

S100 Specification – Bostwick Stainless Steel Consistometer



Product codes VBOS-355-75 (24cm Model) & VBOS-355-80 (30cm Model)

The consistency of a sample is measured by its resistance to flow under specific conditions, for a specified time.

The Bostwick Consistometer is one of many instruments designed to make such measurements.

The Consistometer is manufactured from stainless steel engraved with a series of precise

graduations at 0.5cm intervals. The sample is initially retained in a reservoir behind a spring loaded gate prior to testing

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S100	20-12-17	001	NA	S Britton

Applications:

Food Processing

Tomato Sauces + Others

Preserves

Fillings

Soups

Baby Foods

Salad Dressings



Directions for use:

- A measured sample, usually 75 ml, is placed in the reservoir behind the gate.
- The gate is released, by pressing the lock release lever - the spring action ensures it opens instantaneously.
- As the liquid flows down the instrument its progress can be accurately measured using the graduated scale. By comparing the low rate to specified time periods the physical properties of the sample can be calculated
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INTRODUCTION

- The CONSISTOMETER is an instrument used to determine the consistency of viscous materials by measuring the distance that the material flows under its own weight in a given time interval.
- The instrument allows producers of such viscous products as jellies, preserves, sauces, etc, to predetermine formulas for their product and to standardize production lots.

DESCRIPTION

- The CONSISTOMETER is made of 316 Stainless Steel (Food Grade) stain-resistant material.
- It consists of a trough divided into two sections by a gate.
- The smaller section serves as a reservoir for the material to be tested.
- The larger has laser etched graduated measurement lines along the bottom in one cm divisions beginning at the gate.
- The gate is spring-operated and is held by a trigger that permits instantaneous release. In operation, the gate slides vertically in the grooves of two posts extending upward from the sides of the trough.
- The L-shaped trigger release hooks over the top of the gate to hold it in a closed position.
- Two levelling screws are located at the reservoir end of the trough and a circular spirit level is located at the other end of the trough.
- This is fully closed before filling the reservoir. The reservoir should always be filled completely to the top.
- A material should always be tested as quickly as possible after being removed from the constant temperature oven or bath to prevent any consistency changes caused by temperature change or exposure to air.

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MAINTENANCE

No maintenance should be necessary except occasional checking of the level, as explained. In Setting up the equipment, and cleaning of the troughs after each test. Should any difficulty occur, contact. C R Instruments Ltd for further instructions.

SETTING UP THE INSTRUMENT

- Place the CONSISTOMETER on a LEVEL surface and adjust the levelling screws until the bubble in the circular level is centered. Check the level by placing another spirit level, on the bottom of the trough about midway along the length of the graduated section. The two levels should agree. If they do not, then proceed as follows:
- Adjust the levelling screws until the bubble of the level in the trough is centered. Then, bend the pointed, vertical lip of the CONSISTOMETER slightly until the two levels agree. Do not bend the horizontal part of the lip as this may prevent proper levelling of the instrument.
- Close the gate and hook the trigger release over the top.
- The material to be tested should be prepared by holding it at a constant temperature (usually 20 degrees C or 68 degrees F) for several hours to assure a uniform temperature throughout.

OPERATION

- Fill the reservoir with the material to be tested and level off the top with a spatula or other straight-edge
- Press down on the trigger to open the gate and, at the same time, start a stopwatch. At the end of the selected time period, determine how far the material has flowed along the trough. Take the maximum reading at the centre of the trough and the minimum reading at the edge of the trough, and average the values. The average value is then compared against a previously determined standard.
- When using the CONSISTOMETER, make certain that the gate is fully closed before filling the reservoir. The reservoir should always be filled completely to the top.

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Specifications: 24cm and 30cm Models

Engraved Graduations in 0.5 cm Divisions

Wear & Smear Resistant

Assures Accurate Results

Length 355 mm Long Version 418mm

Through length: 240 mm Long Version 300mm

Width : 88 mm

Height : 104 mm

ASTM F1080-93

316 Food Grade Stainless Steel

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