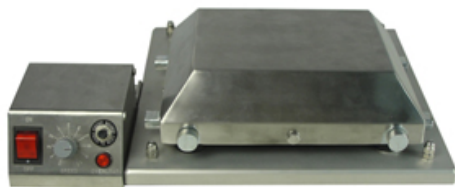


FOR PROFILLER 1000 AND 3000 SERIES



P78 VIB Vibrator
for ProFiller 3700, 3800



PM VIB HH Vibrator
for ProFiller 1060, 1100, 1120, 3600

A) BENEFITS OF POWDER VIBRATION

- Reduced Filling Time - 60 seconds or more per cycle
- Increased Fill Weight
- Reduced Fill Weight Variation

You may see some or all of the above benefits depending on the properties of the powder filled.

B) EXAMPLES OF POWDERS BENEFITING FROM VIBRATION DURING FILLING

Vibration along with powder spreading and tamping or tapping provides benefits for the following types of powders.

Powder Type	Benefits of Vibration	Examples (Common Excipients in Bold)
Bridging	Some powders form a bridge at the top of the capsule body, leaving air pockets inside the capsule body. The capsule appears full but it is not. A Vibrator breaks up powder bridges and eliminates air pockets resulting in a reduced filling time and reduced weight variation.	Avicel PH105 , Calcium Carbonate, Ginseng, D-Glucosamine Sulfate 2 KCL, Lactose Fine Powder , Mannitol Fine Powder , Metoprolol Succinate, Peanut Powder, Respitose ML001 & ML006 , Talcum, Tyrosine
Sticky	Similar to bridging powders but also stick to surfaces. As the powder bridges during the first spreading only a small portion of powder enters capsules and most remains on the Filler surface. During the first tamping, the Tamper pins enter deep into the capsules and the powder on the Filler surface sticks to the bottom surface of the Tamper plate. Vibration settles more powder into the capsules and eliminates this effect.	Diatomaceous earth, Dolomite, Frankincense, Griseofulvin, Lactose Fine Powder , Metoprolol Succinate, Peanut powder, Starch , Talcum
Fluid-like, Fine or Fluffy	Do not settle quickly and are pushed out of the capsule bodies as the Tamper pins enter. For powders requiring more than 2 or 3 tamping cycles because of these effects, a powder vibrator is very useful.	Aluminum Hydroxide, Charcoal, Ginseng, Milk Thistle P.E. Min 80% Silymarin
Granular or Pellets	Tamping can damage granules or pellets. A powder Vibrator eliminates the need for tamping these powders.	Creatine Monohydrate, Omeprazole



View our online videos at www.profiller.com/vibrators

C) POWDER VIBRATION TECHNIQUE

We recommend a combination of vibration with spreading, tamping/tapping, and spreading as follows. Tapping refers only to the 1000 series and 3600 hand-held models.

Capsules must be completely filled. Use an excipient if needed.

1. Pull Cam Handle until a slight resistance is felt, or about 30-35 °.
2. Pour powder onto Filler.
3. Start Vibration. Spread powder to all four corners. Vibrate for approximately 60 seconds for most powders. Fluid-like powders may benefit from a longer vibration time. Continue spreading during entire vibration time.
4. Turn off vibration.
5. For higher fill weights or to comply with USP/EP fill weight requirements, tamp or tap based on powder type as follows:
 - a. Bridging, sticky, fluffy, or fine, powders: Use a Tamper or tap to compress powder. Spread remaining powder. Repeat tamping/tapping and spreading a second, and perhaps a third time. If all powder is still not filled, next filling cycle add in another 30-60 seconds of vibration/spreading after the first tamping/tapping.
 - b. Fluid-like powders: use a Tamper to press powder gently according to guidelines below. Optionally, tap Filler on table. Repeat cycle of vibration with spreading, tamping/tapping, and spreading up to 4 times until all powder is filled.

Fluid-like Powder Tamping:

1000/3600: place Tamper in position and, while holding Tamper gently, allow its own weight to press the powder. Once Tamper settles, gently press further until powder begins coming up around Tamper pins or about 2 mm (1/10 of an inch) into the powder.

3700/3800: lower Tamper slowly until powder begins coming up around Tamper pins or about 2 mm (1/10 of an inch) into the powder.

- c. Granular powders or pellets: follow directions in 5a but do not use Tamper. Tapping of hand-held systems is acceptable. If vibration alone (3700) or in combination with tapping (1000/3600) does not fill all powder into capsules, reduce powder volume or use a larger capsule size.

Due to wide variations in properties between powders, their grades and suppliers, your results will vary.