

NYC Department of Buildings 280 Broadway, New York, NY 10007 Patricia Lancaster, FAIA, Commissioner (212) 566-5000, TTY: (212) 566-4769

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use subject to the terms and conditions contained herein.

MEA 61-06-E

- Manufacturer:GFS Manufacturing, S, DE R.L. DE C.V., Parcela 5
Edificio1, Hera Nos. 609,607, y 605, Parque
Industrial Kalos Guadalupe, Ciudad Guadalupe, N.L.
67190, MEXICO
- Trade Name(s): Global Finishing Solutions

Product: Paint spray booths

- Pertinent Code Section(s):27-406 through 27-412, Board of Standards &
Appeals Rule 353-30-SR, 27-800, 27-826, RS 14
- Prescribed Test(s): NFPA 33, Board of Standards & Appeals Rule 353-30-SR

Laboratory: ETL Testing Laboratories

Test Report(s):3049856, 3049856-2, 3049856-3, 3049856-4,
3045678, 276-2399-99-04, 3083724 and 3026839,
issued November 11, 2005

Product 1: Concept Paint Spray Booths Models: CSD2001, CDSE3001, CDC1001, Concept DD, CTC241409, CTC241409-8H ETL Listing Report #: 3049856

This product is a fully-automated spray booth with forced air filtration system and a paint cure cycle. It is erected on site and permanently-connected to the supply source. An air makeup heater pre-conditions the air used for ventilation and curing, and is connected to the booth through permanently-installed ducts and dampers.

The Concept series are direct gas-fired, automobile refinishing combination spray booths. The booths are used for duplicating original manufacturers' painted finishes on

automobiles. The booths are single-skin white pre-coated galvanized steel panel construction. The model numbers and burner numbers are:

CSD2001 is the Concept Semi Downdraft. The dimensions are 24ft. long, 14ft. wide and 9ft. high. The Concept Side Downdraft Heat System is model number AHFD-2100-C, has a fan motor size of 10HP and capacity of 12,000 CFM.

CDSE3001 is the Concept Side Downdraft. The dimensions are 24ft. long, 14ft. wide and 9ft. high. The Concept Side Downdraft Heat System is model number AHFD-2100-C, has a fan motor size of 10HP and capacity of 12,000 CFM.

CDC1001 is the Concept Crossdraft. The dimensions are 24ft. long, 14ft. wide and 9ft. high. The Concept Side Downdraft Heat System is model number AHFD-2100-C, has a fan motor size of 10HP and capacity of 12,000 CFM.

Concept DD is 24ft. long, 14ft. wide and 9ft. high. The Concept Side Downdraft Heat System is BT1200FD, which is model number AHFD-2100-C, has a fan motor size of 10HP and capacity of 12,000 CFM

CTC241409 is 24ft. long, 14ft. wide and 9ft. high. This is the cabin only with no burner options.

CTC241409-8H is 24ft. long, 14ft. wide and 8ft. high. This is the cabin only with no burner options.

Product 2: Ultra Paint Spray Booths

Models: Ultra P1, ULTRA RVF, ULTRA, ULT241409, ULT241409-8H ETL Listing Report #: 3049856-3

This product is a fully-automated spray booth with forced air filtration system and a paint cure cycle. It is erected on site and permanently-connected to the supply source. An air makeup heater pre-conditions the air used for ventilation and curing, and is connected to the booth through permanently-installed ducts and dampers.

The Ultra series are direct gas-fired automobile refinishing combination spray booths. The spray booths are used for duplicating original manufacturers' painted finishes on automobiles. The booth is a dual-skin white pre-coated galvanized steel, insulated panel construction with a high-efficiency controlled airflow ceiling. The model numbers and burner model numbers are:

Ultra P1 is 27ft long, 14ft. wide and 9ft. high. The Ultra Heat System Group is the GUL2000, which has a fan motor size of 15HP and capacity of 15,000 CFM.

ULTRA RVF is 24ft. long, 14ft. wide and 9ft. high. The Ultra Heat System Group is the GUL2000, which has a fan motor size of 15HP and capacity of 15,000 CFM.

ULTRA is 24ft. long, 14ft. wide and 9ft. high. The Ultra Heat System Group is the GUL2000, which has a fan motor size of 10HP and capacity of 12,000 CFM.

ULT241409 is 24ft. long, 14ft. wide and 9ft. high. This is the cabin only with no burner options.

