

ABSTRACT

5 In a high-strength bolted friction joints, the ratio
of the hardness of a surface layer portion of a friction
surface of at least one of the steel materials to the
hardness of a surface layer portion of a friction surface
of the other of the steel materials is at least 2.5, the
depth of the surface layer portion having higher hardness
is at least 0.2 mm, and a plurality of triangular
10 corrugation-like or pyramidal protuberances having a
height of 0.2 to 1.0 mm are disposed on the surface of
the surface layer portion having higher hardness. This
friction joints can secure a sliding coefficient of at
least 0.9, can improve quality of the friction joint
15 surface and joint performance, can make the friction
joint portion compact, can improve execution factors, and
can reduce the execution cost. The invention discloses
also steel materials for the high-strength bolted
friction joints.