

BATCH OVEN



RTT designs and fabricates batch curing ovens to meet a wide range of industrial curing applications for both liquid and powder coatings. RTT ovens are designed for efficient performance, utilizing high-quality direct fired burners. The oven is designed around an internal frame structure which supports prefabricated insulated oven panels that interlock, simplifying installation. The pretested burner box assembly supplies heated air to ductwork in the side walls of the oven enclosure which exits through "H" nozzles. The design of the internal duct work, combined with dedicated combustion and exhaust blowers, allow for optimal air flow balance within the oven which equates to quicker ramp up times and faster batch processing.



RTT ovens are supplied with our industry leading SmartTouch Control Panel. Utilizing the touchscreen interface, the operator can intuitively scroll through the various menu features which include batch timers, alarms, programmable recipes, maintenance schedules and diagnostics. RTT ovens are also supplied with our SmartConnect feature which is an app based program that allows for remote monitoring of the oven parameters and can also be configured to send notifications. As an option, RTT offers as an option the SmartBatch feature which provides real time part temperature monitoring.

RTT's standard batch ovens are equipped with dual entry doors. Optional door configurations include bi-fold or sliding, in situations where floor space is an issue. RTT also offers a premium AutoSeal metalized fabric roll-up door designed for reduced energy usage, ease of operation and operator convenience. Contact your local RTT distributor for more detailed information or custom oven designs.



SmartTouch Control Panel

SmartConnect

The RTT SmartConnect App provides the ability to remotely view oven status when the control panel is connected to an active internet connection. SmartConnect provides the ability to monitor temperature, process time remaining, elapsed time, system faults or burner status remotely. With the SmartConnect app you can receive email and/or text notifications for batch complete, oven temperature out of range, system faults or preventative maintenance with a yearly subscription (free for the first year). The subscription also provides email updates with temperature and batch time reports. SmartConnect is simple and easy to use with user-friendly screens that mirror the oven touch screen panel. The app can be accessed using any Android, PC or Apple device.



SmartConnect App to remotely view oven status.

SmartBatch

RTT's new **patent pending** SmartBatch technology allows for "real-time" monitoring of part temperature. SmartBatch technology incorporates part temperature probes into the design of the batch oven and control panel for monitoring part temperature during the cure process. The information can then be used to control cure time cycle as well as document the part curing process. The SmartBatch technology allows better control of the cure process, cure temperature and energy consumption providing energy savings.



Optional SmartBatch part temperature monitoring

AutoSeal

An alternative to traditional oven doors, the new AutoSeal Roll Up Oven Door is designed with patented airtight sealing technology offering energy efficiency, improved safety, less maintenance and space-savings. AutoSeal Roll Up doors are perfect for batch cure ovens with operational temperatures up to 500F. The patented sealing technology creates an airtight environment for your curing operation and comes with a two year warranty.

- Efficient - 10-20% energy savings due to superior sealing technology
- Improved safety - Operators are not exposed to hot air while opening oven doors
- Cost Savings - Most end users realize a one-year return on investment based on energy and efficiency savings ovens doors



Optional AutoSeal metalized door.



Batch Oven Features & Options

Construction & Features

- Internal angle iron frames in all models
- 20-gauge aluminized steel with 4" insulated panels
- Single entry and double entry design available
- In-house design and fabrication of oven panels
- Slotted channel design to reduce heat transfer
- Explosion relief doors with FM approved latches
- Air heat burners
- Superior airflow design to reduce heat transfer
- Maximum operating temperature of 450F
- RTT Batch Ovens comply with applicable OSHA, NFPA and Class A standards

Options

- Custom oven designs to meet any requirements
- Exhaust stack is not included, can be purchased as an option

SmartTouch Control Panel

- 6" Touchscreen with four batch modes and troubleshooting capabilities
- 1 Second to 166-hour digital batch timer with countdown indication
- Digital self-tuning temperature controller and high temperature limit with rollback protection
- Air proving switches for all critical fans
- UL/cUL/ETL listed controls in a NEMA12 Enclosure
- FM approved gas train with high pressure, low pressure, and proof of closure safety switches
- UV scanner flame monitoring for reliable start-up
- 230V/480V 3-phase 60Hz
- Available VFD control on exhaust fan for faster purge and cooler-down times



