



## No.2202

## Size gum-up tester

The size solution for surface sizing penetrates and stays in the paper surface while it circulates in the group of rollers of a paper-making machine. During this process, gummy aggregations form in the size liquid, affected by the contact heat of continuous paper and mechanical shear force. After winding and drying, such gummy substance forms defects on the paper surface. There are two types of machines, A and B models. The model A is a tester applying nip pressure on the rollers, with a pump to let the size liquid circulate from the constant temperature tank. With this machine, it is possible to reproduce the conditions of an actual paper making machine for the user to know in advance the stability and mixing of ingredients. The model B is a simplified type to take out size liquid from the pan through the lower roll and introduce it into the nip between two rollers. By so doing, the desired shear force is produced, and the observer can monitor and evaluate change in state of the liquid. This tester is also used as a simplified roll coater for the coating machine.

## &lt;A model&gt;

**Propelling roller:** 150 diameter x 300mm long, made of NBR

**Pressuring roller:** 150 diameter x 300mm long, made of stonite

**Roll peripheral speed:** 20 to 200m/min.

**Roll pressure:** 50 to 200N/cm

**Driving motor:** three-phase 200/220VAC 50/60Hz 0.4 kW steplessly variable speed

**Constant temperature tank:** jacket type 8 liters, 2kW heater

**Circulation pump:** monoflex pump

**Roller motor:** three-phase 200/220VAC 50/60Hz 0.4 kW

**Air source:** 0.5MPa

**Outer dimensions:** 710 x 830 x 1050mm

**Instrument weight:** 280 kg

## &lt;B model&gt;

**Rubber roll:** 80mm in diameter x 300mm long, two rolls, made of NBR

**Roll peripheral speed:** 5 to 20m/min.

**Roll pressure:** 0 to 200N (total pressuring force)

**Sample pan:** 200cc (max. 300cc)

**Motor:** three-phase 200/220VAC 50/60Hz 0.4 kW

**Outer dimensions:** 680 x 520 x 1200mm

**Instrument weight:** 146kg