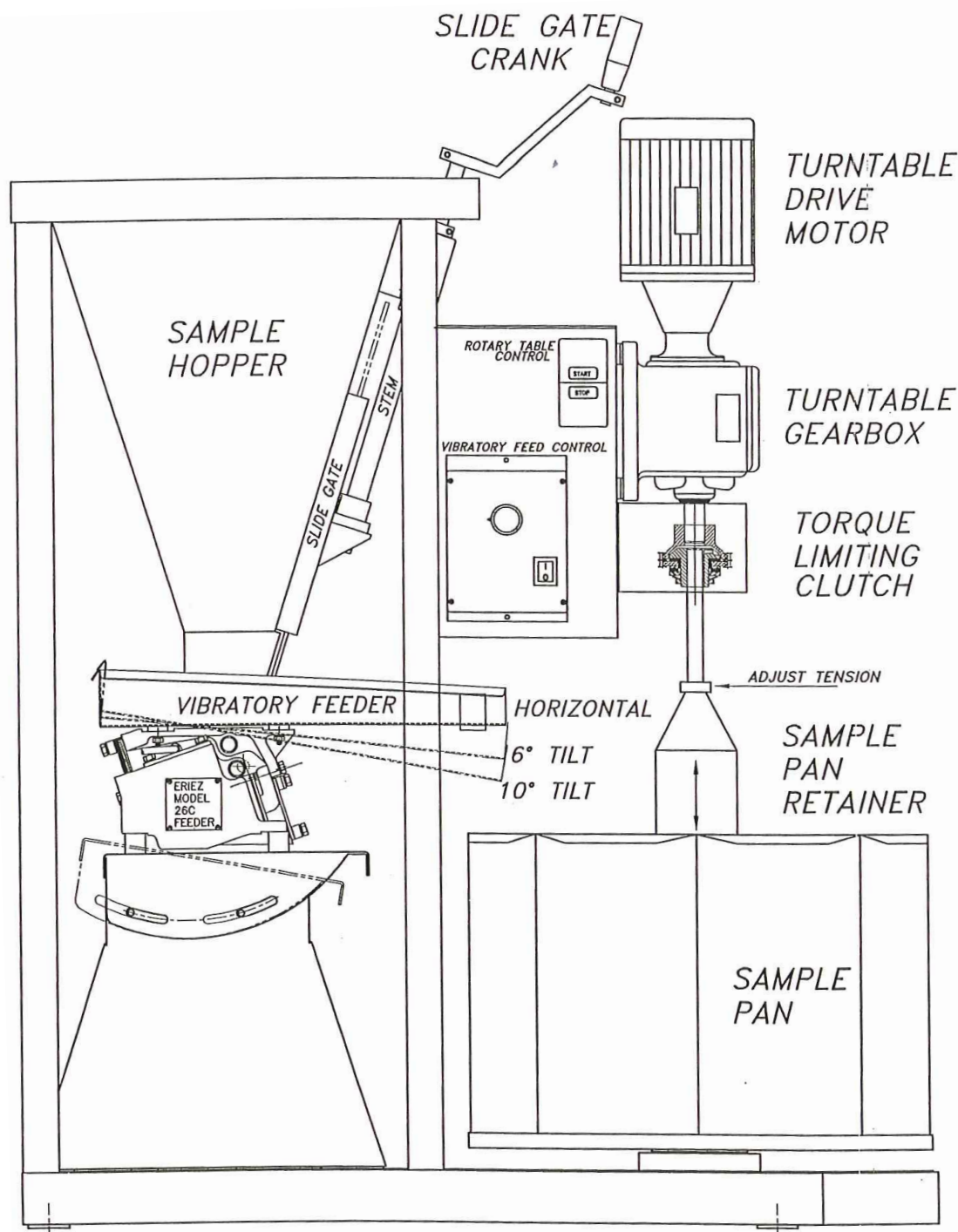
The Start/Stop buttons turn the rotation of the turntable on and off.

The highest sampling accuracy is normally achieved by slow feeding (about three minutes to empty the hopper). The turntable rotates at about 14rpm on an SP-245 (about 12rpm on an SP-245F), and Gilson recommends 35 or more presentations to each pan. Experimentation with various samples is the best way to optimize settings and procedures. You can standardize the gate position for multiple samples by clamping a split collar on the stem.

1. Install the pans on the turntable. Each pan has a lip which overlaps the top of the pan to its left. Lock the pans in place by sliding the sample pan retainer down the drive shaft.
2. Use the hand crank to adjust the hopper gate so that it is **NOT** in contact with the feeder.
3. Push <START> to turn on the rotation.
4. Fill the hopper with your sample.
5. Set the dial to "1" and turn on the vibration at the toggle switch.
6. When the hopper is empty, turn off the feeder and turntable.
7. Raise the sample pan retainer, and remove the individual pans for emptying. The sample pan retainer should slide up and down easily on the shaft and remain in position when released. If necessary, adjust the tension in the spring-loaded allen-head screws in the collar at the top of the sample pan retainer.
8. Replace the pans in their proper position as described in Step 1.

**NOTE:** A torque-limiting clutch for the drive system is located under the coupling guard. Time and environmental factors will affect the operation of this unit.

If problems of operation or questions regarding sampling procedures arise, please call Gilson at 1-800-444-1508 for technical assistance.



**Figure 1**  
**Accu-Max Spinning Riffler Diagram**