



DT2000 PLATING SYSTEM

ENHANCED ANTI-CORROSION PROTECTION SYSTEMS



HEXAVALENT CHROMIUM FREE

Leland fasteners may be coated with an enhanced corrosion resistant finish, providing effective, economical corrosion protection without adversely affecting dimensions.

- Parts coated to this specification shall be capable of withstanding salt spray testing per ASTM B117 and Kesternich (1 litre SO₂ per cycle) testing for the minimum hours shown in the tables.
- Salt spray requirements to apply to significant surfaces only.
- Acceptable resistance is defined as no corrosion products on significant surfaces after exposure to neutral salt spray. Black or gray staining or spotting does not constitute a failure.
- Red rust failure is defined as the first sign of red rust on 1% of significant surfaces.
- Due to the extended testing times associated with these finishes it is normal practice that work be accepted on the basis of zinc thickness.
- Does not promote electrolytic action.
- Totally compatible with galvalume.

DT2000 is an anti-corrosion system developed by Leland Industries.

It combines the best elements of individually superb plating and coating systems.

The combined system begins with an application of JS500 clear zinc chromate plating, with a minimum of .0003 plating. (See JS500 Plating System).

After JS500 base plating the parts receive a silver, water based topcoat paint. DT2000 provides in excess of 2000 hours of salt spray testing, and minimum of 35 cycles in Kesternich (1 litre SO₂ per cycle) testing.

The paint is a water based coating, containing a pigmented system of aluminum flake. The paint cross-links with the JS solution, at a peak metal temperature of 400°F. This provides a melded multi-layered anti-corrosion system. Additionally the paint will provide consistent torque tension, while reducing assembly times, and it's handling resistant.

| RELATIVE EFFECTIVENESS OF CORROSION RESISTANT COATINGS | | | | |
|--|------------|---|------------------------------|--|
| FINISH | SUBSTRATE | APPLICATION | SALT SPRAY HOURS TO RED RUST | KESTERNICH (1 LITRE SO ₂ PER CYCLE) TO RED RUST |
| POWDER COATING | JS500 | SCREWS, HEX WASHER HEADS, RECESS HEADS, BOLTS, BIN BOLTS | 3000 | 50+ CYCLES 2 LITRE SO ₂ PER CYCLE |
| DT2000 | JS500 | SCREWS, HEX WASHER HEADS, RECESS HEADS | 2000 | 35 |
| DT1700 | JS500 | SCREWS, HEX WASHER HEADS, BOLTS | 1700 | 18 |
| DT1500 | JS500 | SCREWS, HEX WASHER HEADS, BOLTS, NUTS, BIN BOLTS\ | 1500 | 13 |
| DT1500 | JS500 | BOLTS AND SCREWS WITH RECESS HEADS, BIN BOLTS AND NUTS, MACHINE SCREWS <small>TO ACCOMODATE THREAD ENGAGEMENT A THINNER COATING OF DT1500 IS USED ON BOLTS</small> | 1500 | 8 |
| JS500 | .0003 ZINC | BOLTS, NUTS , SCREWS | 500 | 5 |
| ZINC DICHROMATE (.0002 / .0005) | ----- | ----- | 108 (.0002) | N.A. |

OTHER COATINGS AVAILABLE FROM LELAND

Phosphate & Oil, Hot Dip Galvanizing, Black Zinc, Zinc & Yellow Dichromate

All test results and suggestions are based on laboratory tests. Specific job site conditions should be taken into consideration when specifying the proper fastener. Because applications vary, we assume no liability for use of this information.