

# Fiber Glass Systems™

A Varco Company

## SMITH FIBERCAST Scarfing Instructions for 8"-16" Grinding Tapering Tool

Use this bulletin along with Bulletin No. F6616, Assembly & Operating Instructions for 8"-16" Grinding Tapering Tool

Note: Refer to Bulletin No. F6616, Assembly & Operating Instructions for 8"-16" Grinding Tapering Tool, for general tool instructions, figures, and photographs. Bulletin No. F6616 is included along with a special grinding drum and a pi tape as part of your 8"-16" Scarfing Kit.

If you are converting a standard Grinding Tapering Tool over to scarf, start with step #1. If you have a rental unit that has already been converted for the scarfing operation, skip to step #2.

**1** Unplug all power sources. Unbolt and remove the grinding drum guard. Use a 1 1/4" socket to loosen the nut on the inside of the drum, and remove drum. Replace the grinding drum with the scarfing drum supplied with the scarfing kit. (The scarfing drum is marked "SC".) Restore the drum guard.

**2** Use a 7/64" allen wrench to loosen the two cap screws on the pawl spring (see Fig. 1). Pull the pawl back from the sprocket so that the automatic feed is disconnected.

**3** Follow steps in paragraph nos. 1 through 9 in Bulletin No. F6616 to set-up pipe.

**4** Use the depth stop crank to set the tool to the correct size. The rail is marked for 8", 10", 12", 14", and 16" pipe.

Insert the pipe onto the mandrels of the tool just far enough for the grinding drum to scarf the correct length. (see Table 1, 2 or 3). Tighten the mandrel knob to expand the mandrels. **DO NOT OVERTIGHTEN.** Lift slightly to align the mandrels. Expanding the mandrels slightly before lifting may help to align the tool.

**5** Move the grinder feed knob to the FINISH position (180 degrees from the START position). Plug the tool into an outlet by itself. Plug the vacuum cleaner into a separate outlet. Turn the mandrel drive on first, then the grinder drive. After the grinder motor reaches full speed, turn the depth stop crank clockwise to move the grinding drum towards the pipe. When the grinding drum makes light contact with the pipe, stop feeding and allow the drum to start scarfing the pipe. Allow at least one revolution between adjustments to keep from bogging down the motor. If the motor starts to bog down, back out a

small amount. Continue scarfing until the scarf dimensions match those shown in Table 1, 2 or 3 (see paragraph no. 7 in this bulletin).

**6** Use the freshly scarfed pipe to set up the tool for automatic operation. With the pipe still secured on the mandrels, move the grinder feed knob to the FINISH position (180 degrees from START). Use the depth stop crank to bring the grinding drum into light contact with the freshly cut scarf. Once the depth stop crank is set, tighten the thumb screw under the crank to lock in the depth for automatic operation. Return the grinder feed knob to the START position. Reconnect the pawl, and tighten the cap screws on the pawl spring to allow for automatic operation.

**7** To check the scarf dimension, you will need an O.D. (pi) tape or a standard tape measure. A pi tape that has a standard tape measure on the opposite side is included in your scarfing kit. Instructions for using the pi tape are included in this bulletin.

Check the scarf dimensions several times throughout the operation. Wrap the pi tape (or the standard tape measure) around the scarf and measure. The scarf dimension should read as shown in Table 1, 2 or 3 of this bulletin.

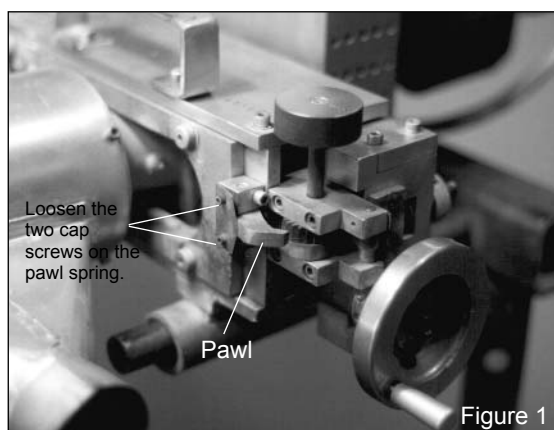
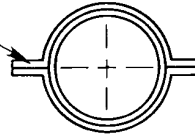


Figure 1

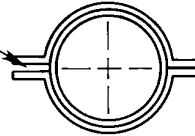
# Scarfig Instructions for 8"-16" Grinding Tapering Tool

**8** For secondary containment, Check each scarf by placing it in the socket of a two-piece containment fitting. The scarfed pipe end must always fit snugly into the socket of the fitting, with no gaps between the fitting halves.

Scarf O.D. of pipe so that the fitting halves fit together when assembled by hand.



If there is a gap between the fitting halves when assembled by hand, pipe must be scarfed more.



