Application note- Chalkiness

Rice Chalkiness is undesired property due its affect on cooking quality, appearance and the head rice milling yield.

Evaluation of chalkiness is traditionally performed by human visual inspection, and there is no standard objective method to effectively classify chalky grains into different categories.

Most of the standards define the chalkiness threshold as minimal area of 50%. Vibe QM3 provides this information, along with flexibility to change the threshold per customers need.

To provide even better observation of the sample quality, Vibe QM3 provides distribution of % of chalkiness on each kernel.

This parameter can provide the markets a new quality measure.

Sample Statistics

Number of kernels	1,221
Number of Whole Kernels	1,206
% of Whole Kernels	99.14%
% of Broken	0.54%
% of Chalky kernels	7.83%
WK length average	7.31
WK width average	1.69
WK area average	9.82
WK L/W ratio average	4.33

Chalkiness Distribution

% Chalkiness	Value
10%	39.18%
20%	12.10%
30%	11.24%
40%	9.37%
50%	11.93%
60%	6.64%
70%	3.92%
80%	3.41%
90%	2.04%
100%	0.17%

QM3 Rice Analyzer- Repeatable, Objective, Accurate