

Application in Hot and Varying Humidity Conditions



Below are application directions necessary to maintain the high level of productivity expected when spraying AQUABASE® Plus waterborne basecoat in hot temperature and varying humidity conditions. **For best performance in all scenarios, use P935-1250 and P935-1255 in the basecoat.**

High Temp and High Humidity (100°F+ / ≥50% R.H.) (Drying too slow)

- The best approach is to apply less material per coat.
- Increasing air pressure will give finer basecoat particle atomization.
- Increase the gun distance with less overlap or consider changing fluid tips to a slightly smaller size. An example would be changing from 1.3 mm to 1.1 mm.
- Viscosity may also be adjusted to the lower side or between 21-25 seconds DIN4, which will give a thinner application.
- These changes may require you to apply an additional coat of color. When each layer is applied thinner, it will flash off faster and shorten the refinish time.
- To dry, turn the booth temperature up 5-10 degrees above ambient temperature.

High Temp and Medium Humidity (100°F+ / 30-50% R.H.) (Drying fast)

- The best approach is to apply a wetter coat.
- Decreasing air pressure which will give larger and wetter particle atomization.
- Decrease the gun distance and/or increase the overlap. When decreasing, do not go lower than the gun setup chart reference DOX440.
- Change fluid tips to a slightly larger tip size. An example would be changing from 1.2 mm to 1.3 mm.
- Viscosity may also be adjusted to the higher side between 23-28 seconds DIN4, which will also give a wetter application.
- **These modifications will allow the basecoat to be applied wetter and will improve sprayability.**

High Temp and Low Humidity (100°F+ / ≤30% R.H.) (Drying very fast)

- The best approach is to apply a wetter coat.
- Decreasing air pressure will give larger particle atomization and wetter application.
- Decrease the gun distance and /or increase the overlap. When decreasing, do not go lower than the gun setup chart reference DOX440.
- Change fluid tips to a slightly larger tip size. An example would be changing from 1.2 mm to 1.3 mm.
- Use slow basecoat thinner P980-5085.
- Viscosity may also be adjusted to the higher side or between 25-28 seconds DIN4, which will also give a wetter application under these conditions.
- **These modifications will allow the basecoat to be applied wetter and will improve sprayability.**

IMPORTANT NOTE: Higher temperatures will reduce the viscosity; therefore less reducer may be needed to achieve optimal application. The above recommendations can be very helpful to improve application in extreme conditions. However, keeping the size of repair in mind, it is not necessarily recommended to make all changes to all scenarios. Single, small adjustments should be made to verify what makes the most improvement. When making equipment, viscosity or technique changes for each of these temperature scenarios, make sure to record your starting point and the adjustments for future reference.