



Iseki
ISEKI POLY-TECH, INC.

SHUTTLEMOLE

TCSM 600-1000

NEW!!

Patented

Following in the footsteps of the Unclemole TCC, TCZ, TCP, TCL and Unclemole Super TCS machines, Iseki Poly-Tech, Inc. are pleased to announce the introduction of the Unclemole TCSM machine, maintaining the company's position at the forefront of microtunnelling technology.



TCSM Shuttlemole Principal Design Features

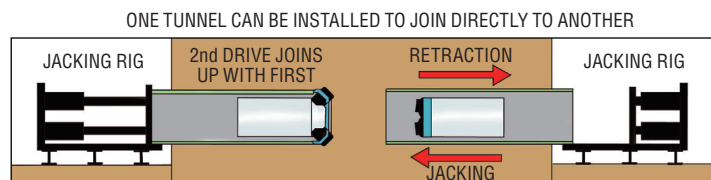
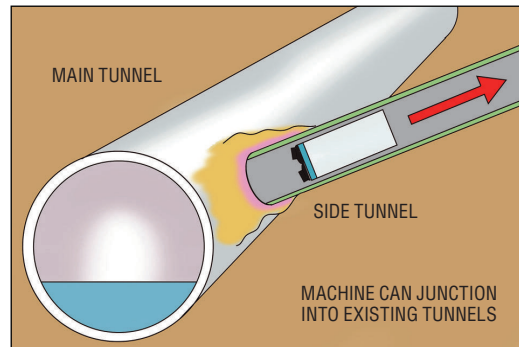
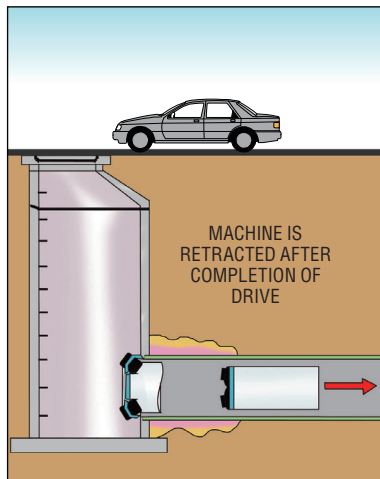
- The peripheral roller cutters on the Unclemole TCSM cutter head can be extended and retracted.
- Built-in facility for chemical / grout injection, and stabilisation of the tunnel face.
- Unclemole TCSM is set up inside the installation (jacking) pipe. Annulus over-cut between the jacking pipe and the ground is maintained.
- Complete change of cutters during the drive possible.
- Excavates through ground from clay to rock.

TCSM Shuttlemole Applications

- TCSM can junction into existing manholes without requiring recovery of the machine from within the existing manhole.
- TCSM can junction into existing tunnels without requiring recovery of the machine through the existing tunnel.
- Construction of "Blind Hole" tunnels or pipe roof structures (i.e. reception shaft is not required for recovery of the machine).
- Temporary recovery of TCSM machine and re-launching following removal of underground obstructions (e.g. sheet piles, reinforced concrete structures, ground piles etc.).

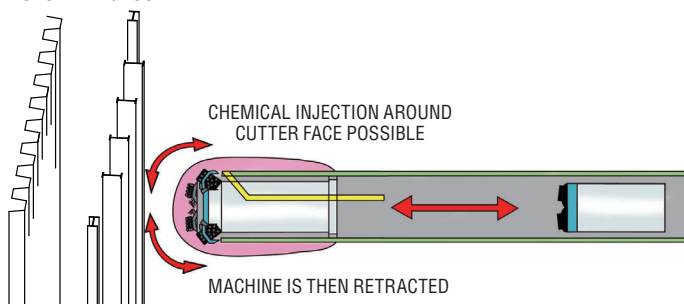
ShuttleMole features

① RECEPTION SHAFT IS NOT NECESSARY

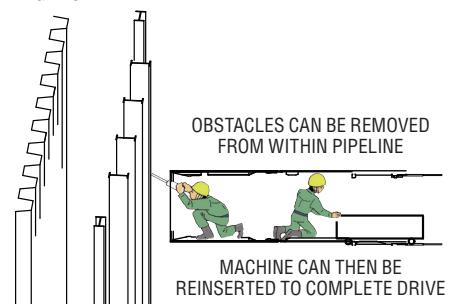


② CHEMICAL INJECTION CAPABILITY ALLOWS REMOVAL OF OBSTACLES

OBSTRUCTIONS ENCOUNTERED IN UNSTABLE GROUND



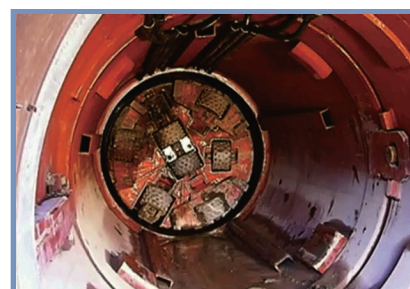
STABILISED GROUND PERMITS WORKING FROM WITHIN PIPELINE



③ CUTTER HEAD CAN BE COMPLETELY RETRACTED FROM PIPELINE



PERIPHERAL CUTTERS SHOWN RETRACTED



MACHINE IS RE-INSTALLED TO PREVIOUS POSITION



Design and manufactured by

ISEKI POLY-TECH, INC.

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