

# Lab-Scale Rotary Furnace



## Higher Degree of Innovation.

At Harper, temperatures are not the only things rising to the challenge. Optimization of process parameters is critical prior to investment in thermal process equipment to ensure capability and quality requirements are achieved. Our rotary furnaces offer exceptional versatility, reliability, and energy efficiency.

Get to market faster and more efficiently with Harper's R&D testing unit. Full featured with rapid delivery to help companies make their innovations become reality.

### About Harper International

Harper International is a global leader in complete thermal processing solutions and technical services essential for the production of advanced materials. From conception to commercialization, from research scale to full production line operations, Harper is perpetually on the cutting edge.

For additional information, visit [www.harperintl.com](http://www.harperintl.com) or email [info@harperintl.com](mailto:info@harperintl.com)

### Capabilities & Features

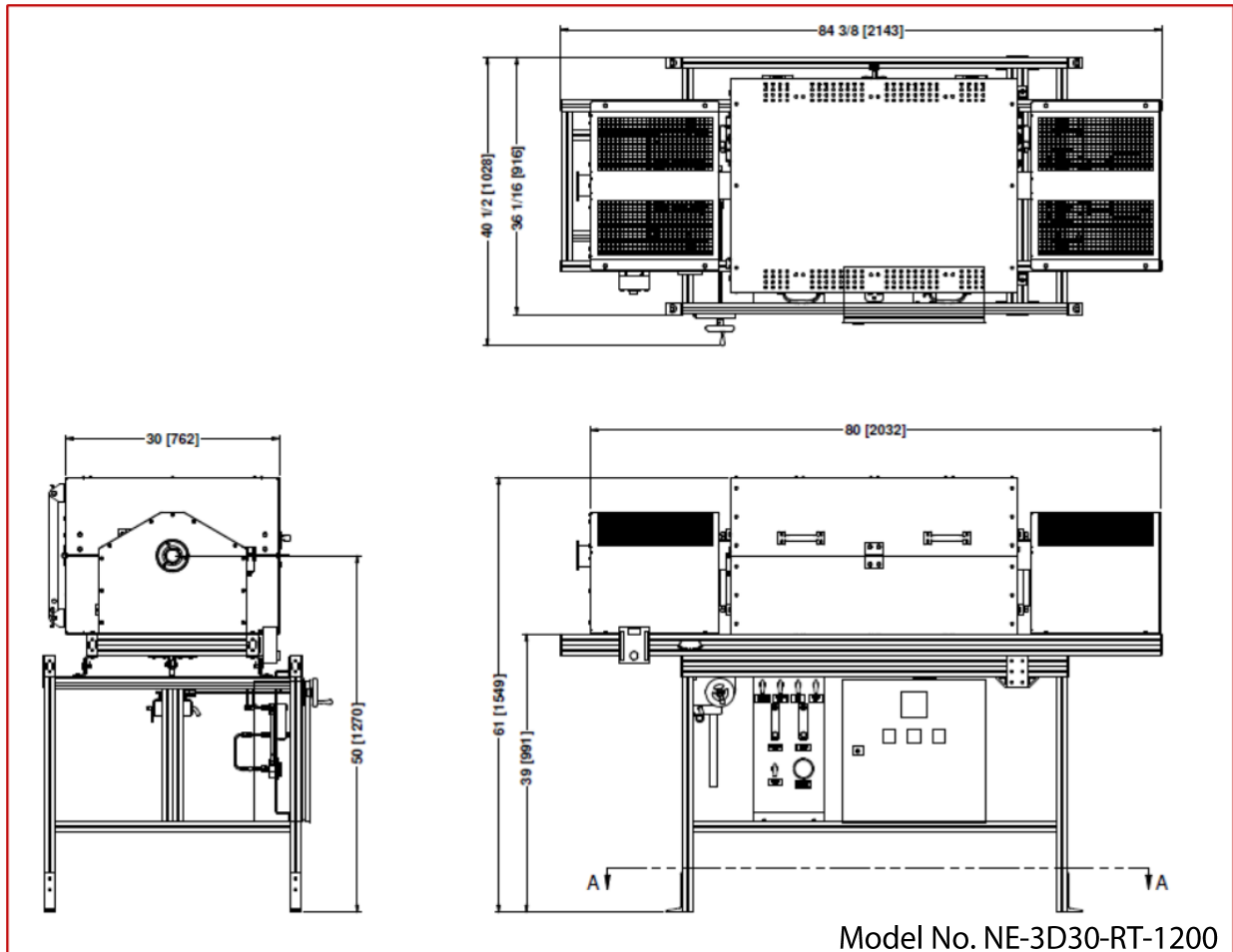
- Temperatures up to 1200°C
- Heated Length to 30 in (762 mm) .
- Tube diameters up to 4 in (102 mm).
- Electrically heated
- Variety of tube material designs—alloy or quartz
- Optional controlled atmosphere capability with Harper's Advanced Sealing System
- Clamshell design for ease of tube installation
- Remote View/Control using PC, Tablet or Smartphone
- Advanced profiler programming
- Multi-zone heating
- Optional powder feeding and collection for continuous thermal processing



### Typical Applications

- Pyrolysis
- Carbonization
- Calcination
- Reduction
- Controlled Oxidation
- Solid-Solid Reaction
- Purification
- Drying

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## Input Power:

- 46.3 FLA at 208 Volts or 51.7FLA at 240 Volts +/- 5%, 50/60 Hertz

## Control:

- 3 Zone, Independent control loops
- Type K Thermocouples
- Advanced profile programming with ramp, soak, jump cycle, hold and event functions for each step (up to 64 steps per profile)

## Data & Features

- Paperless Recorder/Data Logger (CFR21 Part 11 & AMS 2750E)
- Trend viewer/data viewer
- File transfer/backup via LAN/WAN/Cloud
- Email/SMS on alarm
- Remote View/Control using PC/Tablet, or Smartphone via VNC