Friction damper

Outline

◆ Energy absorption material mainly used for the reinforcement of friction control for existing buildings.

◆ Used for a supplementary construction works for buildings.

◆ More than 1,000 pcs have been supplied, especially for the reinforcement of primary and junior high schools across the country.

◆ Applicable to RC and iron frame, depending on the length of stroke.

Friction damper

Feature

◆ Simple structure putting metal rod into a die, covering internal and external cylinder, and fixing both edges.

◆ Converting a seismic energy into heat energy by the friction between a rod and die, and then absorbing it.

◆ Rigid-plastic solid which has high initial stiffness in hysteresis characteristics of displacement and loading history curve.

◆ In comparison with the capacity of energy, this damper has simple appearance which provide no oppressive feeling to people.
Composition of friction damper

![Friction damper diagram]

Data table of friction damper

<table>
<thead>
<tr>
<th>Friction load</th>
<th>Max stroke record</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>100kN</td>
<td>±100mm</td>
<td>-</td>
</tr>
<tr>
<td>200kN</td>
<td>±100mm</td>
<td>-</td>
</tr>
<tr>
<td>300kN</td>
<td>±50mm</td>
<td>-</td>
</tr>
<tr>
<td>400kN</td>
<td>±50mm</td>
<td>-</td>
</tr>
</tbody>
</table>

Manufacturing record for the outer size; φ165~215mm
Although initial stiffness depends on a shape and the connection method of external parts, single unit comes approx. 1000kN/mm in the case of 300kN ±40mm φ195mm

Applicable to various types of reinforcement by changing the shape of cover.

Displacement – load history
Example of application

Manufacturer:
TOMOE RESEARCH & DEVELOPMENT LTD.

Homepage:
http://www.tomoe-giken.co.jp (Japanese only)
http://www.tomoe-giken.co.jp/english/ (English)

Tel: +81-3-3533-6701  Fax: +81-3-3536-0774

Address:
4-16-13, Tsukishima Chuo-ku, Tokyo, 104-0052, Japan

If you would like to have more detailed information about the product, please feel free to contact us by e-mail.

e-mail: eotoiawase@tomoe-giken.co.jp