Date of Issue: January 2021

Affected Publication: Standard 650, Welded Tanks for Oil Storage, March 2020

Errata 1

Section 2: In the ASTM C509 reference, the word “Electrometric” shall be replaced with “Elastomeric”.

Section 2: In the U.S. Federal Specifications. TT-S-00230C reference, the word “Electrometric” shall be replaced with “Elastomeric”.

Section 2: In Footnote 9, the address for American Welding Society shall be replaced with the following:

8669 N.W. 36th Street, No. 130, Miami, Florida 33166-6672

Section 3.30: In the header, the term “self-anchored tank” shall be replaced with the following:

self-anchored tank

Figure 5.12: In “Detail a” of the figure, 175 mm (5 in.) shall be changed to 125 mm (5 in.).

Section 5.8.5.3: In item a), the statement “in calculating limitations per F.4.2, use M = 0” shall be replaced with the following:

use $M_W$ or $M_{WSS} = 0$

Section 5.9.5.3: In the USC units section, the equation shall be changed to the following:

$$Z = \frac{1.5}{0.5F_v} H_s D^2 \left( \frac{P_{wd}}{36} \right)$$

Section 5.9.5.3: In the USC units section, in the equation key, the following shall be added:

$P_{wd}$ is design wind pressure including inward drag = $P_{wv}$ + 5 in (lbf/ft²);

$P_{wv}$ is wind pressure at 33 ft above ground per applicable building code considering all applicable factors, such as gust factor, exposure factor, height factor, importance factor, in (lbf/ft²); or

$P_{wv}$ is wind pressure = 31 (V/120)^2 in (lbf/ft²) where design wind speed (V) is used.

Section 5.9.6.1: In the USC units equation, $\left( \frac{36}{P_{wd}} \right)^2$ shall be replaced with the following:

$$\left( \frac{36}{P_{wd}} \right)^2$$

Section 5.9.6.1: In the SI units section, in the equation key, the bullet in the margin next to $t$ shall be deleted.
Section 5.10.2.1: The section shall be changed to the following:

**Loads:** All roofs and supporting structures shall be designed for load combinations identified in 5.2.2 (a), (b), (c), (e), (f), and (g).

Section 7.3.7.6: The “Water Filling Rate” table shall be changed to the following:

<table>
<thead>
<tr>
<th>Bottom Course Thickness</th>
<th>Tank Portion</th>
<th>Maximum Filling Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 22 mm (7/8 in.)</td>
<td>Top course</td>
<td>300 mm (12 in.)/hr</td>
</tr>
<tr>
<td></td>
<td>Below top course</td>
<td>460 mm (18 in.)/hr</td>
</tr>
<tr>
<td>22 mm (7/8 in.) and thicker</td>
<td>Top third of tank</td>
<td>230 mm (9 in.)/hr</td>
</tr>
<tr>
<td></td>
<td>Middle third of tank</td>
<td>300 mm (12 in.)/hr</td>
</tr>
<tr>
<td></td>
<td>Bottom third of tank</td>
<td>460 mm (18 in.)/hr</td>
</tr>
</tbody>
</table>

Figure F.1: The decision point of “Provide anchors and conform to F.7.” shall be changed to the following:

Provide anchors and conform to F.8.

Section V.3.1: In the USC units section, in the equation key, the bullet in the margin next to $V$ shall be deleted.