Starch Pasting Viscometer - Rapid Visco Analyzer - 20-50,000 cP - 15°C/min Ramp

Model **MSVSC-P80SWISS** | Brand **Master Science**





The Master Science Starch Pasting Viscometer is a programmable rotational viscometer for measuring the stirring and gelatinization behaviour of starch. It is used to assess starch quality in wheat, maize, rice, sorghum, potato, lotus root and other crops, as well as in starch-based food ingredients.

KEY HIGHLIGHTS

- Repeatable profiles
- Uniform mixing
- Rich analysis
- Traceable reports
- Small sample need

AT A GLANCE

0 to 100 °C TEMPERATURE RANGE	**20 to 5000 rpm, computer controlled** SPEED RANGE
≤ ±0.3 °C (at 25 °C) TEMPERATURE ACCURACY	**20 to 50,000 cP (80 rpm); 10 to 25,000 cP (160 rpm)** VISCOSITY RANGE

Request a Quotation
Contact us for pricing, configuration options and delivery details.

support@themsci.com
www.themsci.com

Scan to view online

Overview

Only 2 to 3 g of sample is needed. The instrument heats and cools the sample at up to 15 °C/min while changing shear rate on a user-defined program, then calculates the full pasting profile automatically.

Other rheology and physical test instruments are listed in the Master Science laboratory instrument range.

Key Benefits

Repeatable profiles
direct temperature measurement in the sample can and precise heating and cooling keep curves consistent.

Uniform mixing
a specially shaped paddle prevents starch granules from settling during the test.

Rich analysis
the Master Science Starch Pasting Viscometer reports up to 20 extended results such as time to target viscosity.

Traceable reports
administrator control, locked reports and one-click export to Excel or PDF.

Small sample need
a full test uses just 2 to 3 g.

Technical Specifications

GENERAL

Brand	Master Science
Model Number	MSVSC-P80SWISS
SKU	MSVSC-P80SWISS
Measurement Type	Rotational viscometer with programmable temperature and shear
Automatic Results	Peak viscosity, breakdown, holding strength, setback, final viscosity, stirring value, pasting temperature
Program Steps	Up to 128
Heating Rate	Up to 15 °C/min (programmed)
Cooling Rate	Up to 15 °C/min (programmed)
Temperature Range	**0 to 100 °C**
Temperature Accuracy	**≤ ±0.3 °C (at 25 °C)**
Heating Method	Copper block with overheat protection
Speed Range	**20 to 5000 rpm, computer controlled**
Speed Accuracy	**±1 % (160 rpm)**
Viscosity Range	**20 to 50,000 cP (80 rpm); 10 to 25,000 cP (160 rpm)**
Viscosity Accuracy	**≤ ±3 % (S2000 oil, 5000 cP)**
Units	cP and RVU
Tower Lift	Stepper motor, 0 to 10 mm/s
Paddle Drive	Brushless motor
Display	4 × 20 character
Operating Conditions	10 to 45 °C, 10 to 90 % RH
Power Supply	220 V, 50 Hz

DIMENSIONS & WEIGHT

Sample Size	2 to 3 g

COMMON LABORATORY PROBLEMS AND HOW THIS VISCOMETER HELPS

Common Laboratory Problems and How This Viscometer Helps	How the Master Science Starch Pasting Viscometer supports starch quality testing:
Slow traditional amylograph tests	short programs deliver a full curve quickly.
Settling of starch during heating	paddle geometry keeps the slurry uniform.
Inconsistent temperature ramps	programmed heating and cooling are precise.
Manual curve interpretation	key parameters are calculated automatically.
Report tampering concerns	locked reports and traceability protect data.

Applications

The Master Science Starch Pasting Viscometer is used for
Wheat flour and noodle quality Rice and maize starch grading Potato, cassava and modified starch production Grain breeding and agricultural research Food ingredient QC

Temperature and Shear

- Programmable heating and cooling up to 15 °C/min
- 128-step test programs
- 20 to 5000 rpm variable shear

Mechanics

- Stepper-motor tower lift
- Brushless paddle drive
- Copper block heater with overheat protection

Software

- Automatic pasting parameter calculation
- Built-in rheology and thermodynamics knowledge base
- Excel and PDF reports; multilingual interface