

Automatic Softening Point Tester (Ring & Ball Method)

Overview

The ASP-MG series is the apparatus that automates the test operation of Ring & Ball Method specified by JIS K2207 "Petroleum asphalts". In this series, there are 5 models with different heat methods and number of samples to be tested. It is widely used to test various plastics, wax, hot-melt adhesives, and food additives, etc. in addition to asphalts although this series is based on the standard test method of JIS K 2207.

This series is classified into the following 5 different models.

◆ Models ASP-MG2 and ASP-MG4 (External heating type)

These models are corresponding to the example of apparatus as specified by JIS K 2207 using an external heater heating the bottom of bath (glass beaker) from outside by nichrome wire. Last figure of the model name indicates the number of samples that can be tested at the same time.

◆ Models ASP-MGK2 and ASP-MGK4 (Internal heating type)

These models have a built-in sheathed spiral type internal heater heating the bath (glass beaker) internally. This internal heating type has the feature that there is no red-hot part like an external heater, so there will be no risk of ignition by leakage of heating medium. Last figure of the model name indicates the number of samples that can be tested at the same time.

◆ Model ASP-MGH (High temperature type)

This model is used for high temperature testing up to 250°C and has a built-in sheathed spiral type internal heater. As its heating medium, heat-resisting one like silicon oil will be required. Heating medium resisting to high temperature has usually high viscosity, so stirring is done by a propeller, a motor of which is installed at the upper side of the bath. The basic configuration of this model is in common with other sister models, so softening of less than 200°C can also be measured by this model. The number of samples that can be tested by this model at the same time is 2 only.

Specifications

Temp. range	40 to 195°C (up to 250°C in case of ASP-MGH)
Temp. indication	0.1°C (on LCD with backlight)
Temp. rise rate	Selectable from 3 to 6°C/min.
Softening point detection	Photoelectric detection (by wide angle photoreceptor)
Heating medium	Glycerin /water (standard) or silicon oil, PEG
Stirrer of solution	Magnet type, variable speed (stirring by motor in case of ASP-MGH)
Data display	Temperature, test condition, error message, message for unit adjustment, etc.
Data output	To printer and PC
Alarm	Operation error, insufficient condition setting, unit failure, etc.
Safety mechanism	Automatic stop at upper limit temperature to be optionally set
Heater	Nichrome wire 1kW (ASP-MG), 0.5kW (ASP-MGK), 0.75kW (ASP-MGH)
Power supply	100V AC, 10-15A, 50/60Hz
Dimensions & weight	Approx. 450(W) x 400(D) x 320(H) mm, Net about 15kg

* The above specifications and the tester's outer appearance are subject to change without notice due to technical improvement.



Features

■ Stable temperature rise speed

Stable temperature rise speed can be kept by applying special temperature rise control technique that is most appropriate for heating medium and by continuous stirring of heating medium.

■ Variable temperature rise rate

Temperature rise rate can be selected in the range of 3 to 6°C per minute, so a variety of samples can be tested.

■ Absolute softening point detection

Softening point detecting element has a structure to receive wide-angle light, which makes detecting area wider to secure reliable operation.

■ Availability of different models for different samples

You can choose most appropriate model for your specific samples from 5 models in this ASP-MG series.



Supplied by: **XEBEX INTERNATIONAL, LTD.**
105, Shakujii-machi 2-1-4, Nerima-ku, Tokyo 177-0041, Japan
Fax. 81-3-5372-2581, Email: info@xebex.jp
Website: <http://www.xebex.jp>

Made by: **MEITECH CO., LTD.**
2-9-11 Kuramae Taito-ku, Tokyo 111-0051,
Japan