[Document Name] Claims

[Claim 1]

A construction method of an underground structure characterized in that,

friction cut plates are overlapped on their outer side surfaces and

box-shaped roofs are assembled and disposed into a rectangular array of a lower stage, a side part, and an upper stage so as to correspond to an outer shape of a concrete box body to be propelled by being pressed into the ground together with the friction cut plates,

and after the box-shaped roofs are pressed into the ground, the box body is disposed by matching a distal end portion of the box body with end portions of the box-shaped roofs, and earth and sand inside the rectangular array of the box-shaped roofs is pushed out with propulsion or towing of the box body together with the rectangular array of the box-shaped roofs while leaving the friction cut plates, the box-shaped roofs are pressed in toward an arriving shaft,

wherein for at least one of the friction cut plates, the friction cut plate is a band-plate steel sheet, an end portion of the friction cut plate is welded and integrated to an end portion of the box-shaped roof and the remaining portion of the friction cut plate is placed on an upper surface of the box-shaped roof,

the friction cut plate is of a width so as to extend to right and left from a width of the box-shaped roof, and in said overlapping, one of side ends of the friction cut plate is bent in the length direction so as to form it as a floated-shaped flange, and one of side ends of the adjacent friction cut plate enters below it,

and side ends of the friction cut plates are overlapped so as to have a water stop structure.

[Claim 2]

The construction method of an underground structure according to claim 1, wherein

a water stop member is interposed between the friction cut plates whose side ends are overlapped.

[Claim 3]

The construction method of an underground structure according to claim 1 or 2, wherein

at an arriving shaft for pushing out the earth and sand together with the rectangular array of box-shaped roofs, an earth-retaining jack is provided, and pushing-out is performed by contracting the earth-retaining jack while the earth and sand to be pushed out by this earth-retaining jack are retained.