Branch crack die surface is the crack along the forging die parting surface gene

The crack is usually forged the large tensile stress, shear stress or by additional stress. Cracks in the billet is usually the site of maximum stress, the thickness of the thinner part. If the blank surface and internal micro cracks, or blank defects exist within the organization, or hot processing temperature to reduce improper material plastic deformation, or too fast, the degree of deformation is too large, exceed the material allows the plasticity of pointers, then the cracks in the withdrawal of coarse, stretching, punching, chambering, bending and extrusion other processes are possible.

Crack is a turtle shaped crack appears relatively shallow in forging surface. By the surface tensile stress in the forgings forming (e.g., not filled with the convex part or the bending part) the most prone to this defect. The internal cause cracking may be in many aspects: raw materials of Cu and Sn fusible element too much. The heating time, steel material surface has copper precipitation, surface coarse grains, decarburization, or through the surface of the multiple heating. The fuel sulfur content is too high, the sulphur steel material surface infiltration,

Flying edge crack is a crack generated in the parting surface and cutting edge of die forging. Reason for flash crack may be: in forging operation due to smite metal strong flow generated through reinforcement phenomenon. The magnesium alloy die forging temperature is too low; copper alloy die forging temperature is too high.