



**361-509 Sand Digger**  
**361-509H ADA Sand Digger**

The diggers shall be fabricated from 1 5/8" OD galvanized pipe. The digger scoop and seat shall be molded with a #319 aluminum alloy having physical properties to prevent cracking from impact forces. The pivot point shall employ the use of a single solid ball bearing that shall be self-lubricating. All hardware shall be stainless steel. All galvanized pipe shall be power coated using a non toxic, 3-5 Mil electrostatically applied with rust inhibitor with sealer, and able to withstand Salt spray tests (ASTM B117-73), Humidity test ASTM D822, Weatherability test ASTM D3363, Pencil Hardness Test ASTM D2454.

About our steel:

**Why Galvanize?**

Bare steel will rust almost immediately if left bare. Galvanizing protects steel from rusting by forming a protective barrier between the steel and the environment, just like paint does. But galvanizing goes further than that; it also provides sacrificial protection of the steel.

Steel is more electro-negative than zinc; that is, steel will attract electrons from the zinc. This electronic flow from the zinc to the steel reduces the corrosion rate of the steel, while increasing that of the zinc. Therefore, the zinc coating is "sacrificed" to prevent the corrosion of the steel at breaks in the zinc surface. Galvanizing protects the steel even when the coating is damaged.

**Why the Flo-Coat® Process?**

Galvanizing provides electrochemical protection to steel, in addition to forming a protective barrier. Allied's unique triple layer Flo-Coat galvanizing process goes even a step further by adding a conversion coating to passivate the zinc, and a clear polymer topcoat that reduces the general corrosion rate of the zinc. This synergy between the coatings allows the zinc to be more effective in protecting uncoated edges through the self-sacrificial galvanic effect.

The Flo-Coat process begins with flat strip steel, which is cold formed into the tubular shape and welded. After welding, the tube receives a triple layer of protection — zinc, conversion coating and a clear polymer topcoat — all applied in-line to assure a uniform coating. The result is a smooth, shiny end product that is unmatched in terms of strength and durability. The interior surface is 100% coated with a Zincrich paint that covers the entire surface including the welded area.

### **Advantages of Allied Flo-Coat Tubing**

- The clear polymer topcoat also acts as a primer for painting or powder coating. Extensive pre-cleaning is unnecessary, and excellent adhesion is achieved, even at high baking temperatures.
- Flo-Coat tubing can be easily fabricated (bent, swaged, flattened) without any deformation of the coatings. Other galvanized products tend to flake or chip during fabrication.
- Independent testing shows up to 6 times greater corrosion resistance when powder coating over Flo-Coat as compared to powder coating over bare steel.
- If the powder-coated surface is scratched or marred the galvanized substrate protects the powder/paint from creeping and rusting underneath. This is why our automobiles no longer rust through – auto makers changed to galvanized steel!