

- Sheet Pile Connectors
- APF Jet Filters
- Timber Uplift Connectors





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# **Points & Splicers** For All Types of Piling H • Pipe • Sheet • Timber • Fabricated Items



HP-30000

Available in ASTM A572 Grade 50. The heat# is located on the splicer and corresponds to the test report for full traceability. APF has critically studied test piles, pulled piles and ends exposed as soldier piles. Accessories are developed to meet changing needs. Heavier loading on piles, installation in difficult areas to greater depth and more powerful hammers, make need for point protection more necessary than ever before. Conditions in the underground are never fully known; therefore point protection should be considered for all piles.

The APF HARD-BITE® Point, with integrally cast cutting teeth, breaks debris and boulders. The teeth cut into ledge rock for full bearing. They get a secure toe-hold on rock; even those that slope steeply in relation to the pile axis.

The Hard-Bite<sup>®</sup> Point, HP-77600-B-HZ, is also made for the high sectionmodulus interlocking sections used for deep cofferdams.

Available in high strengh cast steel ASTM A-148 90/60 heat treated.

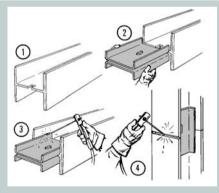
H-EXTENSION FOR PRESTRESSED PILES Need for penetration into difficult strata and protection for the bottom ends of precast has led to use of an Hextension for concrete piles. This "Stinger" design allows for deep



penetration into a variety of soil conditions.

Pile point tests have also been conducted by various State and Federal agencies to evaluate the effectiveness of cast steel H-pile points. The most recent test in April 2008 by the N.H. D.O.T. again confirmed the benefit of an APF pile point to prevent damage and assure a sound pile. Visit our website: www.associatedpile.com for details of the test.

An important accessory for long H-piles is the Champion Splicer. It is a pair of U-shaped units with flared ends that slip on easily and fit tightly into the two sides of the H. A notch is cut into the web of one pile section and the splicer slipped on the pile; it may have to be tapped on with a sledge for it is designed to fit closely. A short fillet weld is made to the flanges near the corners of the splicer. Only the top section of the pile must have the flanges scarfed for an efficient weld. The length of pile to be added is quickly positioned by this arrangement and held firmly. Additional weld at the opposite corners and across the flanges can be made later without delaying the driving rig and crew.



#### **Details of Assembly**

- 1. With the pile on the ground, scarf the outside edge of each flange, of the H and torch cut a 7/8 in. by 2-1/2 in. notch in the web.
- 2. Force splicer onto H to one-half of length. (Splicer can be put on the driven length.)
- 3. Make 5/16 x 2-1/2 in. fillet weld near each corner.
- 4. Set length to be added in position. Dieformed tapers provide for quick entry and close positioning.

Make a 5/16 in. (or heavier) partial penetration groove weld along the full width of each flange and a fillet weld at each remaining corner.

Pipe can be used efficiently for structural support. Piles installed openend to rock, cleaned out and reseated by further driving, then filled with concrete are allowed high loading under most codes. Use of a cutting shoe protects the pipe end and makes it practical to use a thinner wall pipe. The APF cutting shoe is exceptionally tough heat-treated cast steel with a ledge for driving rather than

depending on welds in shear on hardened structural steel reinforcement. The outside cutting shoes. 0-14000, is preferred when drilling past the tip is required. An inside cutting shoe, 0-14001, is also available, when maximum friction surrounding the pile is desired.

Available in high strength cast steel ASTM A-148 90/60 heat treated.

Observation of driving and of driven piles indicates that the 60° configu-

ration for the point is much to be

most soils.

higher/heat-treated.

Also referred to as

preferred over flatter angles. Heavy internal ribs assure penetration in

Available in ASTM A-27 65/35 or

### **Open-End Cutting Shoes**

0-14000 **Outside Flange** 

0-14001 Inside Flange



### **Conical Point**

Cast steel conical points are the preferred end closure for pipe piles. The conical shape pushes the earth aside and preserves friction. On boulders or uneven rock, the point distributes the shock load around the periphery of the pipe rather than concentrating it on a guadrant - as occurs with plate closure.

