

PREMIARC™
DW-309LP
 AWS A5.22 E309LT1-1/-4

DW-309LP: an advanced flux-cored wire offering superior usability in all positions including flat, horizontal, vertical-up, vertical-down, and overhead welding.

Basic characteristics of DW-309LP

The AWS classification of DW-309LP differs from that of DW-309L in only the seventh digit. The seventh digit, “1” indicates that out-of-position welding is intended. For other characteristics of DW-309LP, the reader may refer to the descriptions of the DW-309L classification.

In what kinds of joints DW-309LP shines

A typical application of DW-309LP is seen in chemical tankers (Figure 1). Chemical tankers are equipped with cargo tanks made of solid or clad austenitic stainless steels such as 304L, 316L, and 317L. Cargo tanks usually contain corrosive substances such as petroleum products, chemical products, acids, alkalis, molasses, animal oils, and vegetable oils. Therefore, cargo tanks and piping systems require corrosion-resistant stainless and stainless-clad steels.

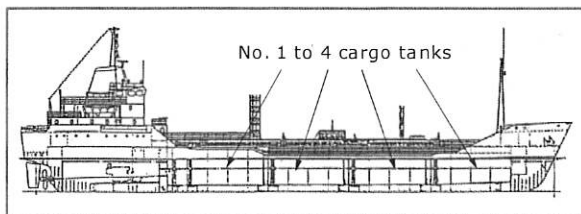


Figure 1: Cargo tanks of a chemical tanker.

Where 304L stainless-clad steel is used for the cargo tanks, DW-309LP is a suitable flux-cored wire for the buffer layer. DW-309LP provides excellent usability in all positions and is as easy to use as a mild-steel flux-cored wire. Figure 2 shows a cross sectional view of a cargo tank of a chemical tanker. Figures 3 and 4 show examples of DW-309LP buffer layers in butt welds of stainless-clad steel joints of a cargo tank.

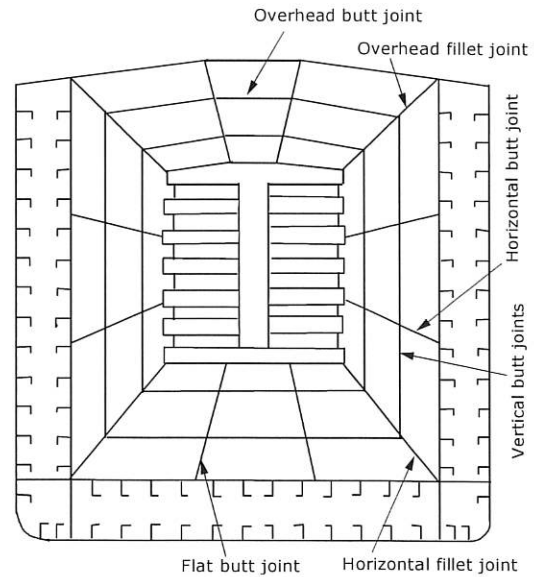


Figure 2: A cross sectional view of a cargo tank and a variety of welding joints in all positions.

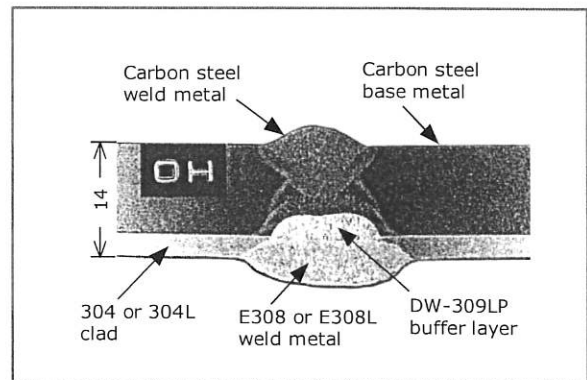


Figure 3: A DW-309LP buffer layer in an overhead joint weld of stainless-clad steel.

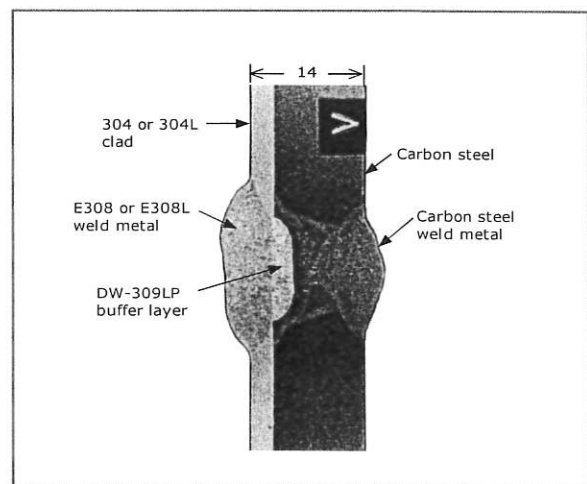


Figure 4: A DW-309LP buffer layer in a vertical joint weld of stainless-clad steel.