SUBJECT: PROCESS REFRACTOMETER ACCURACY AND REPEATABILITY TEST
TEST/DOC. NO. D23-1015 FOR OEM SANITARY REFRACTOMETER PR-33-AC

K-Patents supplies PR-33-AC OEM Sanitary Refractometers for food industry applications where additional certificate of the measurement accuracy and repeatability may be requested. These refractometers are typically intended to be used in applications where the accuracy requirement is high, but the process variations are low and the operating ranges are limited in ranges of 0–30 Brix and 4-30°C.

This document is intended to clarify the contents of the accuracy and repeatability test when specified in a purchase order.

When specified in the purchase order (using a model code Test/Doc. No. D23-1015: PR-33-AC high accuracy and repeatability test and report), K-Patents will supply certification that guarantees that the tested OEM Sanitary Refractometer PR-33-AC has passed the accuracy and repeatability test under the stated conditions.

Acceptance limits:
- Accuracy: ±0.05 Brix,
- Repeatability: ±0.02 Brix

Test procedure:
The measurement accuracy and repeatability is tested under climate controlled ambient temperature of 23°C. The test involves three different test cycles using de-ionized water and three different process temperatures of 20°C, 25°C and 30°C. The duration of each test cycle is 12 hours. The measurement results are recorded by data logging via Ethernet to a computer.

A report of the recorded measurement results is attached to the test certificate.

Fine tuning at process:
Post delivery fine-tuning of the refractometer in the customer’s process is possible by a field calibration procedure. The field calibration service is available through your local authorized K-Patents sales representative.

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