



BONNEY FORGE

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To whom it may concern:

Subject: Product Size: 1" and Smaller 3M/6M Square Head Plugs
Product Size: 3/4" and Smaller 3M/6M Hex Head Plugs
Product Size: 1/2" 3M/6M Hex Bushing family including 1/2 x 1/8, 1/2 x 1/4, and 1/2 x 3/8 sizes.

The purpose of this letter is to explain the manufacturing and heat treat process for the Bonney Forge plugs and bushings mentioned above. These products are now produced on a semi automatic press and are also produced in the quench and tempered heat treated condition. The quench and temper process is a heat treatment type which is listed and utilized for products which are manufactured in accordance with ASTM A105 specification. This heat treat process is typically only used to enhance material performance for Charpy V-notch impact testing and we feel that this process produces a more refined grain structure than normalizing when this type of manufacturing process is utilized. As a result, the quench and temper process for these products will equal or exceed the properties produced by normalizing.

In summary the listed plugs and bushings may be supplied in the quench and tempered condition in substitution for (A105N) normalized or (A105) non heat treated plugs. Also due this type of manufacturing process, we are unable to produce a separately forged test bar and provide a full set of physical properties and therefore these products will be certified on the basis of hardness results only. This type of certification is in accordance with ASTM A105 section 7.3.4. Please review this information and advise your sales representative of any concerns or problems with receiving these plugs in this condition.

If you have any further questions, please feel free to contact me at 800-345-7546 extension 2470 or email: jschirf@bonneyforge.com. Thank you for your time and consideration in this matter.

Best Regards,

Jason M. Schirf
Manager, Quality Process