**Table 1 Scarfig Dimensions for Secondary Containment**

Containment Pipe Size (In.)	Scarfig Diameter using Pi Tape ( $\pm .020$ " (In.)	Scarfig Circumference using Standard Tape Measure ( $\pm 1/16$ " (In.)	Scarfig Length (In.)
8	8.570	26 <sup>15</sup> / <sub>16</sub>	4
10	10.570	33 <sup>3</sup> / <sub>16</sub>	5
12	12.550	39 <sup>7</sup> / <sub>16</sub>	5
14	14.410	45 <sup>1</sup> / <sub>4</sub>	5
16	16.410	51 <sup>9</sup> / <sub>16</sub>	5

Note:

1. Maximum taper over entire scarfed area cannot exceed 0.030".
2. Be sure you are using the correct grinding drum. The scarfig drum is marked "SC."

**Table 2 Scarfig Dimensions for CHEM THREAD® Piping**

Containment Pipe Size (In.)	Scarfig Diameter using Pi Tape ( $\pm .020$ " (In.)	Scarfig Circumference using Standard Tape Measure ( $\pm 1/16$ " (In.)	Scarfig Length (In.)
8	8.605	27	3 <sup>1</sup> / <sub>2</sub>
10	10.730	33 <sup>11</sup> / <sub>16</sub>	4 <sup>1</sup> / <sub>2</sub>
12	12.730	40	4 <sup>1</sup> / <sub>2</sub>

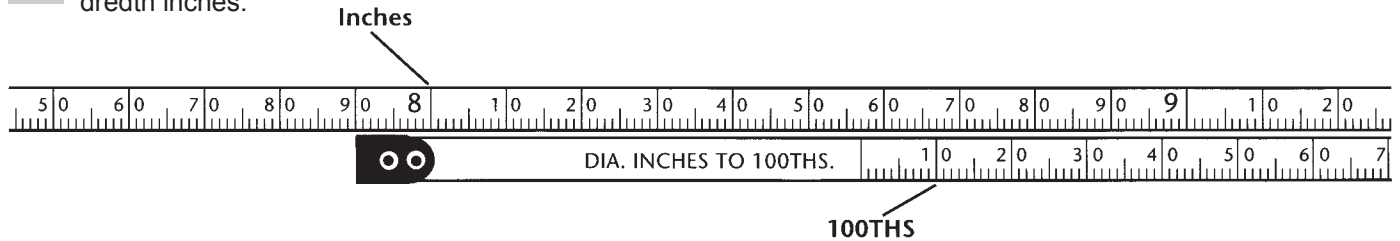
**Table 3 Scarfig Dimensions for GREEN THREAD® 175 Marine-Offshore Piping**

Containment Pipe Size (In.)	Scarfig Diameter using Pi Tape ( $\pm .020$ " (In.)	Scarfig Circumference using Standard Tape Measure ( $\pm 1/16$ " (In.)	Scarfig Length (In.)
8	8.750	27 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>
10	10.825	34	4 <sup>1</sup> / <sub>2</sub>
12	12.850	40 <sup>3</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>2</sub>

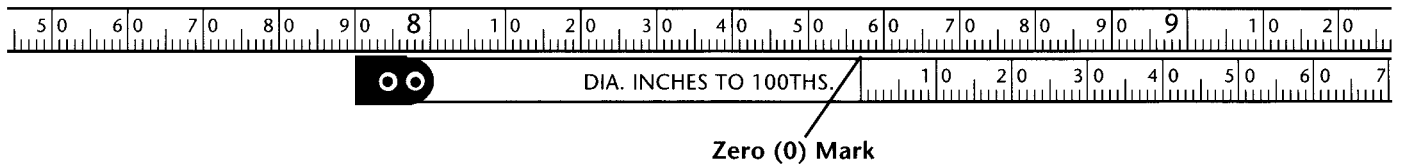
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## Reading an O.D. (pi) Tape

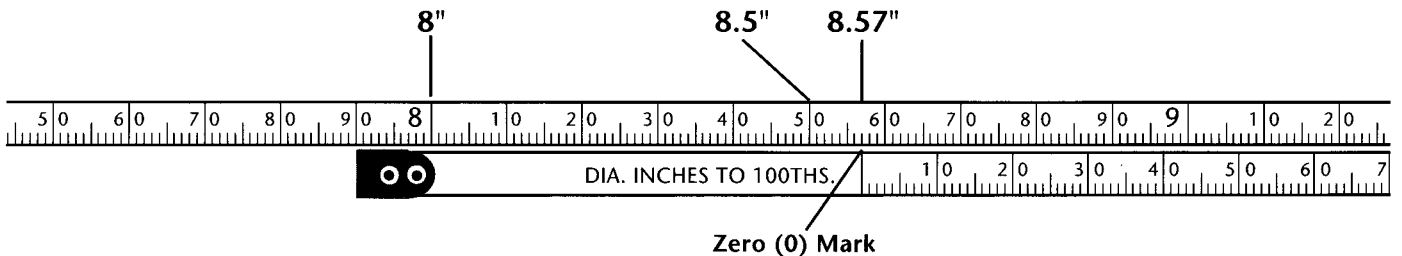
- 1 The pi tape measures from inches to one-hundredth inches.



- 2 Wrap the pi tape around the pipe tightly, laying the overlap side by side with the zero mark of the tape facing you.
- 3 Match up the zero mark of the tape with the corresponding number directly above it on the other end of the tape.



- 4 The outside diameter (O.D.) of the pipe shown in the figure below is 8.57 inches.



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