# TIMBER PILE POINTS

Hard cutting timber pile points will help make any job run more smoothly and more dependably





# **DFP TP 337 TIMBER PILE POINTS**



## **TOUGH PILE PROTECTION**

Timber points protect pile tips from brooming and splitting. Points will help you drive through rubble and other tough conditions without undermining the strength of the pile itself.

#### FAST, EASY ATTACHMENT

DFP Timber Pile Points are easily attached on-site – just rough-cut a point on the pile and nail in place with four spikes.

#### SIZES FOR ANY JOB

TP 337 Timber Pile Points from DFP come in two sizes: a small size for piles from 5 inches up to 10 inches dia.; and a larger point designed to fit pile tips 10 inches and larger.

#### **CHOICE OF THICKNESS**

Shoes are fabricated from steel of two thickness 7 gauge (3/16") and 3 gauge (1/4"). The wings may be readily bent with a hammer to conform to the actual diameter of piles.

#### **RUGGED CONSTRUCTION**

TP 337 points are made from two pieces of tough die formed steel with continuous weld seams. As a result, the points feature uniform size and high strength.

## **BE SURE ON EVERY POINT**

Load carrying capacity and long life of a timberpile depend upon installation without damage. The force required to drive a pile is far greater than the working load a pile is required to sustain. The ENGINEERING NEWS pile driving formula, for example, has a factor of safety of six. The HILEY and similar dynamic formulas have a factor of three or more. For owner, engineer and contractor driving is crucial.

During driving all piles are essentially end-bearing - so far as point stresses are concerned - even when they will be permanently classed as friction piles.

Timber piles taper. For a 40-ft. pile the usually specified minimum area at the butt is three times that at the tip. Thus, the tip becomes the critical area for all timber piles as fiber stresses during driving are many times conventional values. This is particularly true if any obstruction is encountered and the concentrated force of the hammer is transmitted directly to only part of the fibers at the tip of the pile. Stresses here can be determined from the formula

 $f = Ru - AP \\ where f = fiber stress on wood, in psi \\ Ru = load or force on pile, in pounds \\ AP = area of point, in square inches$ 

If the tip is protected by a metal point the stress is distributed so that the load on the fibers is within acceptable limits.

Damage to piles in driving can often be detected by noting any unusual behavior during installation. Bouncing of the hammer may indicate a broken and springing pile. Sudden penetration with little driving may indicate a split pile. If borings show uniform soil conditions, any non-uniform driving-length, penetration per blow, twisting or movement of the pile merits a close check. Any visible symptoms of failure above ground indicate possible failure below ground.

Pile tips are inexpensive. A very few dollars adds this protection to a pile. Pulling and restoring defective piles can cost much more.



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