

Defects Detection in Welds Using Ultrasonic Analysis

Sonia Djili, Faiza Boukazouha, Rafik HALIMI, Ali BADIDI BOUDA

Abstract: In some austenitic stainless steel welds grains orientation cause deviation and splitting of the ultrasonic beam. It is especially true in the case of multipass welds when the remelting process after each pass causes complex solidification process. With these orientations we define a precise description of the heterogeneous and anisotropic material. Non destructive testing (NDT) is commonly used industrial method to evaluate the integrity of individual components. In service induced cracks such as fatigue and stress corrosion cracks can, if they are detected, be sized and monitored in order to postpone repairs or replacements.

Keywords : Non destructive testing, Ultrasonic Analysis, Weld