

P-I-05

Manufacturing Process and Property of Heat-Resistant Polyimide Molded Parts

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Polyimide consists of excellent heat-resistance and ever since it was commercialized in 1962, it has been widely applied to industries such as automotive/automobile, office machines, electric/electronics, industrial machines, and facilities started from aerospace and military.

On this study, we have done property tests on polyimide molded parts that have been manufactured by process of compression molding and powder metallurgy of wholly aromatic polyimide resin, and as a result, came up with tensile strength of 900 kg/cm², and 200 hours of maintenance period when tensile strength shows 50% reduction at 370 °C in air condition. Aside from what has stated above, we have obtained results that polyimide molded products also show good friction, wear property, and electrical property.

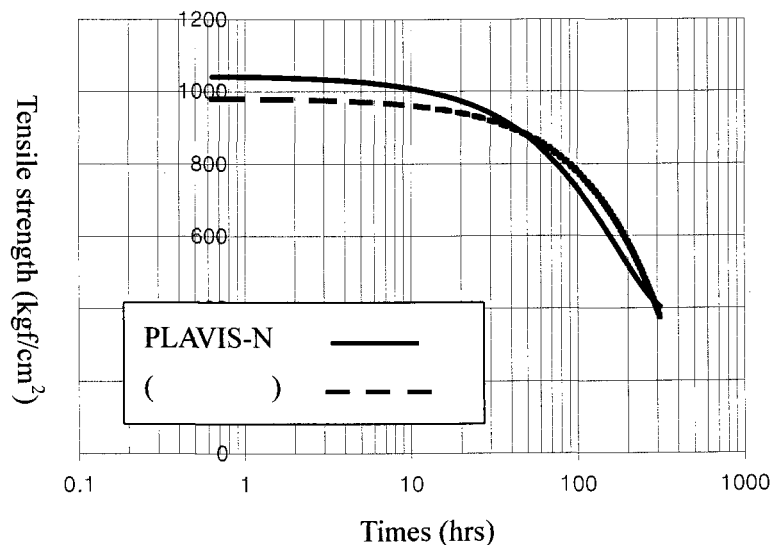


Figure 1. Approximate Time to 50% Reduction in Tensile Strength (370 °C, in air)