Errata

Issue 20, Winter, 2004, page 71. **"A Simplified Method for Determining the Strength of a Tube Subjected to Internal Pressure"**

The example in the article had an error; the **corrected** example follows:

Example: A mortar tube is made of a plastic having a safe stress level of 2000 psi, with an ID of 4 in. and an OD of 4.5 in. Given that the expected internal pressure generated when the mortar is fired has always been less than 200 psig, is the mortar safe?

Solution: *w*, the ratio of the OD to the ID is

$$4.5 \div 4.0 = 1.125$$

From the graph the stress multiplier from the graph, at a ratio of 1.125 is approximately 9.5. Therefore, the tangential, or hoop, stress in the tube is

$$200 \text{ psi} \times 9.5 = 1900 \text{ psi}$$

The mortar is not safe to use since the allowable stress is approximately equal to the expected stress, thus a thicker tube wall is needed.