Of special interest for pipe piles is the Drive-On Splicer, Model S-20000. Driving into the tapered splice compresses the pipe ends into a friction fit. No welding is required, speeding the job and minimizing the crew and equipment time. Available in high strengh grades ASTM, A-148 90/60 - 80/50 heat treated.

The Splicer is especially advantageous where head room is limited and short lengths of pipe must be used. Each addition can be driven right down to the ground line. If uplift capacity is necessary, the splicer can be made weld-fit and pre-attached to one length. The next length of pipe is then set into the splicer and guickly welded.

The Drive-On Splicer has been successfully used in New Orleans to extend pre-stressed concrete piles.

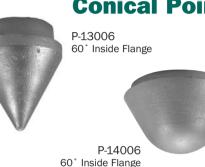
Timber piles can benefit from protection by a boot or point. The trend to more powerful hammers and heavier design loading may mean that timber will be subjected to damaging blows as it reaches obstructions or end bearing. The Rival Boot covers the entire tip without pointing the pile and is available in different sizes. All that is required is slipping it on the pile and securing it with three nails.

the "Bruns Pile Connector", short pipe ferrules are cast on one end of each pile length; the modified splicer functions as it does on pipe. The APF Model S-40000 Carbon Steel Split Backing Rings are used to back-up the weld when splicing pipe with full penetation welds. The pin diameter automatically sets the welding gap for the root pass.



Arrow points are the old standby and continue to be available for all sizes of wood piles. Use a size that fully covers the pointed end of the pile.

The boots and points are produced from 3/16" or 1/4" carbon steel. Higher strength grades are also available.



**Drive-On Pipe Pile Splicer** 



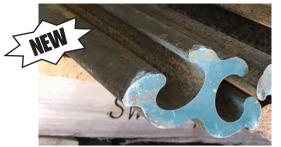
S-20000



T-8316

**Rival Boot** 

# **Sheet Pile Connectors**

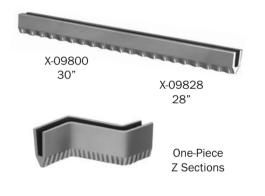


## **APF Jet Filter**



JF 50000

### **Sheet Pile Protectors**



### **Sheet Pile Splicer**



Engineered shapes that provide a full range of corner and junction connections used to connect and orientate the design of a sheet pile wall. The connector is threaded or welded onto the sheet pile. Connectors are a cost effective way to transition the orientation of the sheet pile wall as compared to fabrication. Available for Ball & Socket interlocks, Larssen interlocks, Cold Form Sheets, T Connection and transition connectors. Domestic or Foreign grades available for most designs

- Protect your sheet pile wall, retaining wall structure or abutment.
- Recommended dewatering solution that relieves hydrostatic pressure.
- Insure the life of the wall from movement and/or failure.
- Removeable inner media cartridge to allow for cleaning and servicing.
- Easy Maintenance from wall face.
- Powder coated or stainless steel.
- Available in 2-1/2", 4" or 6" diameters.

#### **Timber Uplift Connector**



Timber Uplift Connector APF Model TC-7612 will provide tension capability between timber piles and concrete pile cap. Call for detailed drawing.

Sheet Pile Protectors will reinforce the end of the pile for optimum penetration into any soil, but is especially beneficial when obstructions are anticipated. It also opens a slightly larger hole to preserve coatings. The One-Piece Z Sections configuration protectors are available for many of the common sheet piles. The 30" straight bar, Model X-09800, with 9/16" at the ledge and the 28" straight bar, Model X-09828, with a 13/16" at the ledge. The straight bars are cut to desired lengths for attachment to web and flanges. Value of the Protectors has been proven by piles pulled for reuse after being driven. They attach with a minimum of weld and protect pile ends to prevent tearing and damage. Available in ASTM A-148 90-60 heat treated.

APF Model Z-30000, provides a strong and efficient splice for Z shaped sheet piles. Nut and bolt assembly allows for quick alignment and attachment of splicer.

#### **SPECIALTY** ITEMS

Fabricated Items

- Rolled Casing Sleeves
- Rock Crushers
- End Plates

Contact APF with your project requirements

Z-30000



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