



## No.2610

## Oken-type autoclave

The pulp manufacturing processes are roughly classified under three categories: timber cut-up, pulping and refining. Among these, the pulping process is the most important. According to the pulping method, produced pulp is classified as DP, KP, SP, SCP, GP or MP. Among these, the KP type is the most commonly used in paper manufacturing, and is produced in the greatest volume, preferred because of its quality and cost advantages. Unlike the GP or MP method using mechanical shearing force, the KP method mainly resorts to chemical treatment using a chemical agent (mix liquid of sodium hydrate and sodium sulfide solutions). Autoclaves are used in the pulping process for testing and studying digestion of various wood chips and yield measurement as well as bleaching/deinking of used paper, collection of chemicals and treatment of waste cooking liquid. This autoclave is easy to handle since the chamber and lid are made of stainless steel that can resist chemical corrosion even after long years of service.

## &lt;Features&gt;

1. Provided with handles on the chamber to allow the operator to hold and shake the chamber, helping permeation of chemicals into chips to take out specimens or to clean the autoclave body
2. Provided with two valves, one on the top and the other on the bottom, helping easy sampling of gas and the liquor.

**Capacity:** 4 liters

**Maximum pressure:** 1.5MPa

**Heating:** electric 2kW (3-stage changeover) or gas burner (city gas or LPG)

**Material of cooker and cover:** SUS-316

**Heater cover:** SUS-304

**Pressure gauge:** 2MPa, resistant to acid

**Inspection of vessel:** inspected by a third party organization according to the regulation for small-size pressure vessels

**Outer dimensions:** 450 x 420 x 1140mm

**Instrument weight:** electric type 61kg, gas type 58kg



## No.2616

## Mini-size autoclave

This autoclave is for timber chip cooking tests in a university laboratory, etc. As such, the cooking chamber is small-sized and can be heated on a gas burner, which is suited for a simple pulping experiment. By removing the fixing pins supporting the chamber body, it can be shaken sideways, helping even permeation of the liquor into chips.

**Capacity:** 500cc

**Material:** SUS-316

**Pressure:** max. 1.5MPa

**Pressure gauge:** 2MPa

**Heating:** by gas burner

**Accessories:** safety valve, gas purge valve, thermometer pocket, thermometer 300° C, Bunsen burner

**Outer dimensions:** 240 x 240 x 540mm

**Instrument weight:** 10kg