

Programmed Instruction Series
Ultrasonic Testing Volume II:
Ultrasonic Evaluation and Advanced Techniques
(1st Printing)

Text Corrections

The next printing of this publication will incorporate the following corrections:

Pages 50-51: Reference level should be labeled (B) and defect level labeled (A) as follows:

The amplitude of the maximized signal will be set based on a code or specification, typically at 80% screen height. The gain setting is recorded as the reference level (B).

Typically, a higher gain setting than the reference level (B) will be used in the testing based on the governing code or specification. When an indication is detected during testing, the signal amplitude is adjusted to the same value as was set for the 0.06 in. (1.5 mm) SDH during calibration — say, 80%. The gain value is recorded as the defect level (A).

Since a DAC curve cannot be obtained from only one reference discontinuity, an attenuation factor (C) based on sound-path distance will be used in the discontinuity rating. As an example, an attenuation factor may be defined as $2 \cdot (SP - 1)$ in inch units. Here, SP stands for the sound-path distance.

The defect rating (D) is calculated based on the defect level (A), reference level (B) and attenuation factor (C) using the formula $D = A - B - C$.

Question 1.14

If the defect level A = 46 dB at 80% FSH, reference level B = 40 dB at 80% FSH and the defect is detected at the 3 in. (76.2 mm) sound path, what is the defect rating?

Note: The answer on p. 57 is unaffected. The slides with the headings Reference Level Calibration and Sample Problem 2 in Volume II, Lesson 5-1, of the CD-ROM, will also be changed to reflect the above corrections.