

ABSTRACT

To provide a low-hydrogen type coated arc welding electrode which can improve moisture absorption resistance without causing deterioration of fixability of a coating flux and welding workability. Disclosed is a low-hydrogen type coated arc welding electrode in which a steel core wire is coated with a coating flux, wherein the coating flux includes: a metal carbonate (in terms of CO_2): 8 to 25% by mass, metal fluoride (in terms of F): 2 to 15% by mass, at least one of TiO_2 , ZrO_2 and Al_2O_3 : 2 to 10% by mass in total, SiO_2 : 3 to 12% by mass, Si: 1 to 7% by mass, Mn: 1 to 8% by mass, a Li compound (in terms of Li): 0.03 to 0.7% by mass, and at least one of a Na compound (in terms of Na) and a K compound (in terms of K): 1.0 to 3.5% by mass in total, with the balance being Fe and inevitable impurities, wherein the coating flux has the composition that satisfies a numerical formula (1) below, and wherein a coating ratio is in a range of 22 to 45% by mass.

$$2. 0 \leq (1.22 \times [\text{Na}] + 1.49 \times [\text{K}]) / [\text{Li}] \leq 35 \quad \dots \quad (1)$$