

# VHD BATCH OVENS

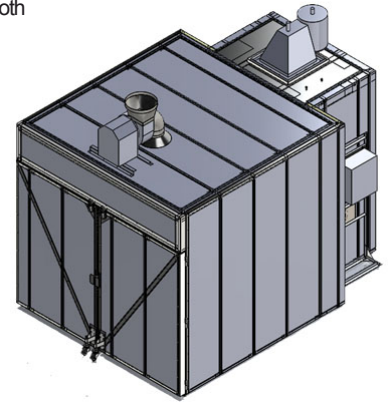


RTT designs and fabricates batch curing ovens to meet a wide range of industrial curing applications for both liquid and powder coatings. RTT ovens are designed for efficient performance utilizing high quality Eclipse Version 2 direct fired burners. The oven is designed around an internal frame structure which supports prefabricated insulated oven panels that interlock simplifying installation.

The floor mounted pretested burner box assembly supplies heated air to a distribution plenum in the ceiling of the oven permitting full overhead discharge. This downdraft design combined with dedicated combustion and exhaust blowers allow for optimal air flow 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 includes 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 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.



## 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 yearly subscription (free for the first year). The App can be accessed using any Android, PC or Apple device.

## 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, providing better control of the cure process.



SmartTouch PLC Control Panel



SmartConnect App to remotely view oven status.

## 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

Eclipse Version 2 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

## SmartTouch PLC 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



Optional SmartBatch part temperature monitoring



Optional AutoSeal roll-up door with patented air-tight sealing technology.

