

December 4, 2017

The SONO-VARIO Probe Mounting Plate and Bracket

The SONO-VARIO Probe Mounting Plate and Bracket is designed to conveniently hold any SONO-VARIO probe having a $\text{Ø}108\text{mm}$ circular-style. It is specifically designed to support the installation of the probe when located under a hopper gate.

The SONO-VARIO probe should be installed in the $\text{Ø}108.5\text{mm}$ cutout, such that the front of the probe is flush with the front of the mounting plate. On the back of the 12" x 8" mounting plate are four (4) $\frac{1}{4}$ " set screws, used to securely hold the probe in the mounting plate. [18-8 Stainless Steel Cup-Point Set Screws, $\frac{1}{4}$ "-20 thread, $\frac{1}{2}$ " long].

The 2" wide by 12" long Bracket is fabricated with two different angles: 45° and 55° . The Bracket is designed to be welded to the back of the Mounting Plate to achieve the desired angle, for the material you want to measure. **DO NOT WELD WITH THE PROBE MOUNTED IN THE PLATE!**

The 45° angle is specifically for sand and small aggregates up to $\frac{5}{32}$ ".

The 55° angle is for rock, stone, and gravel having a diameter greater than $\frac{5}{32}$ " up to $1\text{-}\frac{1}{4}$ ".

The 12" long Bracket has three (3) bolt holes 2" on center, that can be aid in the connection of the Mounting Plate to the superstructure, of your plant. See some examples of installation below. and angle the Mounting Plate, as needed.



Image: Back and Front views of the Probe Mounting Plate and Bracket, Item # 308037.

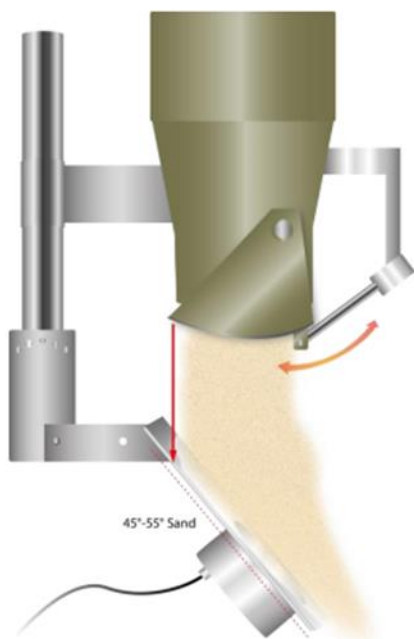
Locating the SONO probe below a hopper gate.

The following instructions should be followed when installing the probe:

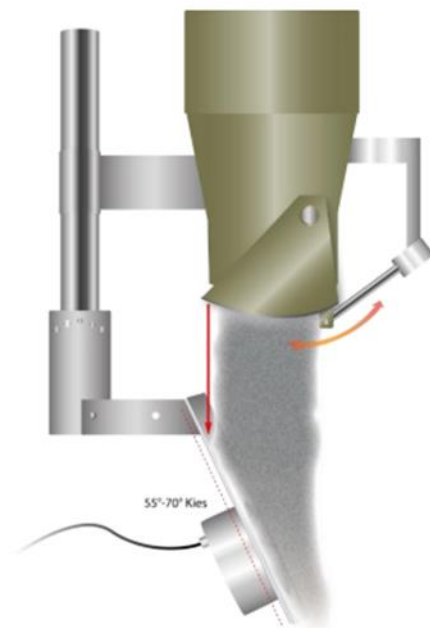
The probe should be installed and rigidly mounted direct under a silo clam gate, so that the flowing material covers the moisture probe completely with minimum 1.2 inches (30mm) height of material. The direction of the material flow should drop directly on and against the probe surface, when the flap opens. This assures that the sensors surface is covered with material immediately upon the opening of the gate and not only when the gate flap is opened completely. This is to assure accurate moisture measurements during short duration openings.

For sand, the angle of the mounting plate should be between 45°-55°.

For gravel and rock and stone the angle must be steeper, between 55°-70°



Sand: Angle sensor holder 45° to 55°



Gravel: Angle sensor holder 55° to 70°

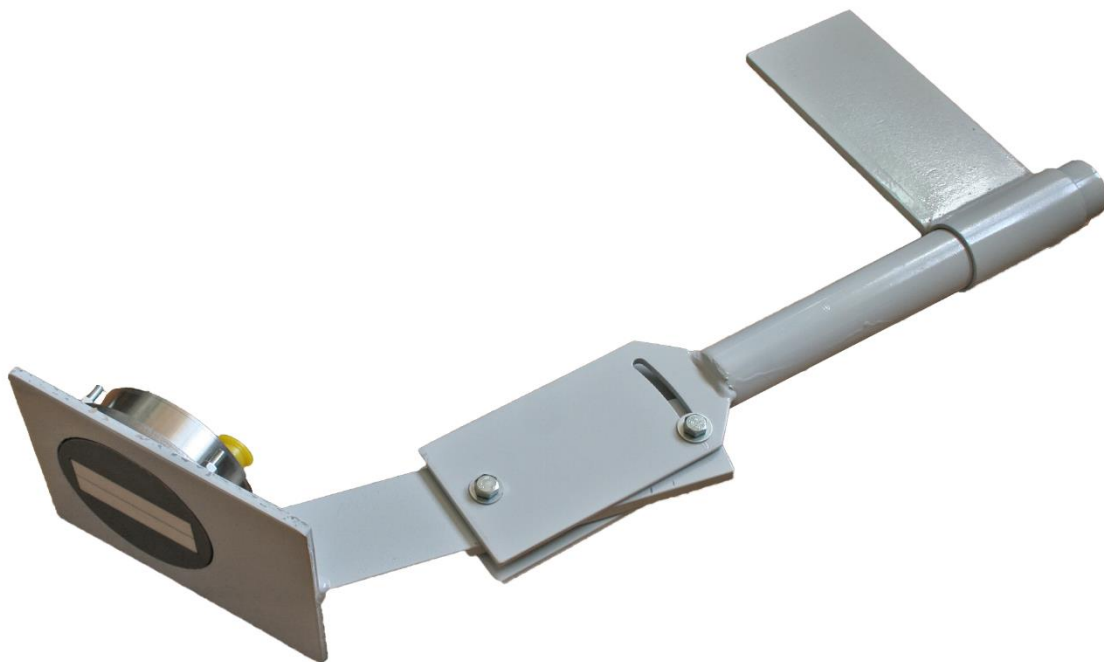


Image: Universal Holder with Probe Mounting Plate and Bracket, Item # 308036A.





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