

Typical Ferrous Alloy EN Plating Cycles

All Stainless Steels

1. Soak Clean, Technic TSC-1501¹, 8 oz/gal, 160⁰ F, 3 – 5 minutes.
2. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
3. Electro-clean – Anodic, Techni TEC-1001², 8 oz/gal, 180⁰ F, 6 – 9 volts DC, 60 – 90 seconds.
4. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
5. Acid Activate, Technic TAS-3Z³, 16 oz/gal, 80⁰ F, 1 – 2 minutes.
6. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
7. Nickel Strike, Woods Nickel Strike, 80⁰ F, 20 – 50 ASF, 30 – 120 seconds.
8. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 1 minute.
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.

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1. Soak Clean, Technic TSC-1501¹, 8 oz/gal, 160⁰ F, 3 – 5 minutes.
2. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
3. Periodic Reverse Electro-clean, Techni TEC-1001², 8 oz/gal, 180⁰ F, 6 – 9 volts DC, 60 – 90 seconds, with part ending cathodic.
4. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
5. Deoxidize, Hydrochloric Acid, 30% v/v, 100⁰ F, 2 minutes.
6. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
7. Acid Activate, Technic TAS-3Z³, 16 oz/gal, 80⁰ F, 1 – 2 minutes.
8. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
9. Nickel Strike, Woods Nickel Strike, 80⁰ F, 20 – 50 ASF, 30 – 120 seconds.
10. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 1 minute.
11. Electroless Nickel Plate, Techni EN 2600/3500/5700, 190⁰ F, pH 5.1, to spec.
12. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
13. Hot DI Water Rinse, 140⁰ F, 2 – 4 minutes.
14. Dry.

Notes:

¹ Techni TSC-1509, Techni TSC-1508L, Techni TSC-1502 may be used as substitutes.

² Techni TEC-1004, Techni TEC-1005 may be used as substitutes.

³ Technic TAS-1 may be used as a substitute.

Typical Ferrous Alloy EN Plating Cycles

Carburized Steel E.g. SAE 8615 or Carbo-Nitride

1. Soak Clean, Technic TSC-1501¹, 8 oz/gal, 160⁰ F, 5 – 10 minutes.
2. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
3. Reverse Electro-clean, Techni TEC-1001², 8 oz/gal, 180⁰ F, 6 – 9 volts DC, 60 – 90 seconds.
4. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
5. Deoxidize, Hydrochloric Acid, 30% v/v, 80⁰ F, 1 minute.
6. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
7. Reverse Electro-clean, Techni TEC-1001², 8 oz/gal, 180⁰ F, 6 – 9 volts DC, 60 – 90 seconds.
8. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
9. Acid Activate, Technic TAS-3Z³, 16 oz/gal, 80⁰ F, 1 – 2 minutes.
10. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
11. Reverse Electro-clean, Techni TEC-1001², 8 oz/gal, 180⁰ F, 6 – 9 volts DC, 60 – 90 seconds.
12. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 1 minute.
13. Electroless Nickel Plate, Techni EN 2600/3500/5700, 190⁰ F, pH 5.1, to spec.
14. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
15. Hot DI Water Rinse, 140⁰ F, 2 – 4 minutes.
16. Dry.

Notes:

¹ Techni TSC-1509, Techni TSC-1508L, Techni TSC-1502 may be used as substitutes.

² Techni TEC-1004, Techni TEC-1005 may be used as substitutes.

³ Technic TAS-1 may be used as a substitute.

Typical Ferrous Alloy EN Plating Cycles

17-4 pH Stainless Steel

1. Soak Clean, Technic TSC-1501¹, 8 oz/gal, 160⁰ F, 5 – 10 minutes.
2. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
3. Periodic Reverse Electro-clean, Techni TEC-1001², 8 oz/gal, 180⁰ F, 6 – 9 volts DC, 60 – 90 seconds, with part ending cathodic.
4. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
5. Deoxidize, Hydrochloric Acid, 50% v/v w/1% Peroxide, 80⁰ F, 1 minute
6. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
7. Periodic Reverse Electro-clean, Techni TEC-1001², 8 oz/gal, 180⁰ F, 6 – 9 volts DC, 60 – 90 seconds, with part ending cathodic.
8. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
9. Acid Activate, Technic TAS-3Z³, 16 oz/gal, 80⁰ F, 1 – 2 minutes.
10. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
11. Nickel Strike, Woods Nickel Strike, 80⁰ F, 20 – 50 ASF, 30 – 120 seconds.
12. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 1 minute.
13. Electroless Nickel Plate, Techni EN 2600/3500/5700, 190⁰ F, pH 5.1, to spec.
14. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
15. Hot DI Water Rinse, 140⁰ F, 2 – 4 minutes.
16. Dry.

Notes:

¹ Techni TSC-1509, Techni TSC-1508L, Techni TSC-1502 may be used as substitutes.

² Techni TEC-1004, Techni TEC-1005 may be used as substitutes.

³ Technic TAS-1 may be used as a substitute.

Typical Ferrous Alloy EN Plating Cycles

High Nickel/Chromium Alloys

E.g. Monels, Inconels, Incolloys, Hastelloys, and Alloy 20

1. Soak Clean, Technic TSC-1501¹, 8 oz/gal, 160⁰ F, 5 – 10 minutes.
2. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
3. Periodic Reverse Electro-clean, Techni TEC-1001², 8 oz/gal, 180⁰ F, 6 – 9 volts DC, 60 – 90 seconds, with part ending cathodic.
4. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
5. Deoxidize, Hydrochloric Acid, 50% v/v, 100⁰ F, 1 minute after even gassing has begun.
6. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
7. Acid Activate, Technic TAS-3Z³, 16 oz/gal, 80⁰ F, 1 – 2 minutes.
8. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
9. Nickel Strike, Woods Nickel Strike, 80⁰ F, 20 ASF, 30 – 120 seconds.
10. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 1 minute.
11. Electroless Nickel Plate, Techni EN 2600/3500/5700, 190⁰ F, pH 5.1, to spec.
12. Cold Water Rinse, Cold Water Rinse, 80⁰ F, 2 – 4 minutes.
13. Hot DI Water Rinse, 140⁰ F, 2 – 4 minutes.
14. Dry.

Notes:

¹ Techni TSC-1509, Techni TSC-1508L, Techni TSC-1502 may be used as substitutes.

² Techni TEC-1004, Techni TEC-1005 may be used as substitutes.

³ Technic TAS-1 may be used as a substitute.