



## No.2503

## KRK pressurized refiner

Since there is a keen demand for resource saving and no pollution in the world, a remarkable advance has been made recently in mechanical pulp, especially TMP (thermomechanical pulp). Much information on TMP is provided globally in the field of research and development. It is undeniable that TMP is more excellent than stone groundwood pulp (GP). So, TMP plants have been constructed and operated in many paper mills in the world. To satisfy the requirement of the pulp and paper industry, we Kumagai Riki developed in 1975 this refiner in collaboration with Japan Pulp and Paper Research Institute, Inc. which has advanced pulp preparation technology, on the basis of the conventional KRK normal pressure refiner. Set in the laboratory the same conditions as those in the practical plant operation, and steam chips for a short time, and perform pressurized refining. It features ease of operation and excellent reproducibility.

**1. Refiner section**

**Refiner type:** single disc, batch operation

**Motor:** three-phase 200/220VAC 45kW 50/60Hz

**Grinding plate size:** 305mm

**Rotation speed of plate:** 3000rpm

**Adjustment of plate parallelism:** 3-point support

**Adjustment of plate interstice:** with screw, increment of scale 0.01mm

**Section in contact with liquid:** SUS-316, SCS-14

**Transmission:** belt drive

**2. Material heating section**

**Tank capacity:** 6 liters (1kg O.D.) option 10 liters

**Feeder:** screw type

**Feeder motor:** three-phase 200/220VAC 0.2kW or 0.4kW

**Section in contact with liquid:** SUS-316, SCS-14

**3. Grindness adjusting section**

**Pump:** constant-feed plunger type

**Discharge rate:** 0 to 2 liters/min., steplessly variable speed

**Pump discharge pressure:** max. 10kg/cm<sup>2</sup>

**Pump motor:** three-phase 200/220VAC 0.4kW or 0.75kW

**Dilution water heating:** steam heat exchanger

**Power source:** three-phase 200/220VAC 50/60Hz 160A

**Cooling water:** water supply

**Outer dimensions:** 2920 x 1200 x 2580mm

**Instrument weight:** 1800 kg