

## Gilson Precision Splitters SP-300, SP-302, SP-304, SP-306

### INTRODUCTION

Gilson Precision Splitters quickly divide bulk samples of fine granular materials and powders, producing accurate representative specimens for testing. These riffle-type splitters feature gate-controlled hoppers, precision fixed-width chutes and 100% heavy-gauge type 304 stainless steel construction throughout. The gate-release hopper allows the entire sample to be loaded and distributed evenly prior to opening the spring-loaded gate.

### OPERATING INSTRUCTIONS

1. Insure the release gate of the hopper is in the closed position.
2. Place the sample pans under the chutes, positioning them back against the center of the splitter.
3. Deposit the sample in the closed hopper, pouring evenly, and leveling until the material is evenly distributed in the hopper from side to side and front to back.
4. Using a smooth, quick motion, push the hopper release tab down and back, seating it into the notch to hold the hopper gate open. The splitter will direct half the hopper contents to each of the sample pans.
5. If a smaller sample fraction is needed, transfer the portion in one pan to the closed hopper, level, and split again. Repeat until the desired fraction is reached, 1/4, 1/8, 1/16, 1/32, etc.

**NOTE:** Sampling accuracy can only be as good as the methods employed. We suggest the following additional tips as part of your standard procedures:

- Prior to splitting, mix the sample by repetitive dividing and recombining entire sample through the splitter. Repeat until the starting sample is thoroughly mixed.
- When pouring samples into hopper, always use care to distribute the material as evenly as possible.

Chute width should be greater than two times the maximum particle size. Material bridging or hanging up in the chutes is an indication that the material may be too coarse for the chute width. Contact Gilson for assistance in selecting the best equipment for your application.



**SP-302**

Side panels control dust and insure that no sample is lost during dividing operations. The unit can be disassembled for cleaning by loosening the knurled knobs and sliding the panels off. Use a soft brush to clean dust out of the chutes, then replace the side panels and secure the knobs. Only the two stainless steel sample pans included are required for proper operation. Extra pans are available as SPA-129 for the SP-300, SPA-130 for the SP-302 and SP-304, and SPA-132 for the SP-306.

SP-300 hopper capacity is 132in<sup>3</sup> (2.2L) and discharge angle of the fixed chutes is 45°. Dimensions: 11.5x9x12in (292x228x305mm), WxDxH.

SP-302 has a hopper capacity of 61in<sup>3</sup> (1L), and the sixteen 1/4in (6.3mm) fixed chutes have a discharge angle of 45°. Dimensions: 8.8x7.4x12in (223x188x305mm), WxDxH.

SP-304 has a hopper capacity of 61in<sup>3</sup> (1L), and the thirty 1/8in (3.2mm) fixed chutes have a discharge angle of 45°. Dimensions: 8.8x7.4x12in (223x188x305mm), WxDxH.

SP-306 is more compact for smaller samples of fine powders. Hopper capacity is 8.8in<sup>3</sup> (0.14L). The thirty fixed chutes are 1/16in (1.6mm) wide and have a 60° discharge angle. Dimensions: 5.3x5.3x7in (135x135x178mm), WxDxH.