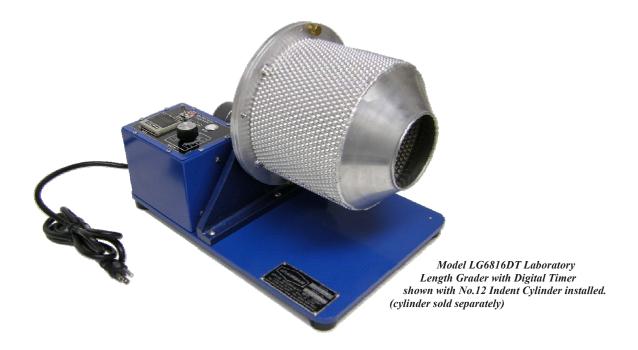


Model No.68 LABORATORY LENGTH GRADER



For more than 30 years, Grain Machinery Mfg. has been manufacturing quality laboratory equipment. We continue this tradition with the Model 68 for length separations, such as removing broken from whole kernel grain. The cylinder shells provide flexibility to meet a wide range of separation requirements either in a single pass or in a multiple pass.

In the Grainman Model 68, the shorter material is always lifted by indent pockets that line the inside surface of the cylinder. The operator controls the separation by adjusting the position of the separating edge of the catcher, into which the product falls.

Model 68 allows you maximum efficiency to achieve length-sizing tasks in determining the amount of separation depending on the cylinder available size and settings.

ADVANTAGES:

- <u>User Friendly Design</u>: allows you to change the cylinder shell quickly and easily.
- Flexibility: enables you to define the degree of separation.
- Easy to Operate: no special skills needed.
- Convenience: allows you to test samples in your own laboratory room, just 2 to 5 minutes testing.
- <u>Standard Features</u>: variable speed control, catcher tilt adjustment control with angle indication, digital timer control, sealed gear drive, vibration free, cylinder shell, electric cord, control box with separated On/Off switch and Run button. Operation: 110 Volts 60 Hz (available: 220 Volts 50 Hz and 230 Volts 60 Hz).
- Rust Free: most components made from aluminum material, stainless steel and brass materials.

OPTIONAL ACCESSORIES: (sold separately)

- Sample Divider, choose from gravity type or powered type.
- Laboratory Digital Gram Scale with tare, zero adjustment and percentage of weighing.
- Sample Pans (available: triangular, oval and spouted).
- Cylinder Assembly (available in std. sizes)



Introduction:

The Model 68 Length Grader is a basic one cylinder machine which is designed to work in the laboratory room and make separations by length only. A variety of indent cylinder sizes combined with control flexibility allows, in a simple way, the processing of many types of product

(C)

(E)

(D)

(B)

(A)

Operation Principle & Main Parts:

The GRAINMAN Model 68 Indented Cylinder Separator relies upon centrifugal force. The speed of the cylinder (A) holds the particle in the indent (B), lifting it out of the mass until the indent is inverted to the point (C) where gravity causes the particle to fall out of the indent.

The particle dropping from the indent falls into the catcher (D). The angle (or tilt) (E) of the catcher can be adjusted to obtain the desired "cut point" there by catching the small particles as they drop out of the indents but not permitting the longer particles to ride up the rising side of the cylinder and fall into the catcher.

To make adjustment on the "cut point" (or point of separating edge), a catcher tilt adjustment control (F) is used which enables you to define the degree of separation that is required.

The short material, lifted, will be separated from the tailed long material, once the machine stops. The amount of product, which can be length separated, will depends on cylinder speed, test time and angle of the catcher.

The unit comes with a digital timer control (G) as well as a variable speed control (H). The rotation speed of the cylinder may be changed by the external speed adjustment rotary control, which changes the motor output speed (I) to the gear reducer (J), which changes the speed of cylinder.

