Single Kernel Characterization System



Benefits:

Increase flour yield Increase malt quality Official hardness Rapid analysis



SKCS 4100 Single Kernel Characterization System

The SKCS 4100 is a unique analytical tool. In addition to determining the average quality of an entire sample of grain kernels, the SKCS determines the characteristics for each and every kernel in the sample – one by one – in a fully automatic mode. Moisture, hardness, diameter and weight are analyzed for each individual kernel. Uniform wheat performs better in the flour mill and uniform barley results in better malt yields. The SKCS 4100 makes it possible to objectively test for uniformity.

Features and Benefits

Grain uniformity: The only tool for grain uniformity testing. Moisture, kernel size, weight and hardness are determined for each kernel and presented in histograms and as averages.

Official hardness: SKCS 4100 is the official measurement for wheat hardness in several countries. It is also standardized according to AACC 55-31.

Rapid automated analysis: Pour the sample into the hopper and press start. Results are presented within 4 minutes.

Windows based: Export data to office applications. Full communication with other computers, networks and peripherals such as printers.

Applications

Seed breeding: Focus is increasingly being placed on grain uniformity, not average properties. The SKCS 4100 is the only instrument designed to help breeders determine uniformity, from early generations and onwards.

Grain collection and trade: Major grain producing countries use the SKCS 4100 for crop surveys and publish the results in their official reports as a way to market their products internationally. SKCS 4100 is also the official method for wheat hardness in several countries.

Flour milling: The SKCS 4100 will help the miller to optimize extraction by determining important characteristics such as kernel size and uniformity. It also makes it possible to detect mixtures of hard and soft wheat that would not perform optimally in the mill.

Malting: Uniformity in kernel size and hardness will improve the malting process. The SKCS 4100 will show whether a batch of barley will germinate in a uniform manner, giving a malt with higher extracts without sacrificing yield.

Specifications

Products: Wheat, durum, barley, rice, sorghum

Parameters: Moisture, hardness, kernel diameter, kernel weight

Weight: 62 kg (135 lbs.)

Size (W x H x D): 460 X 590 X 460 mm (18 X 23 X 18 in) **Analysis time:** < 4 minutes



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