

Title (en)

DIGGING AND TRANSPORTING DEVICE OF A DRIVING APPARATUS FOR PIPELINES BEING OPERATED SUBTERRANEOUSLY

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Application

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Abstract (en)

[origin: US4763954A] The invention relates to an excavator and conveyor for an underground jacking apparatus for pipelines having a preferably non-man-sized rated cross section, which is driven into the surrounding soil from a manhole and comprises a digging head and at least one follower, jacking the digging head, and thereafter introducing additional jacked lengths of pipe. Rotating in the end area of the digging head is a digging disc which is set into rotation by a shaft. The shaft is surrounded at a distance by a conveyor tube, the wall of which is compartmentalized with respect to its outer cylindrical jacket in the vicinity of the digging head. Conveyor means are provided in the conveyor tube for conveying the excavated material back to the manhole. Sluice means are also provided in the conveyor cross section between the shaft and the conveyor tube wall, these sluice means serving to prevent incursions of groundwater. The sluice means comprise at least one annular bellows that can be expanded by means of a flowable medium; the shaft extends all the way through the bellows, and the conveyor cross section is closed completely or partially by the bellows depending on the required compartmentalization and on the extent of expansion.

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