

Program Notice

FGIS-PN-01-16

11-14-01

PROTEIN INSTRUMENT APPROVAL

1. PURPOSE

This program notice announces that the Federal Grain Inspection Service (FGIS) has approved the Infratec Model 1241 Near-Infrared Transmittance (NIRT) instrument for official testing services under the United States Grain Standards Act.

2. BACKGROUND

FGIS evaluated and determined that the Infratec Model 1241 NIRT instrument constitutes an engineering enhancement of previously approved Infratec models and provides results equivalent to those of previously approved models.

3. STANDARDIZATION AND OPERATING PROCEDURES

The instrument operating procedures (e.g., biasing procedures) for Model 1241 are generally identical (except as noted below) to the procedures in place for Infratec NIRT instrument model numbers 1225, 1226, 1227, and 1229 as outlined in the NIRT Handbook.

Engineering enhancements to the Infratec Model 1241 have resulted in the following changes to standardization procedures and field installation of Model 1241. These changes are applicable only to Model 1241.

- A monochromator check is not required.
- "O" and "P" constants cannot be adjusted.
- Path length settings are imported as part of the calibration file and adjust automatically for each type of grain. Therefore, it is not necessary to measure and adjust the path length.
- Wheat calibration standard slope and starting intercept values are different from those used with older Infratec models. Standard slope and intercept settings are unchanged for corn and soybeans.
- A larger sample size is required for testing purposes. The minimum sample size is 600 grams for wheat and 800 grams for corn and soybeans.

In addition to the changes listed above, please note that Model 1241 is configured to import compressed application model (CAM) calibration files. The calibration disk format used with older Infratec models cannot be used with the Infratec Model 1241. Similarly, calibration files configured for the Infratec Model 1241 cannot be imported onto older Infratec models.

4. APPLICATION

Model 1241 can be standardized to perform official testing for protein in wheat; protein and oil in soybeans; and oil, protein, and starch in corn.

5. FILING INSTRUCTIONS

File a copy of this program notice with the NIRT Handbook. The handbook will be revised at a later date to include these changes.

6. QUESTIONS

Direct questions concerning technical features of the Infratec Model 1241 to Rich Pierce, Inspection Systems Engineering Branch, Technical Services Division, (816) 891-0449; or email at rpierce@gipsakc.usda.gov.

/s/ John Giler

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