HR-521(L) / 523(L)
SERIES 810 — Rockwell Type Hardness Testing Machines

FEATURES

- Multiple test force generation for Rockwell, Rockwell Superficial and Brinell hardness.
- Dolphin-nose indenter arm for easy reach of interior (min. ø40mm/ø22mm*) and exterior surfaces.
- When using an optional diamond indenter (198AA292).
- Real time electronic test force control for accurate loading. This perfectly eliminates load force overshooting.

Optional Accessories:
Various shapes of specimen can be measured.
(Nose-type indenter axis mechanism has been adopted)
The nose-type indenter mechanism allows measurement of pipe samples as well as the top surface of a flat sample.

Technical Data
Preliminary test force: 29.42N, 98.07N
Test force
Rockwell superficial: 147.1, 294.2, 441.3N
Rockwell: 588.4, 980.7, 1471N
Brinell*

Test force setting: By control unit
Load control: Automatic
Load duration: 0s - 120s (1s increments)
Max. specimen height: 205mm (for standard flat anvil)
Max. specimen depth: 150mm
Stage elevation: Manual or power drive
Control unit: Sheetswitch type or touch screen type
Data output: RS-232C, Digimatic code (SPC) and Centronics
Power supply: 120V AC, 50/60Hz
Dimensions (W x D x H): 250 x 670 x 605mm
Main unit: 165 x 260 x 105mm

Optional Accessories:
See page K-13, 14

SPECIFICATIONS

<table>
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<tr>
<th>Model</th>
<th>HR-521</th>
<th>HR-521L</th>
<th>HR-523</th>
<th>HR-523L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order No.</td>
<td>810-202-03A</td>
<td>810-205-03A</td>
<td>810-204-03A</td>
<td>810-207-03A</td>
</tr>
<tr>
<td>Preliminary Test Force</td>
<td>29.42N (3kgf), 98.07N (10kgf)</td>
<td>588.4N (60kgf), 980.7N (100kgf), 1471N (150kgf)</td>
<td>1471N (15kgf), 294.2N (30kgf), 441.3N (45kgf)</td>
<td>1839N (187.5kgf) (for use with 2.5mm ball)</td>
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<tr>
<td>Force Control</td>
<td>Automatic control (unloading/duration/unloading) with closed loop feed back</td>
<td>Touch screen operation with back-lit LCD graphic display</td>
<td>By touch screen</td>
<td>Touch screen operation with back-lit LCD graphic display</td>
</tr>
<tr>
<td>Console/Display Unit</td>
<td></td>
<td>Power-Drive (for full-automatic measurement)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test Force Selection</td>
<td>Manual</td>
<td>Auto-brake mechanism</td>
<td>Manual (w/Auto-brake mechanism)</td>
<td>Power-Drive (for full-automatic measurement)</td>
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<tr>
<td>Table up/down drive</td>
<td>Manual (w/Auto-brake mechanism)</td>
<td>Power-Drive (for full-automatic measurement)</td>
<td>Manual (w/Auto-brake mechanism)</td>
<td>Power-Drive (for full-automatic measurement)</td>
</tr>
<tr>
<td>Load Duration</td>
<td>0 to 120 sec. (1 sec. step)</td>
<td>0 to 120 sec. (1 sec. step)</td>
<td>0 to 120 sec. (1 sec. step)</td>
<td>0 to 120 sec. (1 sec. step)</td>
</tr>
<tr>
<td>Maximum Specimen Height</td>
<td>8.1&quot; (205mm)</td>
<td>15.5&quot; (395mm)</td>
<td>8.1&quot; (205mm)</td>
<td>15.5&quot; (395mm)</td>
</tr>
<tr>
<td>Maximum Specimen Depth</td>
<td>5.9&quot; (150mm)</td>
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</tbody>
</table>

Display Indication Functions
Hardness value, Converted hardness value, Test conditions, OK/NG tolerance judgement, statistical processing result
Rockwell/Rockwell superficial hardness testing. Continuous testing.
Cylindrical/spherical surface compensation, data offset
Hardness conversion (HV, HK, HRA/B/C/D/F/G/15T/30T/45T/15N/30N/45N, HS, HB, HBW, tensile strength)
OK/NG tolerance judgement, measured data editing, data memory (max 1024 data)
SPC calculation (No. of data, max/min/mean values, range, upper/lower limit values, standard deviation, No. of passing/defective) Histogram, k-R chart

Data Output
RS-232C, SPC, Centronics

Dimensions (W x D x H): 9.84" x 26.38" x 23.82" (250 x 670 x 605mm)
Mass: 60kg