

Five Easy Steps to Big Savings

Only Nova Verta's paint spray booths feature five-mode operations. Because of this unique process, over the complete painting cycle, no other competitive system achieves the cost-efficiencies available from a Nova Verta solution. Don't be fooled by single-mode process comparisons, evaluate paint spray booths on the complete start-to-finish process:

Prep Cycle

The Prep Cycle optimizes booth conditions while final masking and tack off is performed. Using a variable frequency drive and make-up unit with a stainless steel heat exchanger, the Nova Verta system warms air and safely re-circulates it through the spray booth – without exposing operators to the dangers of carbon monoxide. No other paint spray booth system provides a Prep Cycle that creates OSHA-mandated working conditions, heats the air, maintains air pressure, brings metal to the desired spray temperature, and generates monthly utility savings of 35% or more when compared to competitive systems in its class.

Spray Cycle

Once prep work is completed, a single press of the Controller shifts the Nova Verta spray booth operation to the Spray Cycle. At this stage, a steady stream of freshly heated air is provided into the spray booth and a constant, ideal booth pressure is automatically maintained at a minimum. The exhaust system is dry filtered using a reverse incline direct driven fan using a variable frequency drive for motor speed control, eliminating the need for inefficient pressure control dampers, or operator intervention.

Flash Fresh Air Cycle

Flash Fresh Air is utilized for the flashing of low VOC and waterborne material after spray cycle is completed when not needing to conserve energy by utilizing 100% outside replacement air. This also will assist when cooler temperatures are needed but does not cool beyond ambient temperatures without additional equipment. This also activates Wind System for its desired setpoints - fully adjustable if equipped.

Flash Re-Circulation Cycle

Flash recirculation is utilized to save energy by recirculating air significantly saving 40-50% on electrical and 80-90% on natural gas, propane or diesel. Also allows for elevated temperature. Time, temp are fully adjustable and returns to spray mode upon completion. This also activates Wind System for its desired setpoints - fully adjustable if equipped.

Cure Cycle

After the painting process is complete, another press of the Controller puts the booth in Cure/Bake Cycle. The Bake Cycle, like the Prep Cycle, effectively re-circulates air, minimizing electrical and fuel consumption. Compared to other paint spray booth systems in its class, Nova Verta's spray booth provides higher velocity airflow, shortening cure times on conventional and waterborne paints.

Nova Verta Windsystem

Nova Verta's Optional Wind System is for the auxiliary air movement to assist in flashing and curing of waterborne and VOC materials. The new design strategically places 12 nozzles on each side wall running front to back just under the row of lighting in the 27' foot booth (14 with 31' model) for a total of 24 (28). The nozzles can be individually aimed and receive highly pressurized heated air from Nova Verta's exclusive variable speed fans. The air speed can be adjusted as desired to any speed from user and can exceed over 800 feet per minute. The Control System is incorporated into the Allen Bradley 700 or 850 Panel View Touch Screen that allows easy set up and adjustments to settings and is automatically utilized in the Flash Modes and Cure Modes. The new Plus design allows for customized preset menus for technician or paint material with designated settings with regards to temperature set point, speed of air from booth and or Wind Fans, duration, on/off and even delay with regards to flash and cure mode settings.

This system is a must see and have for delivering the fastest cleanest repairs in the industry. Follow QR code for actual flash and cure times tested at North Idaho College.





CONQUER SERIES Indirect or Direct-Fired

Product Details

Standard External Cabin Dimensions[†]

Lenath

24.5', 27', 29', or 31' further options available upon request.

13'-4 5/8" — Further options available upon request.

Height

10'-9" — Further options available upon request.

Basement, semi-downdraft and side downdraft options available but also usually add additional height.

[†]These are nominal dimensions and should not be used for planning purposes. Please contact Nova Verta for detailed drawings and specifications tailored to your installation.

Controllers

Indirect-Fired

Allen-Brady, Panel View Plus 7 Color Touch Screen with 1400 series PLC. Rated for class I Division II hazardous locations.

Direct Fired

Allen-Bradley 850 Color Touch Screen with Micro series PLC.
Rated for Class I Division II hazardous locations.

Light Fixtures

4 tubes - Inside access Class 1 Division 2

Options

- Wind System Plus
- Auto Prep Mode System (APMS)
- Light fixture: 6 tubes Inside access Class 1 Division 2
- New 2020 Industrial LED 100,000 rating and Dimmable option
- 3-row tunnel pit
- Dry filter raised basement raises booth and equipment 16'

Options Cont.

