

Application News

No. SCA_300_028

Material Testing System SMV

Measuring and Controlling Performance of Shimadzu Mooney Viscometer Model SMV in Viscosity Tests on Rubber Materials



■ Introduction

Some of today's synthetic rubbers feature unique properties such as minimal elasticity or a thermoplastic nature that needs no vulcanization, which make them particularly appropriate for some applications. Such new features and functions of synthetic rubbers are blurring the line between rubbers and plastics. Many kinds of rubbers are appearing on the market due to the development of new rubber materials, fillers, vulcanizing agents, plasticizers etc.

The viscosity test of rubber materials is one important method for evaluating various functions for rubber. The Shimadzu Automatic Mooney Viscometer is an excellent machine for the efficient performance of Mooney viscosity and Mooney scorch tests.

■ Test results of Mooney viscosity and scorch

(1) Butyl type rubber (Fig.1)

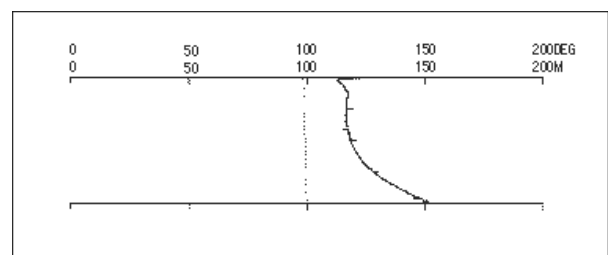


Fig. 1 Butyl Type Rubber

(2) Natural rubber (Fig. 2)

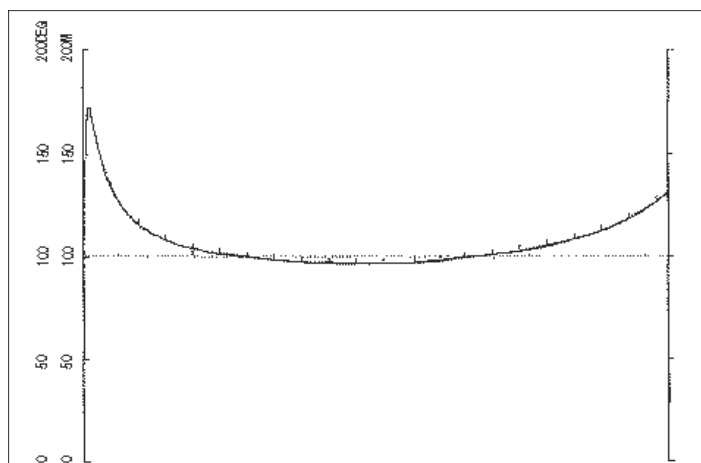


Fig. 2 Natural Rubber

(3) Nitrile rubber (Fig. 3)

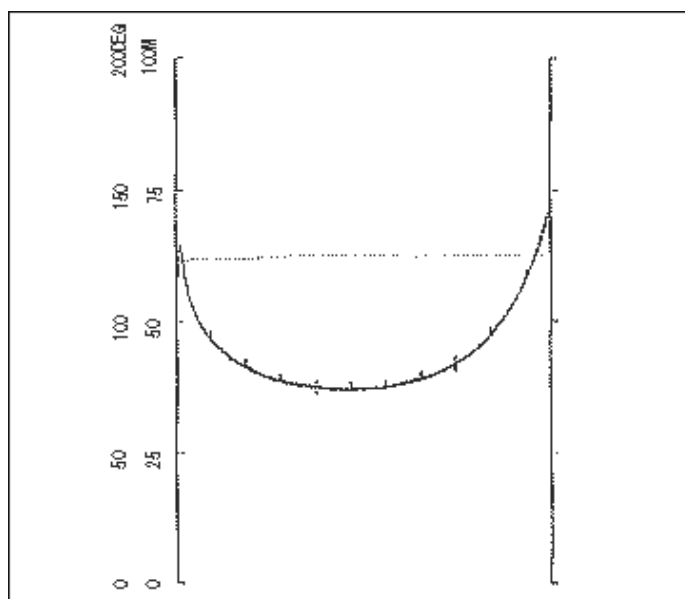


Fig. 3 Nitrile Rubber

* Please be advised that data obtained before the implementation of the current Weights and Measures Law may be presented in terms of gravimetric unit.
