

Typical Aluminum Alloy EN Plating Cycles

380 Casting Series Alloys

1. Soak Clean, **Technic TSC 1515****, 7% v/v, 150⁰ F, 3 – 5 minutes.
2. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
3. Tri-Acid Etch, **Techni Tri-Act 95**, 30 g/l, 80⁰ F, 2 – 5 minutes
4. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
5. Acid Activate, Nitric Acid, 50% v/v, 80⁰ F, 30 – 60 seconds.
6. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
7. Alkaline Zincate, **Technic Alkaline Zincate**, 75% v/v, 75⁰ F, 40 seconds
8. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 minutes
9. Electroless Nickel Plate, **Techni EN 2600/3500/5700**, 190⁰ F, pH 5.1, to spec.
10. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes
11. Hot DI Water Rinse, 140⁰ F, 2 – 4 minutes.
12. Dry.

1000, 3000, 4000, and 6000 Series Alloys

1. Soak Clean, **Technic TSC 1515****, 7% v/v, 150⁰ F, 3 – 5 minutes.
2. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
3. Desmut/deoxidize, **Techni Tri-Act 95**, 30 g/l, 80⁰ F, 1 – 2 minutes.
4. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
5. Alkaline Etch, **Technic Alkaline Etchant**, 25% v/v, 150⁰ F, 30 – 120 seconds.
6. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
7. Desmut/deoxidize, **Techni Tri-Act 95**, 30 g/l, 80⁰ F, 15 – 30 seconds.
8. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
9. Alkaline Zincate # 1, **Technic Alkaline Zincate**, 75% v/v, 75⁰ F, 40 - 120 sec.
10. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 minutes.
11. Strip Zincate # 1, Nitric Acid, 50% v/v, 80⁰ F, 30 – 60 seconds.
12. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
13. Alkaline Zincate #2, **Technic Alkaline Zincate**, 75% v/v, 75⁰ F, 15 – 45 seconds.
14. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 minutes
15. Electroless Nickel Plate, **Techni EN 2600/3500/5700**, 190⁰ F, pH 5.1, to spec.
16. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
17. Hot DI Water Rinse, 140⁰ F, 2 – 4 minutes.
18. Dry.

Technic TSC 1501, 4 – 6 oz/gal, 140⁰ F, 2 – 4 minutes or Technic TSC 1508L, 7% v/v, 150⁰ F, 3 – 5 minutes may be substituted for Technic TSC 1515.

Typical Aluminum Alloy EN Plating Cycles

2000 and 7000 Series Alloys

1. Soak Clean, **Technic TSC 1515****, 7% v/v, 150⁰ F, 3 – 5 minutes.
2. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
3. Desmut/deoxidize, **Techni Tri-Act 95**, 30 g/l, 80⁰ F, ½ – 1 minute.
4. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
5. Acid Activate, Nitric Acid, 50% v/v, 80⁰ F, 15 – 30 seconds.
6. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
7. Alkaline Etch, **Technic Alkaline Etchant**, 25% v/v, 150⁰ F, 30 – 120 seconds.
8. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
9. Desmut/deoxidize, **Techni Tri-Act 95**, 30 g/l, 80⁰ F, 15 – 30 seconds.
10. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
11. Acid Activate, Nitric Acid, 50% v/v, 80⁰ F, 15 – 30 seconds.
12. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
13. Alkaline Zincate # 1, **Technic Alkaline Zincate**, 75% v/v, 75⁰ F, 40 - 120 sec.
14. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
15. Strip Zincate # 1, Nitric Acid, 50% v/v, 80⁰ F, 30 – 60 seconds.
16. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
17. Alkaline Zincate # 2, **Technic Alkaline Zincate**, 75% v/v, 75⁰ F, 15 - 45 sec.
18. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 minutes.
19. Electroless Nickel Plate, **Techni EN 2600/3500/5700**, 190⁰ F, pH 5.1, to spec.
20. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
21. Hot DI Water Rinse, 140⁰ F, 2 – 4 minutes.
22. Dry.

Technic TSC 1501, 4 – 6 oz/gal, 140⁰ F, 2 – 4 minutes or Technic TSC 1508L, 7% v/v, 150⁰ F, 3 – 5 minutes may be substituted for Technic TSC 1515.