ULT241409-8H is 24ft. long, 14ft. wide and 8ft. high. This is the cabin only with no burner options.

Product 3: Ultra Fast Track Models: UFT0921 ETL Listing Report #: 3049856-4

The Ultra Fast Track Spray Booth is a fully-automated spray booth with a forced air filtration system and a paint cure cycle. It is erected on site and permanently-connected to the supply source. The Ultra Fast Track is an automobile refinishing combination spray booth. The booth is used for duplicating original manufacturers' painted finishes on automobiles.

UFT0921 is 21ft. long, 9ft. wide and 9ft. high, and is a single- or double-skin downdraft panel construction. The Ultra Fast Track Heat System Group has been ETL-listed to be used with any of our Heat Systems. The Heat System model number is the GUL2000, which has a fan motor size of 10HP and a capacity of 12,000 CFM and also fan motor size of 15 HP and a capacity of 15,000 CFM. The UFT0921 can also be used with models AHRC2100-C and AHFD2100-2, both of which have a fan motor size of 12,000 CFM.

Product 4: Pyramid Paint Spray Booth Models: PYRAMID-CF ETL Listing Report #: 3026839

PYRAMID-CF is a fully-automated spray booth with forced air filtration system. It is erected on site and permanently-connected to the supply source. An air makeup heater pre-conditions the air used for ventilation and curing, and is connected to the booth through permanently-installed ducts and dampers. The booth is used for duplicating original manufacturers' painted finishes on automobiles. The PYRAMID is a single-skin galvanized steel panel construction with horizontal airflow during operation.

PYRAMID-CF is 24ft. long, 14ft. wide and 9ft. high. The fan size and capacity is 24" fan, 3HP, 10,000 CFM and an optional upgrade of 34" fan, 5HP and 12,000 CFM.

Product 5: The Expert Paint Spray Booth Models: EXP ETL Listing Report #: 276-2399-99-04

This product is a fully-automated spray booth with forced air filtration system and a paint cure cycle. It is erected on site and permanently-connected to the supply source. An air makeup heater pre-conditions the air used for ventilation and curing, and is connected to the booth through permanently-installed ducts and dampers.

The Expert booth is a direct gas-fired automobile refinishing combination spray booth. The booth is used for duplicating original manufacturers' painted finishes on automobiles. The booth is a full downdraft spray booth with dual-skin white pre-coated galvanized steel insulated panel construction with a high-efficiency controlled airflow ceiling.

EXP is 24ft. long, 14ft. wide and 9ft. high. The Expert Heat System is model number AHRC2100-C, has a fan motor size of 10HP and a capacity of 12,000 CFM.

Product 6: The Professional Paint Spray Booth Models: BDSD241409 and BDSD271409 ETL Listing Report #: 3083724

This product is a fully-automated spray booth with forced air filtration system and a paint cure cycle. It is erected on site and permanently-connected to the supply source. An air makeup heater pre-conditions the air used for ventilation and curing, and is connected to the booth through permanently-installed ducts and dampers.

The Professional booths are direct gas-fired automobile refinishing combination spray booths. The booths are used for duplicating original manufacturers' painted finishes on automobiles. The booths are full downdraft spray booths with dual-skin insulated white pre-coated panel construction with a high-efficiency controlled airflow ceiling. The Professional Booth is a full downdraft spray booth with direct-fired vertical or horizontal heater configurations.

BDSD241409 is 24ft. long, 14ft. wide and 9ft. high. BDSD271409 is 27ft. long, 14ft. wide and 9ft. high.

The Professional heat system is Titan Air, Model TA-12, approved under MEA 171-89-E. The other two Expert heat systems are the model numbers AHRC2100-C and AHFD2100-C; both have a fan motor size of 10HP and a capacity of 12,000 CFM and approved under MEA 33-07-E.

Product 7: Paint Mix Rooms

Models: UMR410, URM421, UMR432, UMR443, URM454, UMR465, UMR324, UMR335, UMR346, UMR 343, UMR353, UMR313, UMR357, UMR368, UMR216, UMR227, UMR238; CMR69, CMR99, CMR912, CMR915, CMR612, MCR615

ETL Listing Report #: 3045678

The Ultra Paint Mix Room (UMR model numbers) is pressurized downdraft airflow with dual-skin white pre-coated insulated panel construction with a high-efficiency filtered ceiling.

