| INTER PLANT STANDARD – STEEL INDUSTRY | | |
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| IPSS | **SPECIFICATION OF ONLINE NIR TYPE MOISTURE METER** | **IPSS:2-07-093-13** |

## 0. FOREWORD

**0.1** This Interplant Standard was prepared by the Standards Committee on Instrumentation and Automation, IPSS 2:7 with the active participation of the representatives of the steel plants and reputed consulting organizations and established manufacturers in this field and was adopted on August, 2013.

**0.2** Inter Plant Standards on design parameters primarily aim at achieving rationalization and unification of parts and assemblies of process and auxiliary equipment used in steel plants and these are intended to provide guidance to the steel plant engineers, consultants and manufacturers in their design activities.

## 1. SCOPE

1.1 This Interplant Standard covers the requirements of Online Moisture meter, NIR absorption type for Sinter Mix.

2. Moisture meter, On-line, NIR absorption type
(for Sinter Mix on conveyor and Coke on screen)

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|---|---|
| Measuring range | 0 to 25 % |
| Material to be tested | To be specified by user with approximate composition<br>[ Ex: Sinter Mix approx. constituent<br>(a) Iron ore: 75-80%,<br>(b) Lime stone: 7-8 %,<br>(c) burnt lime added separately: 1-2%,<br>(d) dolo fines: 7-8%,<br>(e) coke: 4- 5% ]<br>and grain size range<br>Speed of material movement |
| Sensor to material distance | 250 +/- 100 mm |
| Power supply | 220 V AC, 50 Hz |
| Output | 4 – 20 mA DC/ 500 Ohm |

| | |
|---|---|
| Display | LCD with backlight Instantaneous value of each component, Parameter setting display |
| Accuracy | 0.5% or better |
| Calibration/ configuration facility | Provision of calibration at site/laboratory With Material samples through laptop/palmtop. Necessary software and hardware to be supplied with meter. The system should have facility for minimum four (4) nos. of calibration curve fittings, corresponding to four (4) combinations of Material compositions. A) the curve correction shall be linear, quadratic etc. |
| Protection | IP 65 |
| Accessories | All required accessories and tools for Mounting in the field<br>Calibration |