

FROM: Product Engineering **DATE:** December 22, 2014
SUBJECT: Forged Steel Valves and Fittings; Phosphate Coating Surface Protection
KEYWORDS: Carbon Alloy Steel
PERMISSIONS: External

New "Corrosion Protective Coating" requirements have been implemented into the 2014 active standard (latest version) of ASTM A961. ASTM A961 – 14 requires carbon and low alloy steel materials for flanges, fittings and valves to be furnished with a corrosion protective coating. The new requirements are effective as of the standard's publication date (November, 2014).

The product design standards (e.g. ASME B16.11 Fittings, MSS SP-97 Branch Connections, and ASME B16.34 / API 602 Valves) reference the ASTM material standards (e.g. ASTM A105, A182 and A350). These ASTM material standards all require ASTM A961, which covers common requirements for manufacture, heat treatment, mechanical testing, etc. Because of the hierarchy of standards, the new corrosion protective coating requirement is invoked in all products manufactured to the material and design standards.

Bonney Forge has supplied fittings and valves with phosphate coatings as a standard for over 40 years. Some of the key benefits are:

- Meets ASTM A961 – 14 requirements
- Increased indoor shelf life and extended outdoor atmospheric corrosion protection.
- Overall clean products. Minimal shavings, metal particles, chips, and rust.
- Overall improved product appearance. Minimal oily finish and oil contamination.
- Reduces friction between threads during threading and prevents galling.

Many manufacturers utilize a non-compliant method of corrosion protection, which include using an oil dip in the manufacturing process or even simply using the residual cutting oils applied during machining steps as the surface protectant. Either method is unacceptable per ASTM A961 – 14.

Please contact Bonney Forge for more information on phosphate coatings or any questions related to the above information.

Sincerely,



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