

How it works

Unfortunately, airflow in a downdraft paint booth has a tendency to "bent" over the vehicle. The results being... certain areas of the vehicle, i.e. near the windshield wipers, at the base of the back window, and at the "C" pillar, do not dry as quickly as the rest of the vehicle... forcing the vehicle to be in the paint booth longer than actually necessary.

Operating on the same principle as the newer convection ovens for the home, which drastically shorten cooking time, the "QADS" force an accelerated airflow horizontally around the vehicle. Working with the existing "vertical downdraft" airflow of the booth, the vehicle is now surrounded in a "sphere of air", thereby generating a more even "flash off" of the paint...top to bottom.

Why it works

In the Spray (paint application) Cycle:

By re-directing approx. 50% of the air from the booth's ceiling plenum to the corner pods, and forcing it through the small aluminum nozzles, the air speed is increased tremendously. It's very simple...accelerated air speed induces accelerated evaporation and thereby a shorter "flash off" time.

Via an interlock from the "QADS" control panel to your booth's existing heater, when the "QADS" engage, the "flash off" booth temperature is raised slightly to further shorten cycle times. (A must if considering water borne paints)

In the Bake (paint curing) Cycle:

Another "inmate" problem in a downdraft booth is that the air temperature is much hotter in the upper part of the booth and gets cooler near the floor. By redirecting some of the air horizontally through the booth, the results are more even temperatures...top to bottom. Rocker panels dry as quickly as the roof and hood. Why shouldn't the entire vehicle dry as quickly as the hood?

When it works

In the Spray Cycle:

As the painter exits the booth after each paint application he engages the "QADS." The nozzle protection doors (necessary to keep the nozzles clean and protect them from overspray accumulation) open automatically, the "QADS" run approx. 4 to 6 minutes, at which time the paint has completely "flashed." A buzzer will sound indicating the painter should return for the next coat.

In the Bake Cycle:

Where previously booth bake air temperature may have been raised to 160° or 170° to get a 140° panel temperature, now, because of the "sphere of air," the same 140° panel temperature is obtained with possibly only a 145° or 150° air temperature. A tremendous fuel savings!



What are the benefits?

Quite simply...the total cycle time (from the time the vehicle enters the booth till the time it comes out) is drastically reduced.

Your booth will consume far less energy (both fuel and electric) to complete the job.

It also means the "bottleneck" in your shop has been eliminated.