SmartTouch Control Panel

Selecting a Batch Oven Size

RTT can design and build ovens in a variety of sizes and configurations. Although our team can engineer a custom oven to fit your needs, below are standard sizes that are quickly available to you.

| Model Number | Interior Dimensions | | | Single Entry Outside | | | Double Entry Outside | | | Recirculating Fan | | Exhaust Fan | | Burner | | BTU Load (lbs/hr) | Gas Train | Cubic Feet/Hour | |
|------------------|---------------------|--------|--------|----------------------|--------|--------|----------------------|--------|--------|-------------------|-------|-------------|-------|-----------|--------|-------------------|-----------|-----------------|--------|
| | Width | Height | Depth | Width | Height | Depth | Width | Height | Depth | SCFM | HP | SCFM | HP | BTU | HP | | | Natural CFH | LP CFH |
| BO-06-07-12-SE-S | 6'-0" | 7'-0" | 12'-0" | 8'-5" | 8'-4" | 17'-8" | 8'-5" | 13'-4" | 12'-8" | 5,202 | 5HP | 1,350 | 1HP | 1,000,000 | 0.33HP | 1,100 | 1.5" NPT | 1,000 | 630 |
| BO-06-07-14-SE-S | 6'-0" | 7'-0" | 14'-0" | 8'-5" | 8'-4" | 19'-8" | 8'-5" | 13'-4" | 14'-8" | 6,069 | 5HP | 1,375 | 1HP | 1,000,000 | 0.33HP | 1,300 | 1.5" NPT | 1,000 | 630 |
| BO-06-07-16-SE-S | 6'-0" | 7'-0" | 16'-0" | 8'-5" | 8'-4" | 21'-8" | 8'-5" | 13'-4" | 16'-8" | 6,936 | 7.5HP | 1,375 | 1HP | 1,000,000 | 0.33HP | 1,500 | 1.5" NPT | 1,000 | 630 |
| BO-06-08-12-SE-S | 6'-0" | 8'-0" | 12'-0" | 8'-5" | 9'-4" | 17'-8" | 8'-5" | 14'-4" | 12'-8" | 5,814 | 5HP | 1,375 | 1HP | 1,000,000 | 0.33HP | 1,300 | 1.5" NPT | 1,000 | 630 |
| BO-06-08-14-SE-S | 6'-0" | 8'-0" | 14'-0" | 8'-5" | 9'-4" | 19'-8" | 8'-5" | 14'-4" | 14'-8" | 6,783 | 5HP | 1,375 | 1HP | 1,000,000 | 0.33HP | 1,500 | 1.5" NPT | 1,000 | 630 |
| BO-06-08-16-SE-S | 6'-0" | 8'-0" | 16'-0" | 8'-5" | 9'-4" | 21'-8" | 8'-5" | 14'-4" | 16'-8" | 7,752 | 7.5HP | 1,375 | 1HP | 1,000,000 | 0.33HP | 3,500 | 1.5" NPT | 1,000 | 630 |
| BO-07-07-12-SE-S | 7'-0" | 7'-0" | 12'-0" | 9'-5" | 8'-4" | 17'-8" | 9'-5" | 13'-4" | 12'-8" | 5,814 | 5HP | 1,375 | 1HP | 1,000,000 | 0.33HP | 1,300 | 1.5" NPT | 1,000 | 630 |
| BO-07-07-14-SE-S | 7'-0" | 7'-0" | 14'-0" | 9'-5" | 8'-4" | 19'-8" | 9'-5" | 13'-4" | 14'-8" | 6,783 | 5HP | 1,375 | 1HP | 1,000,000 | 0.33HP | 1,500 | 1.5" NPT | 1,000 | 630 |
