Text Corrections

The following text corrections apply to the first printing of Supplement to Recommended Practice SNT-TC-1A (Q&A Book): Magnetic Particle Testing Method, second edition. Subsequent printings of the document will incorporate the corrections into the published text.

Level I

Page 3: Question 27 should be changed as follows:
27. A metal that is difficult to magnetize is said to have:
   a. high permeability.
   b. low permeability.
   c. low coercive force.
   d. low retentivity.

   Ref: C.45

   Answer b is correct.

Page 4: Questions 34 and 38 should be changed as follows:
34. Which of the following is the most effective method for the detection of near surface defects?
   a. Dry residual method using DC with surge.
   b. Wet continuous method using half-wave rectified current.
   c. Wet residual method.
   d. Dry continuous method using half-wave rectified current with prods.

   Ref: C.207

   Answer d is correct.

38. When there is absolutely no pattern or distribution of magnetic particles on the part, the possible cause is that:
   a. the amperage setting is too high.
   b. the amperage setting is too low.
   c. the particle bath strength is too high.
   d. the part is made of steel with high retentivity.

   Ref: A.64

   Answer b is correct.

Page 6: Questions 52 and 53 should be changed as follows:
52. What equipment is used to determine if a part has been demagnetized?
   a. a magnet on the part
   b. a field indicator
   c. a survey meter
   d. careful observation for clinging magnetic particles

   Ref: C.302

   Answer b is correct.
53. Which of the following is most often used for dry magnetic particle inspection?
   a. full cycle direct current
   b. half wave rectified alternating current
   c. high voltage, low amperage current
   d. direct current from electrolytic cells

   Answer b is correct.

Page 11: The answers to the following Level I questions should be corrected as follows:

   1. b
   2. a
   38. b
   48. d
   49. b
   66. a
   85. a

Level II

Page 17: Question 31 should be corrected as follows:
31. Which of the following is the most common current method used for preserving and documenting magnetic particle indications?
   a. hand drawn sketch
   b. color-tinted tape
   c. color-tinted lacquer
   d. digital photography

   Answer d is correct.

Page 19: Question 56 should be changed to read:
56. The lines of force that form a path around a crack in a ring magnet are called:
   a. leakage flux
   b. field strength
   c. magnetic lines
   d. longitudinal field

   Answer a is correct.

Page 21: Questions 71 and 76 should be corrected as follows:
71. Magnetic field strength is measured in:
   a. tesla
   b. gauss
   c. oersted
   d. webers/m²
   d. ampere/meter

   Answer d is correct.
76. Demagnetization would most likely be required when:
   a. the material has low retentivity.
   b. the object is to be electric arc welded.
   c. the material has low reluctance.
   d. heat treatment is to be carried out after testing.

   Answer b is correct.  
   Ref: C.30

Page 23: The answers to the following Level II questions should be corrected as follows:
51. a
53. d
62. d
71. d

Page 25: Question 6 should be changed to read:
6. The concentration of the solid content of a suspension of magnetic particles is measured by:
   a. weighing the suspension
   b. soaking the solids in benzol
   c. measuring the pull on a magnet
   d. permitting the solids to settle out of suspension

   Answer d is correct.  
   Ref. A.261-263

Page 26: Delete Question 8.

Page 29: Questions 35 and 40 should be changed to read:
35. The least important factor below that should not be considered when selecting a method of magnetization to detect subsurface discontinuities is:
   a. available equipment
   b. configuration of the part
   c. skill of the operator of cost of the equipment
   d. type of materials the part is made from

   Answer c is correct.  
   Ref: C.233

40. The magnetic lines of flux in a permanent magnet:
   a. in all cases produce a longitudinal field
   b. enter the south pole and leave through the north pole
   c. flow from the north pole through the magnet to the south pole
   d. change direction 60 times a second with the magnetizing current

   Answer b is correct.  
   Ref: C.12
Question 47 should be changed as follows:

47. A discontinuity caused by a welding operation is:
   a. creep crack.
   b. segregation.
   c. machining tear.
   d. lamellar tearing.

Answer d is correct.

Ref: C.86