- Inside ramp
- External rampDrive-through door
- Side exit door (additional or for drive-through)
- 208, 230 volt 3 phase, 480/277 volt 3 phase, 480/120 volt 3 phase with
- 120 volt lighting and controls
- Electric roll-up door for automotive booth
- Electric side roll-up door
- Additional sizing and configurations are available upon request
- Indirect or direct-fired air make up unit
- (Note: ANSI standards do not permit a recirculating prep cycle with a direct-fired system)

Code Compliance

Most products are ETL Listed for their intended purpose to meet IFC, IBC, IEC, IMC, NFPA 33, 70, 86, 91, 101, UL508A, ANSI, and OSHA standards





CONQUER Indirect or Direct-Fired

The recently redesigned Conquer is our most economically designed production booth. Our new Industrial LED fixtures with 100,000 hour rating and shadowless illumination allows us to put the fixtures in the upper hip angle only - giving exceptional light output throughout the booth and allowing us to have a lower vertical wall panel design. This lowers the cost and reduces maintenance and care to the walls.

Lighting

The Conquer Series offers our newest cabin lighting package. The Conquer 27' cabin features 12 energy efficient and shadowless Industrial LED Class I Division II Light Fixtures. With the quality and efficiency of light output we are able to locate a single row in the upper hip angle. These lights are rated plus 90 CRI and 100,000 service hours. Ten times T8 Tubes or T8 LED style tubes. These fixtures produce up to 50% more measured light output than any booth on the market, providing unobstructed and unprecedented illumination.



Performance & Operational Savings

The Conquer Series offers the choice of indirect or direct-fired heating with a designed airflow that equals competitive designs that use 30-50% more horse power. The Conquer Series also provides the best laminar airflow in the industry. Touch Screen operator station offers outstanding technology, variable frequency drives, self-diagnostics, and the energy savings controls give you the power and information you need to maximize production and minimize operating expenses.

Indirect Fired

Nova Verta's indirect-fired system controls provide five distinct operating cycles: prep, paint, flash fresh air, flash recirc, and cure. The automated pressure control uses a variable frequency drive (VFD) on the exhaust fan. During the prep, flash recirc and cure cycles, this configuration is proven to conserve energy by recirculating 90% of the warmed airflow - saving 35% on utility costs and filtration expenses when compared to typical direct-fired systems and 25% over the newer, economic direct-fired systems using a VFD. Plus, the prep cycle, which is exclusive to Nova Verta, prevents operators from being exposed to the dangers of carbon monoxide. Nova Verta's indirect-fired solutions also have lower humidity output, which promotes quicker drying of waterborne paints.

The Conquer Series indirect-fired booths use an Allen-Bradley control system, featuring a Panel View Plus 7 Color Touch Screen series with Class I Division II remotely mounted operator station mounted in booth wall or other desired locations such as mix room entry.

Optional Auto Prep Mode System (APMS) automatically shifts booth into prep mode after desired timer set point and returns to spray cycle upon spray gun activation.

Direct Fired

The direct-fired system also has automated pressure control. It features 1.1 million BTU with a 100 degree temperature rise in the spray cycle. Optional sizes with 1.7 million BTU at 18,000 CFM and 2.4 million BTU at 24,000 CFM. The Conquer Series direct-fired units recirculate 90% of the booth's warm air during cure cycle with reduced airflow for energy savings in prep mode (no recirculation in reduced air flow modes with occupancy due to listing requirements).

The direct-fired models use a Allen Bradley 850 touch screen operator station. An optional energy saving system (ESS), with a dual VFD and an automated economy cycle slows air speed when not spraying to conserve fuel and electricity usage.



Booth Construction

With pre-coated, galvanized, dual panel construction, two inches of insulation, tubular steel super structure center, door hardware, sealing material, and nut and bolt assembly, Nova Verta paint booths are built to last. Side walls due to the new technology in lighting, are vertical panels from floor to angle hip lighting. This makes maintenance simpler and cleaner with no lower fixtures to maintain from overspray accumulation and simplifies removal and application of booth gaurd coatings.

Factory pre-wiring expedites the installation of Nova Verta paint booth systems. Color-coded and labeled wiring in Seal Tite conduit, and easy-to-read installation manuals minimize the need for electrical contractors and reduce set-up time and expense.

