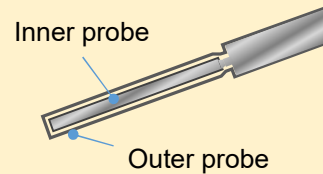




Vibrating Level Switch for waste plastics

The level switch type is limited to be applied for waste plastics used for plants' fuel due to low specific gravity and low dielectric constant. Vibrating Level Switch can be applied to detect waste plastics because it can detect light weight materials like 0.02g/cm^3 and it is not influenced by dielectric constant.

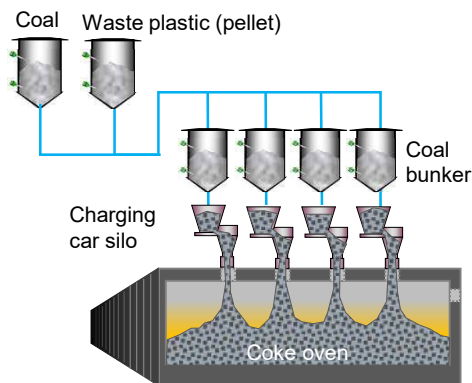
Small vibrating inner probe resonates with the outer probe. When the outer probe is covered by the materials, the resonance is attenuated, which makes a detection signal.



◎ Applications

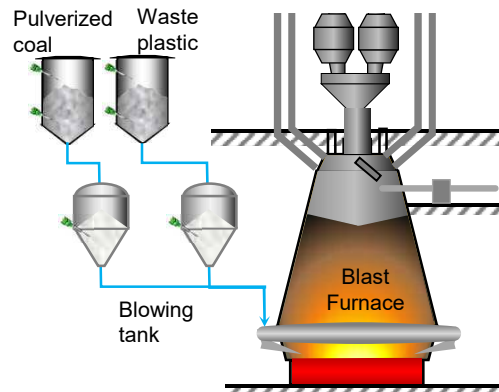
Steel Plant

Level control of waste plastic pellets for coke oven fuel



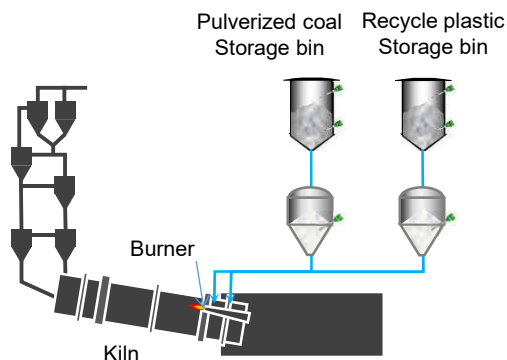
Steel Plant

Level control of waste plastic powder of reducing agent for blast furnace



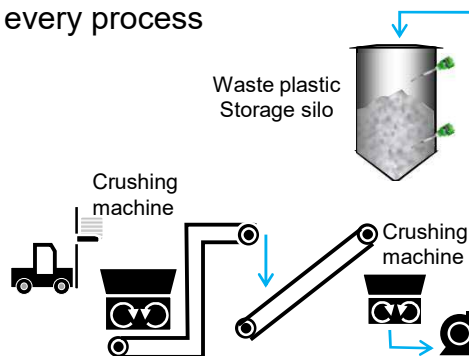
Cement Plant

Level control waste plastic powder silo



Waste plastic manufacturing facility

Level control of waste plastic at every process



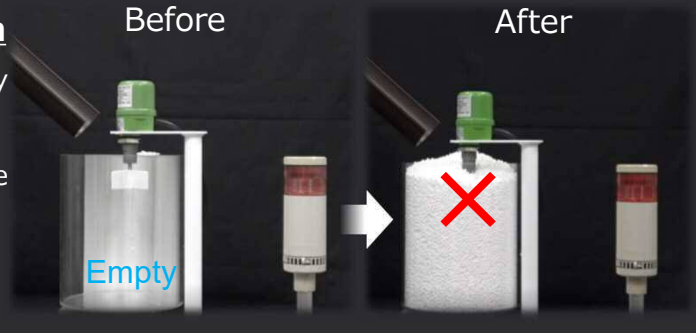


Comparison experiment

Forming beads (particle size $\phi 2\text{mm}$, dielectric constant 1.01, bulk specific gravity 0.01g/cm^3)

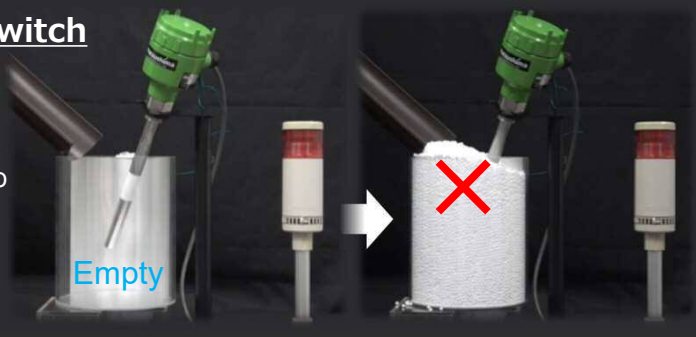
Paddle type Level Switch

Because the bulk specific gravity of the material is too light, it does not stop the rotation of the paddle and cannot be detected.



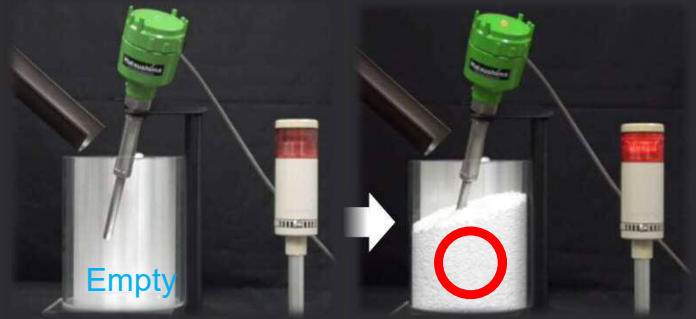
Admittance type Level Switch

(Capacitance level switch, less influenced by adhesion)
It cannot be detected due to too low dielectric constant.



Vibrating Level Switch

It can be detected at the tip of the probe because it is not influenced by bulk specific gravity and dielectric constant.



*Remark: This experiment was conducted with the materials of bulk specific gravity 0.01g/cm^3 , but the warranty range for the performance is 0.02g/cm^3 .

◎For stable detection, it is necessary to select the model in accordance with each application including the material characteristics.

Feature

The detection sensitivity is 0.02g/cm^3 !

It is easy to adjust regardless of electrical characteristics.

It is easy maintenance due to no moving parts.

Check out this experiment



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