Kemper Valve and Fittings began providing a revised version of the 2” 602 Female in September of 2009. It will prevent make up with a 2” 1502 Nut. Prior to the revision, the industry standard for this part allowed for a minor overlap of the threads between the 2” 602 Female and the 2” 1502 Nut. This minor overlap could cause a false impression that the union was made up and pressure tight when, in fact, it was not. A make up of these mismatched threads could fail explosively – potentially causing serious injury to anyone nearby if the assembly failed.

With the revised 2” 602 Female, the minor overlap has been eliminated – preventing make up with a 2” 1502 nut. The revised version of the 2” 602 female has a truncated thread (see picture below) and a shoulder immediately behind the threads on which the designation “2” FIG 602” is stamped.

Reduction of Thread Major Diameter in New Engineering Design is Illustrated by Comparing the Original Design Major Diameter (on left with no raised shoulder) to the Reduced Major Diameter (on right with raised shoulder).

Picture and caption are from API RECOMMENDED PRACTICE 7HU1 FIRST EDITION, FEBRUARY 2009. See this RP for further detail and explanation.