## Procedure 1101: How to Use a Dixon® Diameter Tape

effective 02/08

### **Preparation**

- □ 1. One side of the Dixon<sup>®</sup> diameter tape is a standard measuring device. The other side is marked "INCHES OF DIA. BY 64THS" (see A in diagram one, on next page). This side of the tape measures OD (Outside Diameter).
- □ 2. Review markings on the diameter tape:
  - a. The unmarked line to the right of the "INCHES OF DIA. BY 64THS" label is the measurement line.
  - b. The number figures (1, 2, 3, etc.) with a line the width of the tape to the right of them indicate <u>inches of diameter</u> (see B in diagram one, on next page).
  - c. The number figures (16, 32 and 48) with a partial line below them are <u>reference numbers</u>. They identify <sup>16</sup>/<sub>64</sub>, <sup>32</sup>/<sub>64</sub> and <sup>48</sup>/<sub>64</sub> of an inch respectively (see D in diagram one, on next page).
  - d. The hash marks between the reference numbers represent 1/64 of an inch, (see C in diagram one, on next page).

#### **Notes**

- □ 1. Many Dixon® clamping devices (example: Boss™ clamps, Holedall™ ferrules) are selected based on the OD of the hose on which they will be used. Each device has a minimum and maximum OD range. To ensure proper coupling performance, it is imperative that the clamping device selected be the correct size for the hose OD being used.
- □ 2. Always measure the OD on both ends of the hose.
  - a. Manufacturers may change dimensional specifications on their products without notification.
  - b. Allowable manufacturing tolerances in the hose may affect clamping device selection.
- □ 3. It is good practice to measure each hose end twice to ensure an accurate measurement.

#### **Process**

- 1. Grasping the diameter tape buckle, pull several inches of tape from the case.
- □ 2. With the diameter side of the tape facing up, loop the tape around the end of the hose keeping the loop 2-3" from the hose end.
- $\square$  3. Keep the buckle near the bottom of the loop.
- ☐ 4. Pull the tape tight to the hose.
- 5. The measurement line will line up with an inch of diameter mark, a reference number mark or a hash mark.
- ☐ 6. Read the hose OD:
  - a. If the <u>measurement line</u> lines up with a <u>reference number</u> or a <u>hash mark</u> to the LEFT of the 1" of diameter number, the OD of the hose is a fraction. The fraction uses the number of hash marks as the numerator and 64 as the denominator.
  - b. If the <u>measurement line</u> lines up with an <u>inch of diameter</u> number, the <u>inches of diameter</u> number is the OD of the hose (see diagram two, on next page).
  - c. If the <u>measurement line</u> lines up with a <u>reference number</u> to the RIGHT of the <u>inches of diameter</u> number, the hose OD is the <u>inches of diameter</u> number plus a fraction. The fraction uses the <u>reference number</u> as the numerator and 64 as the denominator (see diagram three, on next page).
  - d. If the <u>measurement line</u> lines up with a <u>hash mark</u> to the RIGHT of the <u>inches of diameter</u> number, the hose OD is the <u>inches of diameter</u> number plus a fraction. The fraction uses the number of <u>hash marks</u> to the RIGHT of the <u>inches of diameter</u> number as the numerator and 64 as the denominator (see diagram four, on next page).

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# Procedure 1100: 1101: How to Use a Dixon® Diameter Tape

(continued) effective 2/08

Diagram One

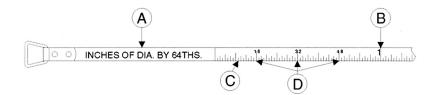


Diagram Two

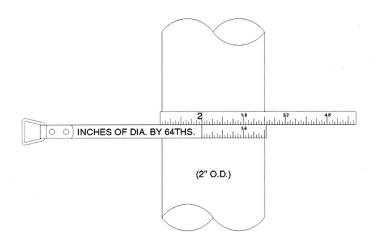


Diagram Three

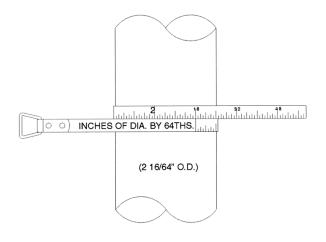


Diagram Four

