

**SGD Inquiry Ballot
Spring 2022**

Inquiry Number	INQ-620-D010
Date submitted	1/27/2022
Publication Info:	API-620 12th
Section Referenced:	5.9.5.3
Subject:	Inquiry about interpretation of each instructions shown on Figure 5-3
Background:	<p>1. There is a requirement of the dimensional relation between groove depth, the leg of the fillet and the thickness of the bottom plate under the sidewall in API Std. 620 5.9.5.3. On the other hands, each dimensions such as 1/2 in. maximum, 1/4 in. minimum and 45 degrees are additionally instructed on API Std. 620 Figure 5-3. It is expected to clarify whether the main clause mentioned in 5.9.5.3 is only required and Figure 5-3 is explanatory figure for reference in API Std. 620 or not. 2. When bottom plates under the sidewall with a nominal thickness is greater than 1 in., the sum of the groove depth and the leg of the fillet is also needed to be greater than 1 in. according to Figure 5-3. However it is not consistent with the instructions which are 1/2 maximum and 45 degrees shown in Figure 5-3 because the sum of the groove depth and the leg of the fillet is needed to be less than 1 in. ($= 1/(2 \tan 45) + 1/2$). It is expected to clarify whether Figure 5-3 is shown as reference for bottom plates with a nominal thickness from 1/2in, to 1in. or not.</p>
Question:	<p>1. For bottom plates under the sidewall with a nominal thickness greater than 1/2 in., is only requirement based on API Std. 620 5.9.5.3 the main clause as below? “The attachment welds shall be sized so that either the legs of the fillet welds or the groove depth plus the leg of the fillet for combined weld are of a size equivalent to the thickness of the bottom plate under the sidewall” In other word, t minimum (the groove depth plus the leg of the fillet) shown in Figure 5-3 shall be met according the main clause “...equivalent to...”; while the other instructions (1/2 in. maximum, 1/4 in. minimum and 45 degrees) do not always have to be met. Is this interpretation correct? 2. Is Figure 5-3 shown as reference for bottom plates with a nominal thickness 1/2 to 1 in.? 3. Other How long does it take before committee responses against above questions?</p>
Ballot question	Q1) For bottom plates under the sidewall with a nominal thickness greater than 1/2 in are the details of Figure 5-3 (such as 45 degree bevel and min and max weld sizes) required details?
Draft reply	Yes
Need agenda item?	