



APPLICATION GUIDE

COSMO-POLYURETHANE

ALIPHATIC POLYURETHANE-BASED COATING

SURFACE PREPARATION:

General Surface Preparation:

The surface must be perfectly clean and dry, free of contaminants. To ensure good adhesion, complete removal of oils, greases, loose rust and other foreign matter on the substrate is necessary.

Steel:

COSMO-POLYURETHANE is the finishing layer which must be applied on the recommended systems.

Before applying COSMO-POLYURETHANE make sure that the recoatability time of the previous coat is in accordance with the time the COSMO-POLYURETHANE coat will be applied.

If the previous coating was exposed to the environment for a long time and within the recoatability time, consider pre-cleaning to remove foreign matter from the surface to ensure adhesion.

APPLICATION CONDITIONS:

Surface temperature:

Minimum: 41 °F / 5 °C
Maximum: 122 °F / 50 °C

The surface temperature must be at least 37 °F / 3 °C above the dew point temperature.

Paint temperature:

Minimum: 41 °F / 5 °C
Maximum: 95 °F / 35 °C

Relative ambient humidity:

Minimum: 10%
Maximum: 85%

When applied above the maximum relative humidity limit, a loss of gloss may occur.

APPLICATION EQUIPMENT:

The equipment data given in this Application Guide are for guidance only. Similar equipment may be used. If necessary, vary pressures and nozzle sizes to improve spray characteristics.

Before the application, make sure that the equipment and its respective components are clean and in the best conditions. Purge the compressed air line to avoid paint contamination.

Airless Gun:

Pressure.....2000 - 2500 psi

Hose.....¼" internal diameter
Nozzle.....0.015" to 0.019"
Filter.....60 mesh
Dilution.....10% - 20% For thicknesses < 2 mils

Conventional Gun:

Pistol..... DeVilbiss JGA 502/3 or DeVilbiss MBC 704/765 or equivalent
Fluid nozzle.....FX - FF
Air cap.....704
Atomization pressure.....50 psi
Fluid pressure (in the tank).....20 - 30 psi
Dilution10% - 25%, by volume

Brush:

Recommended for small areas and/or touch-ups.

Roller:

Recommended for small areas and/or touch-ups.

Equipment cleaning: Use special THINNER for polyurethane.

APPLICATION PROCEDURES:

Mix:

- Shake the contents of the containers separately if possible with a mechanical shaker. Make sure that no pigment is retained in the bottom of the can.
- Add component B to component A, respecting the mixing ratio. Mix vigorously, if possible with mechanical stirring until obtaining a homogeneous mixture without lumps.
- Add the diluent only after the mixing of both components is complete.

Application:

- In order to avoid premature failures, the edges, vertices, edges and weld beads must be reinforced with a brush.
- When applied by spraying, the previous pass must overlap by 50%, to avoid exposed and unprotected areas, culminating with a cross pass, until the recommended thickness is completed.
- Excess dilution can affect the formation and appearance of the film, making it difficult to obtain the specified thickness.
- Paint should not be used after the useful life of the mixture has expired.
- If you exceed the maximum recoating time of the previous coat, sand the surface or use a special Surface Preparer for polyurethane before coating.
- Drying time depends on temperature, humidity and film thickness.
- Application of the coating above the maximum or below the minimum recommended application thickness may adversely affect the performance of the coating.

TIPS FOR OPTIMUM PERFORMANCE:

- Apply an extra layer (reinforcement) to all imperfections, weld beads and edges to prevent premature failure in those areas.
- When using spray application equipment, use a 50% overlap with each gun pass to avoid pinholes and unpainted surfaces. If necessary cross the gun at the correct angle.
- Yields and thicknesses are calculated with the corresponding volume of solids and do not include application loss factors due to shot blasting profile, surface roughness and porosity, experience and technique of the applicator, application method, surface irregularities, loss of material during mixing, spills, over-dilution, weather conditions and excessive thickness of the paint layer.
- Excessive dilution of the product can affect the thickness of the layer, appearance and adhesion.
- Do not mix catalyzed material with a new mixture.
- Do not use the material for a period longer than the useful life of the mixture.
- To avoid blockage in spray application equipment, clean the equipment before use or long periods of detention using special cleaning solvent for polyurethane.

CLEANING INSTRUCTIONS:

Clean spills and splashes immediately with special polyurethane solvent. Clean equipment and tools immediately after use with special solvent for polyurethane.

SAFETY PRECAUTIONS:

Refer to Product Safety Data Sheet before use.

ADDITIONAL INFORMATION:

The data in this Application Guide represent typical values of the product characteristics. It is the responsibility of the user to take appropriate measures in order to comply with the requirements established within their industry under current legislation. The information represents a general guide and should not be considered as a guarantee of the properties of the product. The information provided is based on the company's own research and that of experts. From the moment the user receives it until they decide to use the product (PART A of the product has a useful life of 12 months, and PART B of the product has a useful life of 6 months) the content of the Application Guide may change without prior notice.

