



Technical meeting Notice:

Topic:

Duplex Stainless Steels, their properties and their applications.

Date:

Thursday Nov 20 2008

Speaker:

Devin Wachowiak, Graduated with a Bachelor of Science in Mechanical Engineering from the University of Toledo in 2005.

Applications Engineer for Rolled Alloys, have been employed by Rolled Alloys for 6 years.

Details:

The rising price of alloying components, such as nickel, have dramatically increased the costs for 304L and 316L and other high nickel bearing stainless steels, which are standard materials of construction for piping and heat exchangers in chemical processing, refining and other industrial applications.

Duplex stainless steels are a family of stainless steels that are lean in nickel and provide several distinct advantages as a material of construction in addition to their price stability. Lean duplex stainless steels, such as LDX 2101 and AL 2003 are leaner in nickel and molybdenum content in comparison to the duplex 2205 and superduplex 2507. The cost and availability along with the higher strength and corrosion resistance of duplex stainless steels has resulted in their use in many industrial applications where 304L or 316L and even high nickel alloys have been used.

All duplex stainless steels are much stronger than austenitic stainless steels, with nearly twice the yield strength allowing for reduction of wall thickness in many applications. Also, all duplex stainless steels are resistant to chloride stress corrosion cracking (SCC). Corrosion resistance to chloride and various acids varies for the duplex family starting with the leanest LDX 2101, AL 2003, 2205, and 2507 having the best corrosion resistance in the family.

All duplex stainless steels are very weldable by common practices and additional welding guidelines are available. Formability is also very good, however, due to their strength, more power is needed to form and additional springback can be expected.

The meeting will address applications, corrosion properties and weldability of the different duplex materials.

If you have issues that you would like to discuss at the meeting please send an email with questions to [Harm.deGroot@Shell.com](mailto:Harm.deGroot@Shell.com)

Location:  
Dow Center  
8700- 84 street  
Fort Saskatchewan, AB

Times:  
6:00: Reception  
6:30: Dinner  
7:15: Presentation

Costs:  
\$20 for members  
\$25 for non members  
\$10 for students

Affiliate members to include AWS, CWS, NACE, SME, CSME

RSVP: To register please contact Gerard Macdonald at 780-469-9469 Ext. 223 or Harm de Groot at 780-992-3426.

Please indicate your name, your corporate affiliation and a contact phone number.

Registrations will be accepted until Tuesday 18 November.

Hope to see you in the Dow Center!