

## Phosphate Coating Procedure -- NuKoat 33 MF

For best results with Iron Phosphating these parameters should be followed.

- Spray (superior coating and cleaning over immersion)
- MIN Pressure: 300 PSI at >3 GPM
- Temperature: 120 -140°F
- Time: 60-180 Seconds (coating weights will increase with longer contact times).

Start from the bottom and work vertically up surface for large pieces. Ensure complete impingement, under pressure, of NuKoat 33MF for a minimum of 60 seconds on entire surface. DO NOT ALLOW the surface to dry down during processing.

Guidelines for achieving desired coating weights:

1. Spray coating weights 25 - 50 mg/ ft<sup>2</sup>
  - a. Temperature: 120 - 140°F
  - b. Concentration: 2-4 % by volume
  - c. Time: 1 - 2 minutes
- Laboratory Q-Panel Testing on mild 1010 steel: 120°F @ 2 % b.v., 90 sec will give coating weights of 30 - 45 mg/ft<sup>2</sup>

### NOTES:

- On cast iron coating weights will be slightly lower than mild steel. Use 130 - 140°F to get 30 - 45 mg/ft<sup>2</sup>.
- In cold weather or on cold metal surface, especially large pieces metal should be heated or processing could require an extra 30-60 seconds.
- Direct contact time is critical along with prior removal of surface grease and oils. NuKoat 33 MF is designed to provide adequate cleaning of mildly soiled work pieces.

### 1. Immersion with light agitation:

- a. Mild steel (1010) - 120°F, @ 2 % b.v., 2 - 3 minutes, 35 - 50mg/sq. ft.