

## **Choosing an Air Agitator System – Wall or Corner Mounted?**

**As the crash repair market becomes ever more competitive, with costs typically rising faster than prices, the key to maintaining profitability is a firm focus on productivity.**

To further compound matters, every bodyshop, if it hasn't done so already, will soon have to move to low VOC paint systems, in compliance with the European Paint Directive. For the majority, this means waterborne paints.

With traditional two pack paints the emphasis was always on heat, in particular the even distribution of heat within a spraybooth, to dry the paint. However, with waterborne paints this emphasis shifts firmly towards airflow, in much the same way that washing dries quickest on a warm, windy day!

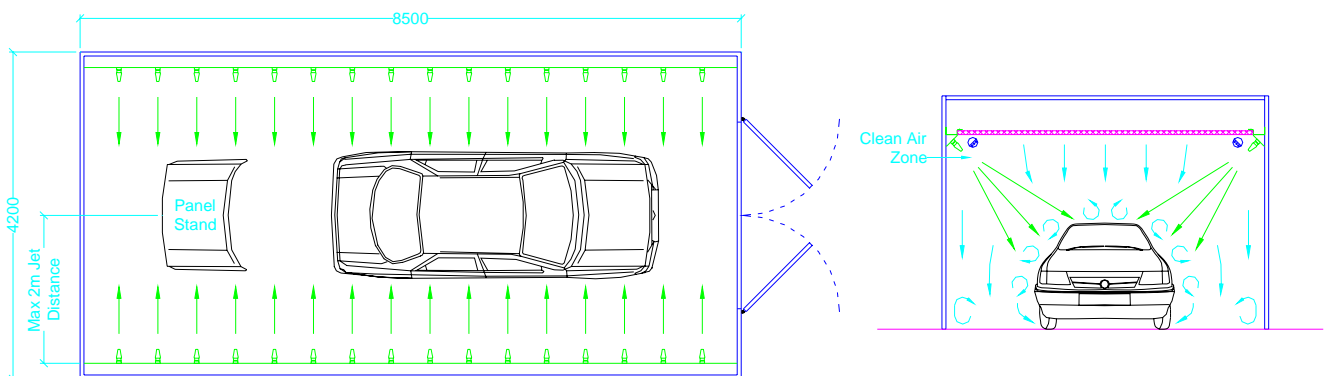
A modern, high specification booth, such as the STL Cyclone II, will dry waterborne paint even quicker than it does two pack, due to its advanced airflow engineering. Owners of older or lower spec booths, with poor airflow, may have to look at either a new booth, or a retrofit air agitation system, to mitigate the increased drying times they will experience with waterborne paints.

There are several air agitation systems available as a retrofit for spraybooths, which can reduce the drying time required for waterborne paints by as much as 50%. However, how can you be sure that what you gain in drying is not lost to rework due to the increased risk of paint contamination?

The majority of booths in operation throughout the UK's bodyshop industry have a noticeable "clean air zone" at a higher level, and a lower level "dirty air zone", increasingly so the closer you get to the booth floor (a notable exception being STL's innovative Cyclone II spraybooth, featuring full roof and full floor filtration system).

In addition, a progressively higher proportion of work is now done on panel stands, so an increasing number of body shops owners now choose to install larger spraybooths to comfortably accommodate both a vehicle and at least one panel stand.

**So, bearing these factors in mind, what are the pros and cons of the different type of air agitation systems available on the market today?**

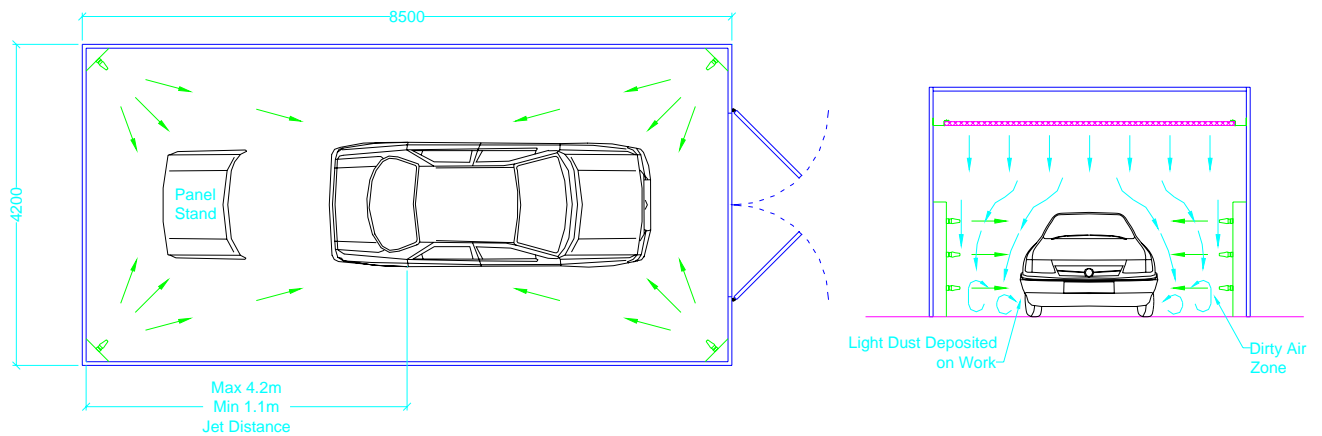


### **Type 1: AquaDry - the Engineering Solution**

A series of high-level, wall-mounted nozzles direct pre-heated filtered air into the spraybooth, creating high velocity airflows over the vehicle and accelerating the evacuation of water from the paint. As these operate in the clean air zone of the spraybooth, the risk of paint contamination is minimised, even in a rear extract spraybooth.

As the nozzle system extends through the entire length of the booth, the maximum distance the jet stream has to travel to reach paint surface is 2m, consistent throughout the booth, ensuring even temperature distribution and consistent drying.

This system operates on both flash-off and bake cycles, reducing energy costs and increasing productivity by up to 40%.



## Type 2: The low level or corner mounted system

The only advantage of a system of this type is that it is very simple to retrofit to virtually any booth, even one unsuited to air agitation.

However, low level or corner mounted air agitation systems inject pre-heated air at high velocity through the dirty air zone, effectively punching contaminants straight onto the work. This means that time saved on flash-off and bake times is lost on de-nibbing, polishing and re-work.

In a booth of up to 8.5m, the injected air has to travel over 4m to reach the middle of the vehicle, as compared to just a few feet for the corner of the vehicle. This results in uneven temperature distribution around the vehicle and therefore inconsistent drying.

Many air agitation systems do not operate on bake cycle, and therefore have only limited impact on productivity and energy savings.