# VHD BATCH OVENS



## Selecting a VHD 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-VHD-05-06-06-SE	5'-0"	6'-0"	6'-0"	5'-8"	7'-10"	10'-8"	9'-8"	7'-10"	6'-8"	1,080	LHP	675	LHP	500,000	0.33HP	500	1" NPT	500	315
BO-VHD-05-06-07-SE	5'-0"	6'-0"	7'-0"	5'-8"	7'-10"	11'-8"	9'-8"	7'-10"	7'-8"	1,260	LHP	675	LHP	500,000	0.33HP	500	1" NPT	500	315
BO-VHD-05-06-08-SE	5'-0"	6'-0"	8'-0"	5'-8"	7'-10"	12'-8"	9'-8"	7'-10"	8'-8"	1,440	L5HP	675	LHP	500,000	0.33HP	600	1" NPT	500	315
BO-VHD-05-06-10-SE	5'-0"	6'-0"	10'-0"	5'-8"	7'-10"	14'-8"	9'-8"	7'-10"	10'-8"	1,800	L5HP	700	LHP	500,000	0.33HP	800	1" NPT	500	315
BO-VHD-05-06-12-SE	5'-0"	6'-0"	12'-0"	5'-8"	7'-10"	16'-8"	9'-8"	7'-10"	12'-8"	2,160	2HP	700	LHP	500,000	0.33HP	900	1" NPT	500	315
BO-VHD-06-06-06-SE	6'-0"	6'-0"	6'-0"	6'-8"	7'-10"	10'-8"	10'-8"	7'-10"	6'-8"	1,296	LHP	675	LHP	500,000	0.33HP	500	1" NPT	500	315
BO-VHD-06-06-08-SE	6'-0"	6'-0"	8'-0"	6'-8"	7'-10"	12'-8"	10'-8"	7'-10"	8'-8"	1,728	L5HP	675	LHP	500,000	0.33HP	700	1" NPT	500	315
BO-VHD-06-06-10-SE	6'-0"	6'-0"	10'-0"	6'-8"	7'-10"	14'-8"	10'-8"	7'-10"	10'-8"	2,160	2HP	700	LHP	500,000	0.33HP	800	1" NPT	500	315
BO-VHD-06-06-12-SE	6'-0"	6'-0"	12'-0"	6'-8"	7'-10"	16'-8"	10'-8"	7'-10"	12'-8"	2,592	2HP	1,350	LHP	1,000,000	0.33HP	1,000	1.5" NPT	1,000	630
BO-VHD-06-06-14-SE	6'-0"	6'-0"	14'-0"	6'-8"	7'-10"	19'-8"	10'-8"	7'-10"	14'-8"	3,024	3HP	1,350	LHP	1,000,000	0.33HP	1,200	1.5" NPT	1,000	630
BO-VHD-06-06-16-SE	6'-0"	6'-0"	16'-0"	6'-8"	7'-10"	20'-8"	10'-8"	7'-10"	16'-8"	3,456	3HP	1,350	LHP	1,000,000	0.33HP	1,300	1.5" NPT	1,000	630
BO-VHD-06-07-06-SE	6'-0"	7'-0"	6'-0"	6'-8"	8'-10"	10'-8"	10'-8"	8'-10"	6'-8"	1,512	L5HP	675	LHP	500,000	0.33HP	600	1" NPT	500	315
BO-VHD-06-07-08-SE	6'-0"	7'-0"	8'-0"	6'-8"	8'-10"	12'-8"	10'-8"	8'-10"	8'-8"	2,016	2HP	700	LHP	500,000	0.33HP	700	1" NPT	500	315
BO-VHD-06-07-10-SE	6'-0"	7'-0"	10'-0"	6'-8"	8'-10"	14'-8"	10'-8"	8'-10"	10'-8"	2,520	2HP	1,350	LHP	1,000,000	0.33HP	1,000	1.5" NPT	1,000	630
BO-VHD-06-07-12-SE	6'-0"	7'-0"	12'-0"	6'-8"	8'-10"	16'-8"	10'-8"	8'-10"	12'-8"	3,024	3HP	1,350	LHP	1,000,000	0.33HP	1,100	1.5" NPT	1,000	630
BO-VHD-06-07-14-SE	6'-0"	7'-0"	14'-0"	6'-8"	8'-10"	18'-8"	10'-8"	8'-10"	14'-8"	3,528	3HP	1,375	LHP	1,000,000	0.33HP	1,300	1.5" NPT	1,000	630
BO-VHD-06-07-16-SE	6'-0"	7'-0"	16'-0"	6'-8"	8'-10"	20'-8"	10'-8"	8'-10"	16'-8"	4,032	5HP	1,375	LHP	1,000,000	0.33HP	1,500	1.5" NPT	1,000	630
BO-VHD-06-08-06-SE	6'-0"	8'-0"	6'-0"	6'-8"	9'-10"	10'-8"	10'-8"	9'-10"	6'-8"	1,728	L5HP	700	LHP	500,000	0.33HP	700	1" NPT	500	315
BO-VHD-06-08-08-SE	6'-0"	8'-0"	8'-0"	6'-8"	9'-10"	12'-8"	10'-8"	9'-10"	8'-8"	2,304	2HP	700	LHP	500,000	0.33HP	900	1" NPT	500	315
BO-VHD-06-08-10-SE	6'-0"	8'-0"	10'-0"	6'-8"	9'-10"	14'-8"	10'-8"	9'-10"	10'-8"	2,880	2HP	1,350	LHP	1,000,000	0.33HP	1,100	1.5" NPT	1,000	630
BO-VHD-06-08-12-SE	6'-0"	8'-0"	12'-0"	6'-8"	9'-10"	16'-8"	10'-8"	9'-10"	12'-8"	3,456	3HP	1,375	LHP	1,000,000	0.33HP	1,300	1.5" NPT	1,000	630
BO-VHD-06-08-14-SE	6'-0"	8'-0"	14'-0"	6'-8"	9'-10"	18'-8"	10'-8"	9'-10"	14'-8"	4,032	5HP	1,375	LHP	1,000,000	0.33HP	1,500	1.5" NPT	1,000	630