The **UMR4** are free-standing Mix Rooms with 4 walls

- UMR410 is 6ft. wide by 9ft. deep
- UMR421 is 9ft. wide by 9 ft. deep
- UMR432 is 9ft. wide by 12ft. deep
- UMR443 is 9ft. wide by 15ft. deep
- UMR454 is 6ft. wide by 12ft. deep
- UMR465 is 6ft. wide by 15ft. deep

The **UMR3** are three-sided Mix Rooms

- UMR324 is 9ft. wide by 9ft. deep
- UMR335 is 9ft. wide by 12 ft. deep
- UMR346 is 9ft. wide by 15ft. deep
- UMR343 is 12ft. wide by 9ft. deep
- UMR353 is 15ft. wide by 9ft. deep
- UMR313 is 6ft. wide by 9ft. deep
- UMR357 is 6ft. wide by 12ft. deep
- UMR368 is 6ft. wide by 15ft. deep

The UMR2 are two-wall Mix Rooms

- UMR216 is 9ft. wide by 9ft. deep
- UMR217 is 12ft. wide by 9ft. deep
- UMR238 is 15ft. wide by 9ft. deep

The **Concept Paint Mix Room** (CMR model numbers) is a pressurized downdraft airflow room with single-skin white pre-coated insulated panel construction with a high-efficiency filtered ceiling.

- CMR69 is 6ft. wide by 9ft. deep
- CMR99 is 9ft. wide by 9 ft. deep
- CMR912 is 9ft. wide by 12ft. deep
- CMR915 is 9ft. wide by 15ft. deep
- CMR612 is 6ft. wide by 12ft. deep
- CMR615 is 6ft. wide by 15ft. deep

Pursuant to "Promulgation of the Rules relating to Material and Equipment Application Procedures" dated November 5, 1992, the Bureau of Fire Prevention has no objections Letter dated March 14, 2007, F.P. Index #0601044H.

Terms and Conditions: The above units are accepted on condition that:

A. Paint Spray Booth and Curing Ovens

- 1. Only natural gas fuel supply shall be permitted for the heaters and shall comply with all requirements of New York City Building Code.
- All uses and installation of the spray booth comply with all provisions of 2RCNY §18-01 and New York City Building Code Subchapter 7, Article 3 "Occupancies Involving Spray or Dip Finishing."
- 3. The glass window of the door of the spray booth shall be modified to comply with the requirements of 2RCNY §18-01(d) (ii).
- 4. The combined spray booth and oven is classified high-hazard occupancy. For installation of a combination spray and bake booth, the detailed installation plans approved by the Department of Buildings shall be submitted to the Fire Department for approval. The installation plans sealed by a new York State Professional Engineer or a Registered Architect shall include the details of the sprinkler system. Installation of the sprinkler system shall comply with the requirements of Reference Standard 17-2 of the New York City Building Code and inspection in accordance with Section 27-967 of the Building Code.
- 5. In addition, the volume of air introduced to the paint spray booth as well as exhaust, be investigated and tested by a Professional Engineer and filed together with the plans in accordance with NFPA-86 to assure public safety

by testing that the volume of air introduced and exhausted are sufficient to keep the paint spray booth below the lower explosive limits of the solvents in the paints, under all operating conditions including the drying cycle. The ventilation system must be able to provide an air velocity of at least 100 linear feet per minute in the breathing zone of the operator.

- 6. The burner used in the heaters shall be MEA- or BS&A-approved.
- 7. The manufacturer's installation instructions and maintenance procedures and ETL requirements including tests and follow-up procedures shall be strictly followed.
- 8. All areas inside the spray chamber that are capable of producing a spark (such as light fixtures, switches, etc.) shall be isolated with proper explosion proof barrier.
- 9. Approval of all electrical equipment, apparatus, materials and devices shall be obtained from the Department's Electrical Advisory Board prior to installation.
- 10. All electrical wiring and equipment shall be installed in accordance with all applicable requirements of the Electrical Code of the City of New York and meet the requirements of 2RCNY §18-01.
- 11. All electrical equipment/installation located in spray/bake booth or within ten(10) feet of the open end of such booth shall be of a type suitable for use in explosive atmosphere as per 2RCNY §18-01(d)(5).
- 12. All electrical installation is subject to inspection and approval by the Electrical Division of New York City Department of Buildings.
- 13. Doors of the spraying room shall be fitted with limit switches to provide automatic spray cut-off through solenoid valve on the compressed air line to the spray gun.
- 14. High limit thermocouple set at 190 degrees Fahrenheit shall be located in the furnace heating plenum that shuts down the burner in event of abnormal increases in air temperature is provided. In addition, burner will also shut down in event of a breakdown of high limit thermostat, blower manometer or if any motor stops.
- 15. The exhaust fan control shall be interconnected with spray gun so as to operate simultaneously. Exhaust fan shall, in addition, be arranged to operate independently of spray gun.
- 16. "No Smoking" signs with letters at least two inches in height shall be posted at entrances to and in the spray booth. If a booth will be used for auto paint spray booth, the warning signs of "DISCONNECT AND REMOVE BATTERY BEFORE PUSHING CAR INTO BOOTH" must be displayed conspicuously.

