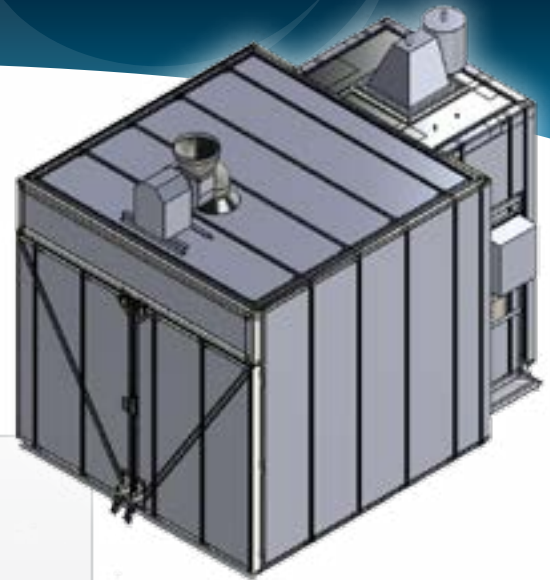


VHD Batch Ovens

After years of testing and evaluating the best and most efficient oven design, Col-Met has launched the new Vortex Heat Distribution (VHD) Batch Oven. The Col-Met VHD batch oven is typically used in smaller product runs however can be used for semi high production of smaller parts hung on multi part racks. Used for powder or liquid applications, batch ovens are recommended if floor space is limited and when product sizes, shapes and volumes vary frequently.



Construction & Features

- >> Single and double entry design
- >> Floor mounted heater box for easy maintenance
- >> Internal angle iron frames in all models
- >> 20-gauge aluminized steel with 4" insulated panels
- >> Slotted channel design to reduce heat transfer
- >> Explosion relief doors with FM approved latches
- >> State-of-the-art economical burner design
- >> Superior airflow design for constant heat distribution from full overhead discharge
- >> Maximum operating temperature of 450F
- >> All Col-Met Batch Ovens comply with applicable OSHA and NFPA standards

Standard Control Panels

- >> 3-Phase main disconnect
- >> UL/cUL/ETL listed controls in a NEMA12 Enclosure
- >> Motor contractors and protectors
- >> Analog 1 second to 300 hour batch timer
- >> Digital temperature controller and high temperature limit with rollback protection
- >> FM approved gas train with high pressure, low pressure, and proof of closure safety switches. Includes ventless regulator and dual blocking valve. 2-5 psi recommended gas pressure
- >> Air proving switches for all critical fans
- >> Terminal strip to connect control panel to burner box
- >> UV scanner flame monitoring for reliable start-up
- >> 230V/480V 3-phase 60Hz



Standard Control Panel

Options

- >> Exhaust stack is not included and can be purchased as an option
- >> Remotely located push button HMI panel
- >> Smart Touch PLC and Touchscreen HMI Control Package
 - 6" Touchscreen with four batch modes and troubleshooting capabilities
 - PLC control logic
 - 1 Second to 16 hour digital batch timer with countdown indication
 - Digital self-tuning temperature controller and high temperature limit with rollback protection
 - Digital password protected purge timer for safer operation
 - Available VFD control on exhaust fan for faster purge and cool-down times
 - Digital chart recorder (additional costs may apply)



Optional Smart Touch HMI Control Panel

Selecting a VHD Batch Oven Size

Col-Met 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	1HP	675	1HP	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	1HP	675	1HP	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	1.5HP	675	1HP	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	1.5HP	700	1HP	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	1HP	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	1HP	675	1HP	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	1.5HP	675	1HP	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	1HP	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	1HP	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	1HP	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	1HP	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	1.5HP	675	1HP	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	1HP	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	1HP	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	1HP	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	1HP	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	1HP	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	1.5HP	700	1HP	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	1HP	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	1HP	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	1HP	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	1HP	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	1HP	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	1HP	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	1HP	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	1HP	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	1HP	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	1HP	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	1HP	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	1HP	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	1HP	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	1HP	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	1HP	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	1HP	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	1HP	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	1HP	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	1HP	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	1HP	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	1HP	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	1HP	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	1HP	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	1HP	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	1HP	1,500,000	0.33HP	5,300	1.5" NPT	1,500	945

Alternative Configuration: Double Entry (DE)