



Technical Definitions , Abbreviations and Symbols

Symbols:

-] x [Normally used in connection with picket castings to indicate the width of the bar ("x" inches) onto which the picket casting will fit.
- ⊠ indicates the size of the hole in the casting and will fit onto a square bar of that size. The opening will be oversized. If the tubing or bar size designated is 1 inch square the hole will typically be 1/16 inch oversized.
- ⊠ indicates the size of tubing into which the casting will fit. If the tubing size designated is 1 inch square the stub on the casting will be typically 7/8 inch square, tapered and will wedge into a 1 inch tube that has a nominal 16 gage wall thickness.
- ⊘ indicates the size of the hole in the casting and will fit onto a round tube or bar of that size. The opening will be oversized. If the tubing or bar size designated is 1 inch round the hole will typically be 1/16 inch oversized.
- ⊙ indicates the size of tubing into which the casting will fit. If the tubing size designated is 1 inch round the stub on the casting will be typically 7/8 inch round, tapered and will wedge into a 1 inch tube that has a nominal 16 gage wall thickness.

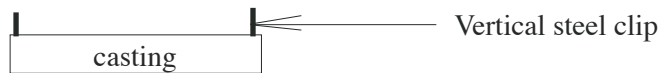
Definitions:

1. **Clips** -- Steel pieces (clips) are cast into the aluminum casting in order to be able to weld the casting to steel. The clips can be placed in the casting at almost any location and are of two basic arrangements.

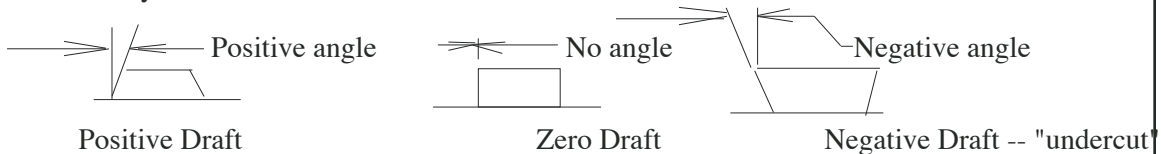
Flat clips -- Those clips that when the casting is placed on a flat surface the clips are parallel to the surface of the casting.



Vertical Clips -- Those clips called vertical clips or "pushed clips" or "ninety degree clips", and are clips that when the casting is placed on a flat surface the clips are vertical to the casting.



2. **Drafts** -- That slope on the vertical face of a pattern. A positive draft allows the pattern to be pulled cleanly from the sand in the mold.



3. **Loose** -- When a casting is molded "loose" it is done without the support of a pattern board. Although the individual piece price is higher, a few items can be made at a lower per piece cost by avoiding the more expensive cost of permanent tooling. However pieces made by this method do not have a quality as good as those made with permanent tooling.

4. **Master Pattern** -- The original piece. A carving or sample from which the permanent production tooling will be created