

ABSTRACT OF THE DISCLOSURE

COPPER-FREE WIRE FOR GAS-SHIELDED ARC WELDING

[0001] Disclosed is a copper-free wire for gas-shielded arc welding featuring superior arc stability, excellent deposition efficiency and high melting rate, wherein the wire has a flat-shaped worked surface, and depressions of a negative direction (toward the center of the wire) with respect to the worked surface formed in a circumferential direction of the surface, a ratio of an actual length (d_r) of a circular arc to an apparent length of a circular arc (d_i) (d_r/d_i) lies within a range of 1.015 to 1.515, and a chemical composition ratio $\{Cu/(Si+Mn+P+S)\} \times 100$ lies within a range of 0.10 to 0.80.

[Figure 9]