The Department of Grain Science and Industry at Kansas State University has established the Grain Quality Evaluation Program (GQEP), a comprehensive grain testing and analytical facility for evaluation of wheat, corn, grain sorghum, soybeans and other grains in whole or processed form. The mission of the Grain Quality Evaluation Program is to provide an unbiased assessment of grain quality and end-use value to all sectors of the grain industry.

The GQEP is composed of two divisions of grain testing: the Wheat Quality Laboratory which performs wheat and flour analysis and the Cereal Grain, Oilseeds, and Products Laboratory which evaluates the processing value of corn, sorghum, soybeans, other crops and feed. Both laboratories are staffed with experienced professionals who use approved methods and common methodologies to evaluate submitted grain samples in a timely manner.

The services of the Wheat Quality Lab have included wheat breeders’ early generation screening and advanced nursery evaluation, wheat crop surveys at nationwide and statewide levels for hard and soft wheat, milling and baking of check and elite varieties of wheat for the Wheat Quality Council and wheat quality evaluation for the Kansas Wheat Commission, the American White Wheat Producers Association, and many other organizations and individual professionals.

The services of the Cereal Grains, Oilseeds, and Products Lab are currently used by commercial grain processors, grain producer cooperatives, private seed companies, county Extension agents and researchers who wish to investigate the end use value of their grain or select grain hybrids which are best suited for their processing needs. The laboratory is also employed by individual producers who wish to add value to their operation by marketing their own crops or by entering into Identity Preserved contracts.

Services offered by the Grain Quality Evaluation Program are as follows. Please see the attached schedule of fees for pricing information or contact the responsible individual.

**QUALITY EVALUATION METHODS**

**Wheat Quality:**
- Test weight (AACC Method 55-10)
- 1000 kernel weight (SKCS)
- Kernel size distribution (Ro-tap)
- Protein (AACC Method 46-30)
- Ash (AACC Method 08-01)
- Moisture (AACC Method 44-15A)
- Single Kernel Characteristics (SKCS) (AACC Method 55-31)
- Falling Number (AACC Method 56-81B)
- Wet/dry gluten and gluten index by Glutamatic (AACC Method 38-12)
- Wheat experimental milling: Brabender Quadrumat Senior Buhler Mill
Flour Quality:
- Moisture (AACC Method 44-15A)
- Ash (AACC Method 08-01)
- Protein (AACC Method 46-30)
- Wet/dry gluten and gluten index by Glutamatic (AACC Method 38-12)
- Flour color (Minolta Color Meter)
- Falling Number (AACC Method 56-81B)

Flour Physical Dough and Baking Tests:
- Alveograph (AACC Method 54-30A)
- Mixograph (AACC Method 54-40A)
- Farinograph (AACC Method 54-21)
- Pup Loaf Bread (AACC Method 10-10B)

Corn Quality:
- Test Weight, (FGIS Method)
- NIR proximate analysis: (moisture, protein, oil, density, starch)
- Kernel size distribution (modified Thins Test)
- True density
- 100 kwt
- Stenvert Hardness Test
- TADD Hardness Test
- Floaters
- Pericarp removal
- 1 Kg Dry Mill Test
- Grit crude fat content (AACC Method 30-25)

Sorghum Quality:
- Test Weight
- Moisture (AACC Method 44-15A)
- True density
- 1000 kwt
- TADD Hardness Test
- SKCS: hardness, berry weight, diameter, abrasion
- Protein (AACC Method 46-30)
- 1 kg Mill Test
- Flour color (Minolta Color Meter)
- Flour total fiber (AACC Method 32-07)

Soybean Quality:
Raw Soybeans:
- Test Weight
- NIR proximate analysis: moisture, protein, oil, fiber

Soymilk:
- Protein (AACC Method 46-30)
- Soluble solids
- Yield

Tofu:
- Moisture (AACC Method 44-15A)
- Texture
- Color
- Yield

Additional Tests:
- Feed Particle Size Analysis
- Mixer Analysis

For corn, sorghum, soybean or feed evaluations, contact:
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