| BO-07-07-16-SE-S | 7'-0" | 7'-0" | 16'-0" | 9'-5" | 8'-4" | 21'-8" | 9'-5" | 13'-4" | 16'-8" | 7,752 | 7.5HP | 1,375 | 1HP | 1,000,000 | 0.33HP | 1,700 | 1.5" NPT | 1,000 | 630 |
| BO-08-08-12-SE-S | 8'-0" | 8'-0" | 12'-0" | 10'-5" | 9'-4" | 17'-8" | 10'-5" | 14'-4" | 12'-8" | 7,182 | 7.5HP | 1,375 | 1HP | 1,000,000 | 0.33HP | 1,500 | 1.5" NPT | 1,000 | 630 |
| BO-08-08-14-SE-S | 8'-0" | 8'-0" | 14'-0" | 10'-5" | 9'-4" | 19'-8" | 10'-5" | 14'-4" | 14'-8" | 8,379 | 7.5HP | 1,400 | 1HP | 1,000,000 | 0.33HP | 1,800 | 1.5" NPT | 1,000 | 630 |
| BO-08-08-16-SE-S | 8'-0" | 8'-0" | 16'-0" | 10'-5" | 9'-4" | 21'-8" | 10'-5" | 14'-4" | 16'-8" | 9,576 | 7.5HP | 1,400 | 1HP | 1,000,000 | 0.33HP | 2,000 | 1.5" NPT | 1,000 | 630 |
| BO-08-08-20-SE-S | 8'-0" | 8'-0" | 20'-0" | 10'-5" | 9'-4" | 25'-8" | 10'-5" | 14'-4" | 20'-8" | 11,970 | 10HP | 2,075 | 1.5HP | 1,500,000 | 0.33HP | 2,500 | 1.5" NPT | 1,500 | 945 |
| BO-08-10-10-SE-S | 8'-0" | 10'-0" | 10'-0" | 10'-5" | 11'-4" | 15'-8" | 10'-5" | 16'-4" | 10'-8" | 7,245 | 7.5HP | 1,400 | 1HP | 1,000,000 | 0.33HP | 1,600 | 1.5" NPT | 1,000 | 630 |
| BO-08-10-12-SE-S | 8'-0" | 10'-0" | 12'-0" | 10'-5" | 11'-4" | 17'-8" | 10'-5" | 16'-4" | 12'-8" | 8,694 | 7.5HP | 1,400 | 1HP | 1,000,000 | 0.33HP | 1,900 | 1.5" NPT | 1,000 | 630 |
| BO-08-10-14-SE-S | 8'-0" | 10'-0" | 14'-0" | 10'-5" | 11'-4" | 19'-8" | 10'-5" | 16'-4" | 14'-8" | 10,143 | 7.5HP | 1,425 | 1HP | 1,000,000 | 0.33HP | 2,200 | 1.5" NPT | 1,000 | 630 |
| BO-08-10-16-SE-S | 8'-0" | 10'-0" | 16'-0" | 10'-5" | 11'-4" | 21'-8" | 10'-5" | 16'-4" | 16'-8" | 11,592 | 10HP | 2,075 | 1HP | 1,500,000 | 0.33HP | 2,500 | 1.5" NPT | 1,500 | 945 |
| BO-10-10-10-SE-S | 10'-0" | 10'-0" | 10'-0" | 12'-5" | 11'-4" | 15'-8" | 12'-5" | 16'-4" | 10'-8" | 8,625 | 7.5HP | 1,400 | 1HP | 1,000,000 | 0.33HP | 1,800 | 1.5" NPT | 1,000 | 630 |
| BO-10-10-12-SE-S | 10'-0" | 10'-0" | 12'-0" | 12'-5" | 11'-4" | 17'-8" | 12'-5" | 16'-4" | 12'-8" | 10,350 | 7.5HP | 1,425 | 1HP | 1,000,000 | 0.33HP | 2,200 | 1.5" NPT | 1,000 | 630 |
| BO-10-10-14-SE-S | 10'-0" | 10'-0" | 14'-0" | 12'-5" | 11'-4" | 19'-8" | 12'-5" | 16'-4" | 14'-8" | 12,075 | 10HP | 2,100 | 1HP | 1,500,000 | 0.33HP | 2,600 | 1.5" NPT | 1,500 | 945 |

Alternative Configuration: Double Entry (DE)