Magnetic Particle Process Guide

**Fluorescent**

**Prepare**
Clean the part or test area with SKC-S

**Magnetic Bench**
Mount the part to be tested. Select current type and output. Start the particle suspension flow.

**Yoke or Prods**
Apply suspension to all test surfaces. Stop the particle suspension flow. Trigger mag shot on equipment. May require double shot depending on specific practice.

**Coil or Cable Wrap**
Apply the magnetic particles. Switch off the current.

**Inspect**
Inspect the part or test area for indications under UV-A light.

**Demagnetize**
Switch on the magnetizing current. Put the part in the demagnetizing unit. Draw the part through the demagnetizing unit. Remove the part from the demagnetizing unit. Switch off the current. Check the part for residual magnetism.

**Nonfluorescent/Visible Color**

**Prepare**
Clean the part or test area with SKC-S

**Dry Method**
Apply contrast paint to the part or test area.

**Inspect**
Inspect the part or test area for indications in a well lit environment.

**Demagnetize**
Switch on the magnetizing current. Put the part in the demagnetizing unit. Draw the part through the demagnetizing unit. Remove the part from the demagnetizing unit. Switch off the current. Check the part for residual magnetism.

**Wet Method/Black and White Method**

**Inspect**
Inspect the part or test area for indications in a well lit environment.

**Six Tips for Magnetic Particle Testing**

1. Check required specifications before beginning magnetic particle inspection.
2. Certifications, SDS, PDS, and instructions are available at www.magnaflux.com
3. Verify that parts to be magnetic particle tested are clean and dry before applying magnetic particles.
4. The settling volume of magnetic particle baths should be tested anytime the bath is started up, changed out, adjusted (particles or carrier added), and at least once per shift.
5. Using a tool steel ring, QQI, or other known defect standard is recommended to confirm proper equipment and material performance.
6. Demagnetization can also be performed by using a yoke in AC mode by energizing it, then removing it from the part while energized.