- 17. Storage and use of pain thinners subject to inspection and obtaining of permits and Certificate of Fitness from the Fire Department.
- 18. Flammable wastes shall be disposed of in accordance with the New York City, New York State and/or Federal Regulations.
- 19. No combustible materials shall be stored or maintained within fifteen(15) feet of the spray booth.
- 20. No open flames or devices creating open flames or arcs shall be maintained within twenty-five(25) feet of the spray booth.

B. Paint Mix Room

- 1. The paint mix room is classified "high hazard" occupancy. For installation of paint mix room, the detailed installation plans approved by the Department of Buildings shall be submitted to the Fire Department for approval. The installation plans sealed by a New York State Professional Engineer or a Registered Architect shall include the details of the sprinkler system. Installation of the sprinkler system shall comply with the requirements of Reference Standard 17-2 of the New York City Building code and inspection in accordance with Section 27-967 of the Building Code.
- 2. All uses and installation of the paint mix room shall comply with all provisions of 2RCNY §18-01 and New York City Building Code
- 3. The glass window of the door of the paint mix room shall be modified to comply with the requirements of 2RCNY §18-01(d)(ii).
- 4. In addition, the volume of air introduced to the paint mix room as well as exhausted, be investigated and tested by a Professional Engineer and filed together with the plans in accordance with NFPA-33 to assure public safety by testing that the volume of air introduced and exhausted are sufficient to keep the paint mix room below the lower explosive limits of the solvents in the paints, under all operating conditions. The ventilation system shall provide for continuous mechanical ventilation of not less than 0.3m³ per minute of air movement per m² of floor area (1ft³/min/ft²) or 4m³/min (150ft³/min), whichever is greater The ventilation system shall be in operation at all times.
- 5. The manufacturer's installation instructions and maintenance procedures shall be strictly followed.
- 6. All areas inside the paint mix room that are capable of producing a spark (such as light fixtures, switches, etc.) shall be isolated with proper explosion proof barriers.

- 7. Approval of all electrical equipment, apparatus, materials and devices shall be obtained from the Department's Electrical Advisory Board prior to installation.
- 8. All electrical wiring and equipment shall be installed in accordance with all applicable requirements of the Electrical Code of the City of New York and meet the requirements of 2RCNY §18-01.
- All electrical equipment/installation located in spray/bake booth or within ten(10) feet of the open end of such booth shall be of a type suitable for use in explosive atmosphere as per 2RCNY §18-01(d)(5).
- 10. All electrical installation is subject to inspection and approval by the Electrical Division of New York City Department of Buildings.
- 11. "No Smoking" signs with letters at least two inches in height shall be posted at entrances to and in the paint mix room.
- 12. Storage and use of paints/paint thinners is subject to inspection and obtaining of permits and Certificate of Fitness from the Fire Department.
- 13. Flammable wastes shall be disposed of in accordance with the New York City, New York State and/or Federal Regulations.
- 14. No combustible materials shall be stored or maintained within fifteen(15) feet of the paint mix room.
- 15. No open flames or devices creating open flames or arcs shall be maintained within twenty-five(25) feet of the paint mix room.
- 16. All doors of the paint mix room shall be operable from inside the mix room at all times.
- 17. The paint mix room walls shall be mounted above a finished concrete floor and the installation shall provide for a minimum 6" tall sill/internal containment to contain a spill of all contents in the room.
- 18. The paint mix room installation shall be provided with a sprinkler fire protection system, shall have air supply from outside of the building and have an exhaust fan that discharges to the outside air.

Final Acceptance Examined By