AT 6500 – CORROSION PROTECTION COATING

NANO-CERAMIC COATING

APPLICATION INSTRUCTIONS

1. PRODUCT DESCRIPTION

AT-6500 is a unique high-performance, two-component protective coating that offers unparalleled corrosion and fire protection for a wide variety of applications. AT-6500 is incredibly tough and has been specifically formulated to perform in extreme and abrasive environments that would quickly destroy conventional protective paints. The outstanding chemical, abrasion and under film corrosion creep resistance characteristics of this coating make it the most cost effective method to prevent corrosion. AT-6500 has superior adhesion properties to almost any substrate. It is effective in both wet and dry conditions. Coated materials may be submersed in water. AT-6500 is Class A fire rated (ASTM E108-91A UBC32-7).

2. SURFACE PREPARATION

- Coating will adhere to almost any clean surface including aluminum, wood, metals of all types, concrete, plastic, brick, and glass.
- Not recommended for use on Teflon, highly plasticized vinyl, polyethylene, and silicone rubbers.
- Surfaces should be free of loose rust, mill scale, paint, grease, oil, loose Portland cement and any other film-forming foreign material.
- Recommend water blasting with high-pressure water (3,000 PSI minimum) to thoroughly clean off all debris, dirt, loose rust, mill scale, paint, grease, oil, loose Portland cement and any other film-forming foreign material and other contaminates.
- Optimum results are obtained if the surface is dry, although entirely satisfactory protection may be obtained even if the surface is damp.
- Surplus water should be removed to prevent excessive bubbling of the coating.
- Coverage rates will vary when applying to corroded metal. Important that the coat covers all existing peaks of rust to ensure a continuous barrier of protection.

3. Mixing

- AT-6500 is a 2K system that must be mixed prior to application.
- **Prior to combining Part A and Part B**, mechanically mix each part separately for 2 minutes each.
- Combine and mix thoroughly at a 1 to 1 ratio (1 part B with 1 Part A) using a power mixer until all streaks and/or lumps disappear and the mixture has uniform color and consistency. Standard mixing times are:
  - 5 minutes in a 5 gallon pail
  - OR for 1 minute in one gallon pail
- Use a power mixer until all streaks and/or lumps disappear and the mixture has uniform color and consistency.

- Be sure to allow mixing blade to rub on sides and bottom of container to prevent settling.
- **Allow to stand (ingest) for 45 minutes to one hour** before using
- Thinner may be used but is not recommended for most applications.
    - Use of thinner increases possibility of sag, retards cure time and reduces dry film thickness.
    - Thinning may necessitate applying additional coats to achieve the desired thickness.
    - If thinning is required, use MEK or new lacquer thinner.

4. APPLICATION (Regular)

- As with any new material, always test application and finished properties on a low value test article or panel before working on valuable surfaces.
- No primer is needed on metal surfaces thereby reducing total job cost. Airless spray is the most efficient application method for larger projects. Brushes and rollers may be used for detail work such as edge termination, filling of voids, pinholes, and small cracks.
- Spraying is recommended for most large projects. Standard recommended sprayer: Graco 5900 with 0.021 to 0.035 tip size, 3500 PSI capability and a reversible self-cleaning tip. Remove all filters from gun and hose, including bung hose, before application
- Apply 5 mils (.005 inches or 0.127 mm) wet to achieve a final dry mil thickness of 3 mils (0.003 inches or 0.076 mm).
- If a second coat is needed wait until first coat is tacky dry, usually one to two hours at 80^0F/26.5^0C.
- The second coat may be applied at 3.5 mils (0.0035 inches or 0.089 mm) wet to achieve a dry film thickness of 2 mils (0.002 inches or 0.05 mm).
- This second coat will cover any voids in the surface due to a very rough surface.
- Note: It is **not** recommended to apply more than 10 mils (0.01 inches or 0.254 mm) in a single coat.
- Clean overspray or equipment immediately with acetone, toluene, xylene, or MEK. Do **not** allow unwanted coating to cure, as it will be become very difficult to remove.

5. APPLICATION (Accelerated)

- When application and cure time is critical for continuous product of pipe or other flat surfaces, use plural spray system (with pre-heaters) to significantly reduce cure time. If followed by a warming tunnel, full cure will be further accelerated.
- If pumping out of 55-gallon drums, barrel mixers would be needed to keep all contents in proper suspension.
- Additional advantages are no waste of pre-mixed batches and less equipment cleaning required between uses.

6. DRYING AND CURING TIMES

Solids	60%
Approximate Pot Life	4 to 6 hours at 80^0F/26.5^0C.
Drying Time	1 to 2 hours at 80^0F/26.5^0C.
Curing Time	Initial: 8 hours at 80^0F/26.5^0C. Complete: 3 days at 80^0F/26.5^0C

7. COVERAGE RATE

- Coverage will be approximately 320 square feet per gallon at 3 mils thickness (8 square meters per liter at 0.076mm thickness).

8. STORAGE STABILITY & SHELF LIFE

The shelf life is one year when stored in the original, unopened container. Store containers in a well-ventilated and covered area away from extreme heat and moisture. Contact your ALPHATEK representative if you have any questions about the products or its uses.

9. SAFETY

Refer to the Safety Data Sheet for this product prior to use. Use in a well ventilated area. If that is not possible, use a NIOSH approved self-contained breathing apparatus or vapor filters on a mask. Protective gloves and safety glasses should be worn at all times. Only very high abrasion cleaners will remove the coating.