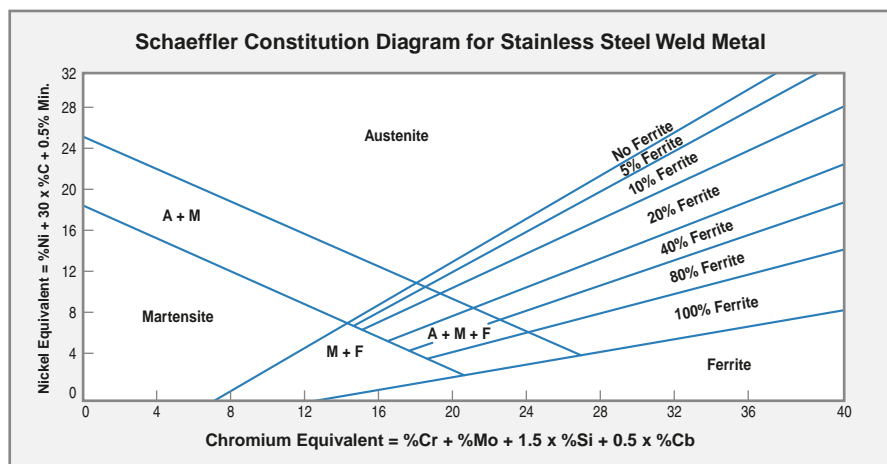




Ferrite Content Computation

Ferrite Content Computation



Calculate the nickel and chromium equivalent from the weld metal analysis. If nitrogen analysis of the weld metal is not available, assume 0.06% for GTA and covered electrode, or 0.08% for GMA weld metals. If the chemistry is accurate, the diagram predicts the WRC Ferrite Number within plus or minus 3 in approximately 90% of the tests for the 308, 309, 316 and 317 families.

Comparison with the Schaeffler Diagram

1. A nickel equivalent of 30 x %N has been added.
2. Ferrite Numbers for 308, 308L and 347 covered electrodes are similar. The higher alloy 309, 316 and 317 families have about 2 to 4 higher FN on this diagram.
3. Generally this diagram correlates better with GTA and GMA weld metals because it allows for nitrogen pick up.
4. The Schaeffler austenite - martensite boundary has been included here for reference.

