



AIR MAKE-UP UNITS

Air make-up units (AMUs) replace contaminated air exhausted from industrial and commercial buildings or spray booths with fresh, heated outdoor air. AMUs maintain a constant leaving-air temperature regardless of the incoming, outdoor air temperature and replenish equal amounts of fresh air for every cubic foot of air exhausted. GFS' direct-fired AMUs are furnished with a heater, filters, motor and blower, controls, mounting hardware and auxiliary equipment. Direct-fired air make-up units provide greater energy savings and efficiency when variable air volumes are needed.

FEATURES

- Eliminate problems with contaminated air and temperature stratification
- Create balanced building pressure and maintain proper comfort levels
- Improve indoor air quality
- 100 percent fresh air
- 80/20 or variable recirculating airflow
- Cooling and humidity control available
- Curing/bake systems

UNIT LOCATION CONSIDERATIONS

- Fresh air intake vs. shop air intake
- Unit size arrangement
- Proximity of the AMU air discharge to the spray booth
- Access for installation and service
- Heat type
- Discharge type
- Mounting arrangement (vertical/horizontal, indoor/outdoor, platform/ceiling suspended)





AIR REPLACEMENT

A spray booth's exhaust system significant quantities of shop or plant air. A small paint booth may exhaust more than 8,000 cubic feet of air per minute. If replacement air is pulled directly from outside, this volume may be sufficient to cool the interior of the building and may adversely affect the quality of coatings. An air make-up unit, which supplies conditioned and filtered air to the booth, may be required to minimize temperature variations and remove particles that compromise finish quality.

In the case of pressurized paint booths, air replacement is introduced directly into the booth, eliminating the need for air to be drawn from the facility. This allows for greater control over the temperature and filtration quality in both the facility and the spray booth environment, therefore improving working conditions and lowering overall operating costs.

CURE/BAKE SYSTEMS

In variable speed and recirculating units, the AMU is designed to discharge either 140 or 160-degree Fahrenheit air for an accelerated curing cycle. These systems also include an auto-balance system with a variable frequency drive (VFD) to automatically adjust the airflow of the exhaust fan(s) and ensure proper booth balance, not only during cure mode but also during paint mode.

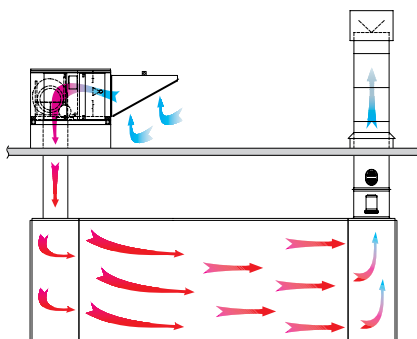
VARIABLE SPEED UNIT (FORCE DRY)

The variable-speed unit always uses outside air while curing to ensure good, clean air for the cure cycle. This design reduces airflow by 50 percent during the cure mode.

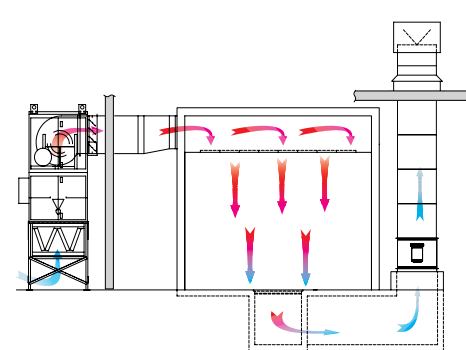
RECIRCULATING UNIT (CURE ONLY)

This design recirculates up to 80 percent of the air while exhausting 20 percent, providing further energy efficiency through the recirculation of heated air, requiring less for the heating unit.

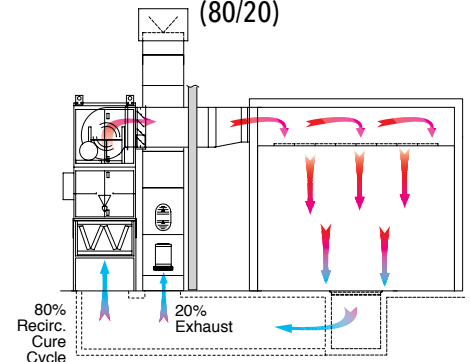
Crossdraft Booth



Downdraft Booth



Recirculating Cure Booth (80/20)



All designs, specifications and components are subject to change at the manufacturer's sole discretion at any time without notice.