

February 10, 2017

## Legend Engineering and Technical Department Report

**This document addresses the rolling change to the finish on the Legend black and galvanized malleable pipe fittings and nipples that are manufactured in China.**

Legend has made an improvement to the coating process on the malleable black and galvanized pipe fittings and nipples. The part numbers will remain unchanged, thus, there will be mixed inventory until the old versions are processed through the supply chain and new product replaces it. There is nothing wrong with the old version. The new coating process is a vast improvement and will offer many benefits in a very price sensitive market segment.

All fittings and nipples with the new finish meet all of the same specifications and certifications as the items with the old finish. The Legend products will continue to meet all requirements of the widely accepted national building codes. They are manufactured at an ISO 9001 & 14001 certified facility.

**Black malleable pipe fittings and nipples** – The new black finish is applied via an electro-painting process verse the traditional dipped method. Each item is degreased with a cleaning agent, rinsed thoroughly twice; the black finish is applied via electro-painting, followed by two more rinsing cycles and then the item is processed through final baking and curing.

### Benefits:

- **Better overall corrosion performance** - due to more smooth, even and tougher surface coating.
- **Environmentally friendly** – no residual oils from traditional coating method and the paint is more environmentally friendly.
- **Clean bright finish** that is much more aesthetically pleasing.

### Certifications / Standards:

#### **American Society for Testing and Materials (A.S.T.M.):**

ASTM A197: Standard specification for cupola malleable iron.

ASTM A153: Standard specification for zinc coating (hot-dip) on iron and steel hardware.

ASTM A47: Standard specification for ferritic malleable iron castings.

#### **American National Standards Institute (A.N.S.I.):**

ANSI B16.3: Malleable iron threaded fittings.

ANSI B16.14: Ferrous pipe plugs, bushings and locknuts with pipe threads.

ANSI B16.39: Malleable iron threaded pipe unions.

ANSI B1.20.1: Threads, pipe—general purpose (inch).

**Old:**



**New:**



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**Galvanized malleable pipe fittings and nipples** - The new finish on the galvanized fittings and nipples is the same as the black fittings and nipples except that an additional galvanization process is added to provide even greater corrosion resistance. The galvanization process on the new Legend product is superior to traditional methods in that there are two coatings of zinc applied. The first coating is similar to the traditional hot dipped method but the second coating of zinc is applied with the electro-painting process. The rinsing cycles prior to and post electro-painting, as well as the final curing are the same as the black fittings and nipples.

### Benefits:

- **Better overall corrosion performance** – due to more smooth, even, and tougher surface coating with better adhesion as a result of superior electro-painting and double zinc coating process.
- **Environmentally friendly** – no residual oils from traditional coating method and much safer trivalent chromium instead of the potentially harmful hexavalent chromium used in the galvanization process.
- **Clean bright finish** that is much more aesthetically pleasing.

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If you have any further questions regarding this topic or any Legend Valve products, please feel free to contact the Legend Technical Department at 800-752-2082.