

Reverse Circulation Drilling Device with Hole Reaming Function and Usage Method Thereof

Abstract

The present invention provides a reverse circulation drilling device with hole reaming function and a usage method thereof. The reverse circulation drilling device includes a drill pipe, wherein the drill pipe is disposed to be hollow to form a main pipeline, a composite drill bit is sleeved at the bottom of the drill pipe, the composite drill bit includes at least one down-the-hole hammer and at least one hydraulic hammer, and a part of the down-the-hole hammer extends out of the bottom surface of a housing of the composite drill bit; and the hydraulic hammer is disposed in a circumferential direction of the housing of the composite drill bit, and the hydraulic hammer can perform an extending or retracting movement along a radial direction of the housing of the composite drill bit.

Fig 1.