

Phoenix Application Note

Petfood Dry Meal from mixer

Introduction

This application note describes the general results when measuring in process mixer meal using the Phoenix NIR Analyzers.

Method

All samples were run on a Phoenix Series NIR Analyzer and calibrations were developed using Alligator Calibration software.

All samples were analyzed straight from the mixer. All samples were mixed well before analyzing.

The large rotating cup was used for analysis. Sample cup was ½ filled with lid.

Results

Samples were collected from many locations around the world and include many different types of Petfood brands and formulas.

All results are on as-is basis.

Definitions

of Samples: Total number of samples for each constituent.

Range: Constituent range in the calibration

R²: Correlation coefficient is the agreement between the wet chemistry and NIR results. Correlation is dependent on lab accuracy and constituent range.

SECV: Cross Validation Error of the calibration. This value is approximately what can be expected when using the calibration for routine analysis.

Constituent	# of Samples	Range	R ²	SECV
Protein	810	12.5 – 48.5	0.983	0.84
Moisture	813	8 – 13.5	0.855	0.40
Fat	729	4 - 8	0.916	0.22

