A Boring Machine for making underground Bores under trenchless technology

Technology in Brief

The rapid growth of cities needs more and more underground infrastructures such as electrical and communication networks, water and sewer piping systems and other small utility tunnels. The traffic problem get increases when the infrastructure is constructed by the traditional methods of open trench construction. In addition, unsafe trenches and risky conditions may cause danger to pedestrians and workers. Besides, the traditional methods always disturb the environment. In recent years, trenchless technology has become the preferred construction method for the installation of the new underground infrastructure. The low environmental and social impact of this technology has made the underground boring extremely viable and desirable by various departments and municipalities. Available expensive imported machines are of large capacities and are being used in big projects. No such machine is being manufactured indigenously. Small machines available in the international market are also to be imported and costly. The present machine can bore up to 25m length long, 200 mm dia bores at a depth of 1-2 m from the surface. The production cost of the machine is very low and is best suitable for small/medium-class contractors.

Salient features/Advantages

1. Requires a small pit just road side
2. Light in weight and portable
3. Cost-effective and can be used by small/middle-class contractors
4. Low maintenance cost and can work on both wet and dry boring
5. Faster in construction, easy operation and maintenance
6. Can bore in dry state using open flight auger and in wet state using combination of cutter & water jet
7. Can bore 200 mm dia holes upto a length of 25 m under the ground
8. Power Requirement: 3 HP Single Phase
9.

Under Ground Horizontal Boring Machine

End Product(s)	An Underground horizontal boring machiner
License/Commercialization	M/s. S.V. Engineering,Village- Bhanaeri, P.O- Milapnagar, Roorkee-247667
TRL	07
Environmental Impact	Due to underground boring, no dust to environment
Setup - Equipment required	Fabrication facility