

# RECIRCULATING PAINT BOOTHS



## ACCURATE CLIMATE CONTROL

GFS Recirculating Paint Booths provide accurate control of climate and airflow, while providing the most efficient operating system possible. This type of booth is often used in conjunction with temperature and humidity controls, regenerative thermal oxidizers and other VOC abatement equipment. Not to overlook safety, all GFS Recirculating Booths include all of the required airflow monitoring systems and controls to ensure a completely safe operating environment during all modes of operation.

- 99.9 percent particulate removal down to 0.5 microns
- Major cost reduction in energy usage and emission control equipment
- Features up to 100 percent VOC control

## HOW IT WORKS

### ENCLOSED BOOTHS

- Features a recirculation loop and an exhaust/fresh air loop. Both are separately controlled.
- Recirculation loop, controlled by the Consta-Flow System, maintains constant airflow in the recirculation ducts regardless of filter loading.
- Exhaust/fresh air loop, controlled by Auto-Balance System, maintains constant pressure in the booth cabin regardless of filter loading.
- Fan motors are controlled by variable frequency drives (VFDs) that change the fan motor speed as filters load.

### CONVEYORIZED BOOTHS

- Primary fan/motor unit provides an internal cross ventilation airflow through the booth.
- Fresh air enters the booth through conveyor openings.
- Consta-Flow system automatically adjusts the recirculation fan to the changing conditions of the exhaust filters.
- VFD controls fan motor, differential pressure gauge and sensing probes that monitor the static pressure.

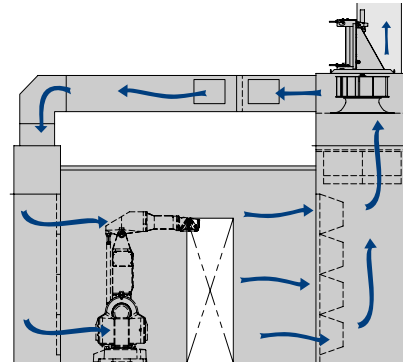
### ENERGY & COST SAVINGS

Recirculation is an effective method of reducing operating costs of the paint booth. GFS recirculation booths reduce operating costs by using less energy and exhausting less air. For example, at a recirculation ratio of 80/20, energy use is reduced by a factor of five. In addition to energy saving, a recirculation booth can also provide capital expense savings, since equipment (air handling and abatement) is reduced in size when using a recirculation booth.

### Automatic Paint Spray Booths

Total Recirculating	16,000 CFM
Exhaust	4,000 CFM
Total Airflow	20,000 CFM

Automatic Recirculating capacity with conveyor opening

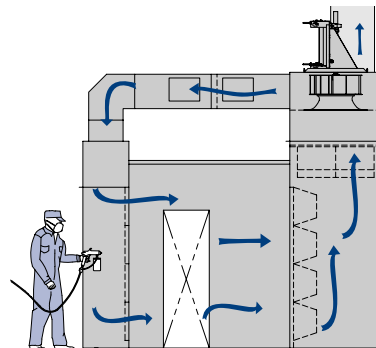


Example:  
By Recirculating 16,000 CFM, this system reduces exhaust by 88%

### Manual Paint Spray Booths

Total Recirculating	5,000 CFM
Exhaust	3,000 CFM
Total Airflow	8,000 CFM

Manual Recirculating capacity with conveyor opening



Example: By Recirculating 5,000 CFM, this system reduces exhaust by 62.5%