GE Sensing

Speedy Moisture Tester Reagent – Grade Change

Introduction

A new grade of calcium carbide reagent is now marketed for use with Speedy Moisture Testers. The previous grade of reagent is no longer available.

The new grade reagent has a larger particle size (1.0-2.0mm) than the original. For certain applications, the new grade reagent yields lower percent moisture content measurements when compared with the original grade. Extensive comparative tests have been taken on green sand with a nominal range of 1 to 3% moisture content. The tests show that the new reagent yields reliable and repeatable measurements, however, they are lower.

For critical measurement applications, such as determination of the moisture content of green sand in foundries prior to casting, it may be necessary to apply a correction factor to the obtained measurements, or to establish a revised gauge value threshold based on the new reagent results and in accordance with the requirements of the application.

Obtaining a Correction Factor

To obtain a correction factor, compare results from samples measured with a Speedy Moisture Tester with results obtained from oven drying standards, such as ISO/TS 17892-1:2004 or industry-specific documents, such as BCIRA Broadsheet 16-2.

Note that comparative reagent test results may be affected by the following variables:

- Moisture distribution in the sand
- Drying out of sand between comparative tests
- Changes in ambient temperature and temperature of the sand
- Inconsistencies in test procedure
- Pressure gauge tolerances

Note: Speedy Moisture Testers should be used in accordance with the manufacturer's Operating Manual and the calcium carbide reagent Material Safety Data Sheet (MSDS). Both documents can be downloaded from http://www.gesensing.com/products/lspeedy_10_manuals.htm?bc=bc_ge_protimeter

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