

TUBULAR CULVERT INTERIOR LINING METHOD AND LINING APPARATUS WITH
SIMULTANEOUS INJECTION OF BACK-FILLING MATERIAL

ABSTRACT

In lining work in which a lining pipe R formed by spirally winding a strip-like member 500 consisting of an elongated sheet-form body is left in place inside a tubular culvert P, and a new lining pipe is additionally formed in front of this lining pipe that has been left in place, a lining apparatus S which has a flexible forming frame 1 consisting of link bodies is used. The strip-like member 500 is wound around the forming frame 1 by means of a joining mechanism part 7 attached to the forming frame 1, and a lining pipe R is formed while being forcibly folded inward utilizing the flexibility of the forming frame 1; at the same time, a back-filling material is injected into the inward-folded part. The inward-folded part later returns to its original state. Alternatively, the diameter of a small-diameter lining pipe R formed by winding around the forming frame 201 or 401 is expanded, and lining is performed with the back-filling material injected during this diameter expansion process.

As a result of this lining work, a lining pipe R that fills the cross section of the tubular culvert P is formed; at the same time, back-filling work is performed on this long lining pipe.

(Fig. 1)

