

**Kett**

SCIENCE OF SENSING

# PQ-520 (type PQ-5205)

## Single Kernel Grain Moisture Tester



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## PQ-520

Determining Overall Moisture Distribution: Measuring Kernels One by One

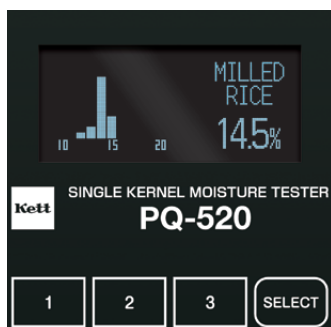
The PQ-520 Single Kernel Grain Moisture Tester provides fast and continuous measurement of moisture, one kernel at a time. It is possible to accurately determine the moisture distribution of a large sample by using this method of measurement, thus determining the appropriate time for threshing, controlling the average moisture of a received sample, and preventing uneven moisture content during drying.

The measurement operation is simple. The sample is poured into the large sample port, and then the "start/stop" key is pressed. After completion of the measurement, the average moisture value is automatically displayed. Moisture distribution may also be displayed with a one-click operation.

Determining the overall moisture distribution, one kernel at a time, is a simple and reliable method that plays an important role in improving the consistency of grain quality.

### ● Easy to Read Screen; Easily Understood Histogram

A high visibility fluorescent display lamp is used for the screen. The average moisture value is displayed after the measurement, and it is possible to also display the histogram indicating moisture distribution. Use of the histogram display makes it possible to intuitively understand the moisture distribution of the entire sample and, in turn, readily detect uneven drying.



### ● Simple Maintenance

Since a large-volume sample case is used for disposal after measurement, there is no need for sample disposal after each test. When the sample feed unit becomes clogged, the side door may be opened for easy cleaning.



Large Sample Case



Side Door for Cleaning

### ■ Specification : type PQ-520S

<b>Measurement Method</b>	<b>Electrical Resistance</b>
<b>Measurement Range</b>	Long milled rice 11-20% Jasmine milled rice 11-20% Short milled rice 11-20% Jasmine paddy 11-35% Long brown rice 11-20% Barley 10-40% Short brown rice 11-20% Naked barley 10-35% Long Paddy 11-35% Wheat 10-40% Short Paddy 11-35% Long sticky paddy 11-35% Long parboiled rice 11-20% Long sticky milled rice 11-20%
<b>Measurement Time</b>	Less than 40 seconds / 100 kernels (during measurement of brown rice, average moisture value display time)
<b>Precision</b>	± 0.5% (moisture less than or equal to 20%)
<b>Statistical Calculations</b>	Average, standard deviation (printout mode)
<b>Display</b>	Fluorescent Digital
<b>Display Content</b>	Selected grain type, average moisture value, kernel count, time, moisture distribution
<b>Temperature Correction</b>	Automatic instrument temperature correction using a thermostat
<b>Kernel Count</b>	10-1000 (Selectable)
<b>Operating Range</b>	5-40°C, Less than 85%RH (non-condensing)
<b>Output</b>	RS-232C interface (for printer), USB (for PC)
<b>Power</b>	AC100-240V (50/60Hz)
<b>Usage</b>	76W Maximum
<b>Dimensions / Weight</b>	320(W) × 254(D) × 382(H)mm / 9.0kg
<b>Accessories</b>	Scoop, Tweezers, Electrical power cord
<b>Options</b>	Printer VZ- 330 (w/ VZC-14 cable) for RS-232C output only, Data logger software PDL-01 (w/ USB cable)

### ● Record Management

The measurement date, moisture content data, standard deviation, and histogram may be printed using the optional printer. PC-based data management is also possible by use of data logger software.

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PQ520                               Ver1.0
TIME                               : 9:48
DATE                               : 12/06/05

GRAIN                               : CHI S.M.RICE
NUMBER OF KERNELS                   : 100 PCS.
AVERAGE                             : 14.5 %
STANDARD DEVIATION                   : 0.43
TEMP.                                : 26.8 °C
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-----HISTOGRAM-----
0                               30                               60
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
12.5%                               1
13.0%                               0
13.5%                               7
14.0%                               32
14.5%                               48
15.0%                               11
15.5%                               1

-----
14.5 15.2 14.3 13.9 14.7 14.6
14.1 13.5 14.6 14.7 14.3 14.2
14.2 14.9 14.5 14.0 14.9 14.8
14.9 14.9 15.0 14.4 14.6 14.6
14.6 14.5 15.0 14.7 14.4 14.0
14.7 14.7 14.7 14.2 14.4 14.2
15.2 14.5 14.3 14.7 14.2 14.8
15.0 14.4 14.2 13.6 14.6 14.5
14.6 14.7 14.9 15.0 14.1 14.6
14.5 15.1 13.6 14.4 14.8 13.6
14.8 14.3 14.3 14.7 14.7 14.8
14.5 14.8 15.0 14.3 15.1 14.0
14.7 14.7 14.3 14.1 14.6 14.7
14.9 14.2 15.1 14.1 15.6 14.8
14.5 14.1 14.2 14.0 14.6 14.5
13.7 12.9 14.3 14.7 14.7 15.2
14.5 14.3 13.5 14.4
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VZ-330 Printer (Optional)

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Management System Enhancement Department of the Japanese Standards Association (JSA) registers the Quality Management System of the above organization, which conform to JIS Q 9001, ISO 9001.

The Scope of the Registration.

Design, development and production management of Moisture Testers, NIR Composition Analyzers, Grain Inspectors and Coating Thickness Testers. Calibration and repair of Moisture Testers, NIR Composition Analyzers, Grain Inspectors and Coating Thickness Testers.



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