The Lindberg/MPH Pacemaker® is a highly productive and efficient integral-quench furnace available in either gas-fired or electric models. It is the centerpiece of a complete heat treating system. The furnaces feature obstruction-free work chambers, large capacity re-circulation fans, and strategically located heat sources to ensure rapid heat transfer, low energy use, and excellent temperature and carbon uniformity. Multiple sizes and configurations are available to accommodate a variety of process needs.

**Features/Benefits**

- Fully automatic movement of the load within the furnace, including quench
- Programmable logic controller eliminates sequencing circuit relay maintenance
- Temperature and atmosphere carbon potential are both automatically controlled
- Preheat oil quench with immersion heaters, temperature and excess temperature controllers, oil level sight gauge and level alarm
- Lindberg/MPH Quench Guard® quench water detection device
- Air-to-oil quench cooling heat exchanger
- Flowmeters for endothermic gas, natural gas additions, ammonia gas additions, and air for carbon burnout
- Emergency nitrogen gas purge circuit activates on power failure or loss of atmosphere
- SCR power control for electrically heated models
- Recuperative vertical radiant tubes for gas-fired models

**Options**

- Upper atmosphere cooling: An oil-cooled double walled chamber above the quench cools the workload under a protective atmosphere and features an atmosphere cool/oil quench selector switch. Upper cooling is available with or without a recirculating fan to accelerate load cool down.
- Hot oil quench with additional immersion heaters and insulation lagged to the quench tank shell
- Variable speed quench agitation
- Enhanced furnace control components
- Complete system automation to suit your unique requirements

**Applications**

- Annealing
- Carbonitriding
- Carburizing
- Tool Steel Hardening up to 1850°F
- Normalizing
- Ferritic Nitrocarbizing

Lindberg/MPH P.O. Box 131, 3827 Riverside Road Riverside, MI 49084
Phone: (269) 849-2700 • Fax: (269) 849-3021 • lindbergmph@lindbergmph.com
www.lindbergmph.com
## Companion Equipment
- Lindberg Pacemaker Companion Washer
- Lindberg Pacecar
- Lindberg Pacemaker Companion Draw Furnace

## Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Input (kW)</th>
<th>Gross Load (lbs)</th>
<th>Quench Oil (gal)</th>
<th>Workload Dimensions (in)</th>
<th>Overall Dimensions (ft)</th>
<th>Fit Dimensions (ft)</th>
<th>Work Height (ft)</th>
<th>OAL with Pacecar (K)</th>
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