BO-VHD-06-08-16-SE	6'-0"	8'-0"	16'-0"	6'-8"	9'-10"	20'-8"	10'-8"	9'-10"	16'-8"	4,608	5HP	1,375	LHP	1,000,000	0.33HP	1,700	1.5" NPT	1,000	630
BO-VHD-07-07-07-SE	7'-0"	7'-0"	7'-0"	7'-8"	8'-10"	11'-8"	11'-8"	8'-10"	7'-8"	2,058	2HP	700	LHP	500,000	0.33HP	800	1" NPT	500	315
BO-VHD-07-07-08-SE	7'-0"	7'-0"	8'-0"	7'-8"	8'-10"	12'-8"	11'-8"	8'-10"	8'-8"	2,352	2HP	700	LHP	500,000	0.33HP	900	1" NPT	500	315
BO-VHD-07-07-10-SE	7'-0"	7'-0"	10'-0"	7'-8"	8'-10"	14'-8"	11'-8"	8'-10"	10'-8"	2,940	3HP	1,350	LHP	1,000,000	0.33HP	1,100	1.5" NPT	1,000	630
BO-VHD-07-07-12-SE	7'-0"	7'-0"	12'-0"	7'-8"	8'-10"	16'-8"	11'-8"	8'-10"	12'-8"	3,528	3HP	1,375	LHP	1,000,000	0.33HP	1,300	1.5" NPT	1,000	630
BO-VHD-07-07-14-SE	7'-0"	7'-0"	14'-0"	7'-8"	8'-10"	18'-8"	11'-8"	8'-10"	14'-8"	4,116	5HP	1,375	LHP	1,000,000	0.33HP	1,500	1.5" NPT	1,000	630
BO-VHD-07-07-16-SE	7'-0"	7'-0"	16'-0"	7'-8"	8'-10"	20'-8"	11'-8"	8'-10"	16'-8"	4,704	5HP	1,375	LHP	1,000,000	0.33HP	1,700	1.5" NPT	1,000	630
BO-VHD-08-08-08-SE	8'-0"	8'-0"	8'-0"	8'-8"	9'-10"	12'-8"	12'-8"	9'-10"	8'-8"	3,072	3HP	1,350	LHP	1,000,000	0.33HP	1,000	1.5" NPT	1,000	630
BO-VHD-08-08-10-SE	8'-0"	8'-0"	10'-0"	8'-8"	9'-10"	14'-8"	12'-8"	9'-10"	10'-8"	3,840	5HP	1,375	LHP	1,000,000	0.33HP	1,300	1.5" NPT	1,000	630
BO-VHD-08-08-12-SE	8'-0"	8'-0"	12'-0"	8'-8"	9'-10"	16'-8"	12'-8"	9'-10"	12'-8"	4,608	5HP	1,375	LHP	1,000,000	0.33HP	1,500	1.5" NPT	1,000	630
BO-VHD-08-08-14-SE	8'-0"	8'-0"	14'-0"	8'-8"	9'-10"	18'-8"	12'-8"	9'-10"	14'-8"	5,376	7.5HP	1,400	LHP	1,000,000	0.33HP	1,800	1.5" NPT	1,000	630
BO-VHD-08-08-16-SE	8'-0"	8'-0"	16'-0"	8'-8"	9'-10"	20'-8"	12'-8"	9'-10"	16'-8"	6,144	7.5HP	1,400	LHP	1,000,000	0.33HP	2,000	1.5" NPT	1,000	630
BO-VHD-08-08-20-SE	8'-0"	8'-0"	20'-0"	8'-8"	9'-10"	24'-8"	12'-8"	9'-10"	20'-8"	7,680	7.5HP	2,075	LHP	1,500,000	0.33HP	2,500	1.5" NPT	1,500	945
BO-VHD-08-10-08-SE	8'-0"	10'-0"	8'-0"	8'-8"	11'-10"	12'-8"	12'-8"	11'-10"	8'-8"	3,840	3HP	1,375	LHP	1,000,000	0.33HP	1,300	1.5" NPT	1,000	630
BO-VHD-08-10-10-SE	8'-0"	10'-0"	10'-0"	8'-8"	11'-10"	14'-8"	12'-8"	11'-10"	10'-8"	4,800	5HP	1,400	LHP	1,000,000	0.33HP	1,600	1.5" NPT	1,000	630
BO-VHD-08-10-12-SE	8'-0"	10'-0"	12'-0"	8'-8"	11'-10"	16'-8"	12'-8"	11'-10"	12'-8"	5,760	7.5HP	1,400	LHP	1,000,000	0.33HP	1,900	1.5" NPT	1,000	630
BO-VHD-08-10-14-SE	8'-0"	10'-0"	14'-0"	8'-8"	11'-10"	18'-8"	12'-8"	11'-10"	14'-8"	6,720	7.5HP	1,425	LHP	1,000,000	0.33HP	2,200	1.5" NPT	1,000	630
BO-VHD-08-10-16-SE	8'-0"	10'-0"	16'-0"	8'-8"	11'-10"	20'-8"	12'-8"	11'-10"	16'-8"	7,680	7.5HP	2,075	LHP	1,500,000	0.33HP	2,500	1.5" NPT	1,500	945
BO-VHD-10-10-10-SE	10'-0"	10'-0"	10'-0"	10'-8"	11'-10"	14'-8"	14'-8"	11'-10"	10'-8"	6,000	7.5HP	1,400	LHP	1,000,000	0.33HP	3,700	1.5" NPT	1,000	630
BO-VHD-10-10-12-SE	10'-0"	10'-0"	12'-0"	10'-8"	11'-10"	16'-8"	14'-8"	11'-10"	12'-8"	7,200	7.5HP	1,425	LHP	1,500,000	0.33HP	4,500	1.5" NPT	1,000	630
BO-VHD-10-10-14-SE	10'-0"	10'-0"	14'-0"	10'-8"	11'-10"	18'-8"	14'-8"	11'-10"	14'-8"	8,400	7.5HP	2,100	LHP	1,500,000	0.33HP	5,300	1.5" NPT	1,500	945

Alternative Configuration: Double Entry (DE)