Evaluation of Processability of Polymer



DJK evaluates processability of polymeric materials such as resin materials, composites, rubbers, and elastomers.

<DJK Characteristics>

- 1 Enhancement of testing machines required to evaluate the processability of polymers
- 2 Support from sample preparation for evaluation/preparation of test specimens to small-scale test
- 3 Also extensive experience in thermosetting and UV-curable resins

< Function of DJK >

- ① We can handle a wide range of tests from small-scale kneading tests such as Labo Plastic Brabender and double roll mill to sample trials using a twin screw extruder.
- 2 Three laboratories are equipped with small twin-screw extruders for testing, which can be tested in the presence of nearby laboratories.
- ③ For extrusion sheet molding (T-die), 150mm and 300 mm width dies are prepared. For 150mm, about 1kg of resin will be enough for testing. And for 300mm, 20kg of raw material will be used to produce A4-size sheet sample.
- 4 Appropriate molding conditions are proposed based on the results of measurements such as melt viscosity, molding fluidity, and thermal analysis.
- ⑤ Thermosetting characteristics can be measured using a curelastometer, rheometer, and etc.



Double roll mill



Φ25 twin screw extruder



Batch mixer



Injection molding machine (for preparing test specimens)



Curelastometer 7 (Type P)



Small T-die extruder