

ABSTRACT

A welding method for manufacturing welded structures having excellent properties to prevent the propagation of brittle fracture occurring in welded joints,  
5 characterized by the step of forming a repair weld having a greater toughness than that of a butt weld and an outer edge whose angle  $\phi$  with respect to the longitudinal direction of the butt weld is not less than 10 degrees  
10 and not more than 60 degrees, by applying repair welding to a region to arrest a brittle crack in a butt-welded joint where a brittle crack is likely to propagate after removing part of the butt-welded joint, in said region, by gouging or machining.