

# APPLICATION NOTE

## Model VHS Point Level Sensor Controls Powder Coat Level to Within 2mm

Rock Falls, IL, United States – June 27, 2011 - We are pleased to have provided the level sensor solution for this interesting application at a multi-national corporation.

### Problem Summary

The machine that finishes electric motor armatures with powder coat includes a level sensor to keep the powder material level within tolerances so that a consistent high quality coating is applied. “These sensors require replacement from time-to-time, but they are very expensive devices when obtaining them from the machine manufacturer from a foreign source”, says Joe Lewis, Managing Director of BlueLevel Technologies.



“The level sensor must be able to detect the powder coat material which is approximately 45lbs/ft<sup>3</sup>. The environment is ambient conditions and the mounting requires adaptation to the existing mount on the machine. The sensor must be tip sensitive and mounted from the top”.

### Solution



The Model VHS Rod is part of a complete line of vibrating element point level sensors for powder and granular materials. The VHS Rod was chosen based upon its wide bulk density range, similarity of technology as the original sensor, while being very moderate in cost making it very affordable. In addition, the Model VHS is locally available and was able to be shipped within minutes of placing the order in case a machine went down and sensor replacement became urgent. The unit shown in the adjacent picture is a part number 46-1111-111 Model VHS Rod unit with universal 20-255VAC/VDC power supply and SPDT relay output.

The Model VHS is an excellent choice for dry free-flowing powder and granular materials with densities as low as 0.624lbs/ft<sup>3</sup>. The output is fail-safe on power failure. Probe material is 316 SS, mounting connection is 1-1/2” NPT and the insertion length on this unit is 8.14”. For more information about the visit the BlueLevel Technologies website and download product documents at [www.blueleveltechnologies.com/solids.php](http://www.blueleveltechnologies.com/solids.php).