

IEEE Cable Plowing Guide

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THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, Inc.

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1. Scope

This guide is intended to attain improved communications between manufacturers and users in clarifying terminology and identifying user objectives. In addition, it attempts to provide the user a means for determining:

- (1) Whether plowing is a feasible method for a specific application.
- (2) What plow type is best suited for the intended application or types of applications.
- (3) Those techniques and practices most likely to maximize performance.

2. Definitions and Nomenclature

These definitions and nomenclature are intended for terms used in this guide and in the industry and are set forth here to promote better communication between involved parties.

bend ratio. The radius of a bend (segment of a circle) divided by the outside diameter of a cable, pipe, etc.

burial depth. The depth of soil cover over buried cable, pipe, etc., measured on level ground.

caliche. Common sedimentary rock normally formed from ancient marine life.

chute (deprecated). See feed tube.

depth control. The means used to maintain a predetermined plowing depth.

drawbar pull. The effective pulling force delivered.

feed tube. A tube attached to the blade of a plow which guides and protects the cable as it enters the earth. There are several types of feed tubes.

fixed feed tube. A feed tube permanently attached to a blade; it may have a removable back plate. See Fig 1.

hinged removable feed tube. A feed tube removably attached to a blade so relative motion

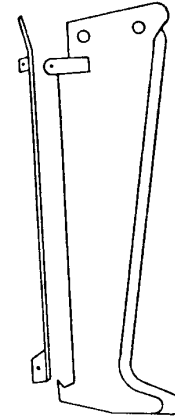


Fig 1
Feed Blade with Fixed Feed Tube

may occur between the feed tube and the blade around an essentially vertical axis. See Fig 2.

floating removable feed tube. A feed tube removably attached to a blade so relative motion may occur between the feed tube and the blade around axes that are essentially vertical and horizontal (perpendicular to direction of travel). See Fig 3.

finer. Particles of earth or rock smaller than $\frac{1}{8}$ in in greatest dimension.

Fig 2
Feed Blade and Hinged Feed Tube

