# Chilled serious phenomenon may be caused by forging crack

1 hardening
Deformation due to temperature is low or the deformation velocity is too fast, and post forging cooling too fast, may make the recrystallization enhanced induced softening with not caused by deformation (hardening), so that after hot forging forging internal remains cold deformation structure. This organization is enhanced by the presence of forging strength and hardness, but the plasticity and toughness decrease.
2 crack
The crack is usually forged the large tensile stress and shear stress or by additional stress. Cracks in the billet is usually the site of maximum stress and the thickness of the thinner part. If the blank surface and internal micro cracks, or blank existing tissue defects, or hot processing temperature improper material plastic deformation is reduced, or the speed is too fast, the degree of deformation is too large, exceed the material allows the plastic needle, then the cracks in the withdrawal of coarse, stretching, punching, chambering, bending and extrusion other processes are possible.