

ABSTRACT

The present invention relates to a lining apparatus dealing with tubular culverts having various cross section which are not limited to a general cross section of a circular shape but constituted by an oval shape, a rectangular shape or other polygonal shape and the like and inserting a tubular body (lining pipe) formed by spirally winding a strip-like member comprising a long sheet-like body at an inner face of an existing tubular culvert such as a sewage pipe, a water supply pipe, a gas pipe or the like.

The lining apparatus is constituted mainly by a forming frame in a closed loop shape made flexible by a link mechanism comprising a series of links, a joint mechanism unit is attached to the forming frame and a peripheral length adjusting mechanism for adjusting the peripheral length and an interval maintaining mechanism for fixing the peripheral length are incorporated.

According to one invention, rotary guides are mounted to the forming frame and a rigid regulating frame that is brought into contact with the rotary guides is arranged on the inner side of the forming frame. The strip-like member having plastic deformation performance is used. The lining pipe is formed in an arbitrary shape along the shape of the regulating frame.