Duplex SS in API, NSF and AWWA Standards

John Grocki
API

- 650 appendix X
- 650 appendix SC
- 653 appendix X
- 653 appendix SC
- 620 appendix X
- 620 appendix SC
- Duplex grades: 2101, 2202, 2304, 2003, 2205, 255, 2507, Z100
API

- API 620 11th edition Addendum 3
  Published March 2012

- 12th Edition is in process:
  will add new lean duplex grades
  will adjust the impact strength requirements for selected duplex grades
API

- API 650 11th edition Addendum 3
  Published August 2011
  Errata published October 2011
- 12th Edition is in final process:
  will add new lean duplex grades
  will adjust the impact strength requirements for selected duplex grades
API

• API 653 4th edition Addendum 2
  Published January 2012

• Addendum 3 has been submitted for publication in 2013
NSF

• NSF/ANSI Standard 61 for Drinking Water Additives

• Duplex grades: 2101, 2202, 2304, 2003, 2205

• Austenitic grades: 304(L), 316(L)
Annex C

• Annex C has been updated to include additional stainless steel materials used in the manufacture of drinking water pipe, tube, storage tanks, and process equipment.

• Grades included: UNS S32205, S32003, S32101, S32202, S32304, S30400/03 and S31600/03
AWWA

- Pipe and Piping Products Standards
- Installation Manual
- Corrosion Manual
- Water Tanks and Equipment
AWWA – pipe standards

• C-220 – Stainless Steel pipe ½” and Larger
• Includes 2205 and 2304
• Revised to include 2101, 2202, 2003, 201 and 201LN
• Published in 2012
AWWA – pipe standards

• C-226 - Stainless steel Fittings for Waterworks Service, Size ½”” Through 72”
• No duplex in present version (2006)
• Being revised to include all NSF duplex grades and 200 series
• Projected for 2013 publication
AWWA – pipe standards

• C-228 - Standard for Stainless Steel Pipe Flanges for Water Service—Sizes 2 In. Through 72 In.
• Includes 2205 and 2304 (2008)
• **Being revised to include 2101, 2202, 2003, 201 and 201LN**
• Projected for 2013/14 publication
AWWA – pipe standards

- C-2FW – Field Welding of Stainless Steel Water Pipe
- In development and ballot process
- **Includes all C-220 grades**
- Projected for 2013 publication
AWWA

Stainless Installation Standard

- A committee Document has been prepared
- Published as an AWWA article
  Feb 2012
- To be added to the M11 Manual as a separate stainless appendix or chapter
- Projected for 2014
AWWA
Corrosion Manual

• A Stainless Section has been prepared
• To be added to the M27 Manual
• Projected for 2013
AWWA – Product Standards

• C-561 – Fabricated Stainless Steel Slide Gates
• **To be revised to include all NSF duplex grades**
• Projected for 2014
AWWA – Product Standards

• D-XXX - BOLTED STAINLESS STEEL TANKS FOR WATER STORAGE
• Includes all NSF duplex grades
• Document complete awaiting AWWA General Pipe Standard approval
• Projected for 2014
• A welded tank standard will be drafted after completion of the bolted standard (2015?)