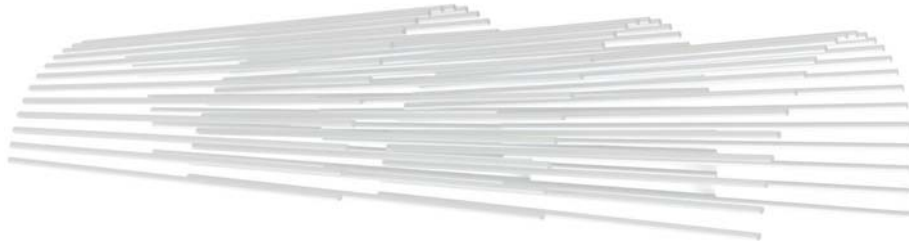




# Casing Advancing System

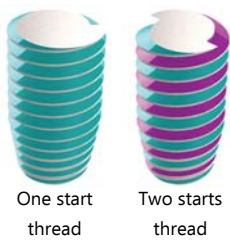
## Forepoling Ring Bit System



LTM is a manufacturer of steel tube for micropiles with about 15.000 tons of raw material on stock.

We supply the complete set of equipment to all those companies needing to drill umbrella tubes with the forepoling method. Our tubes range is from 76 mm to 216 mm with wall thickness from 6.1 mm to 12.7 mm.

According to customer requirements, we can provide tubes with right



The side picture shows the difference between the one start thread (long screwing) and two starts thread (quick screwing).

The two starts thread allows a faster and easier connection of the tubes, even in situations of difficult access to the pipes (ex. very close to the roof), reducing the down time and increasing the

Type of tube	End 1	End 2	Thread type	Accessories
Starter Pipe	Reamer set welding	Pin or Box Thread	1 or 2 starts	Drilled holes or injection valves
Extention pipe	Pin thread	Box thread	1 or 2 starts	Drilled holes or injection valves
End pipe	Pin or Box Thread	Straigth cut	1 or 2 starts	Drilled holes or injection valves

What is "forepoling"?

A method of advancing a mine working or tunnel in loose, caving, or watery ground, such as quicksand, by driving sharp-pointed poles, timbers, sections of steel, or slabs into the ground ahead of, or simultaneously with, the excavat-

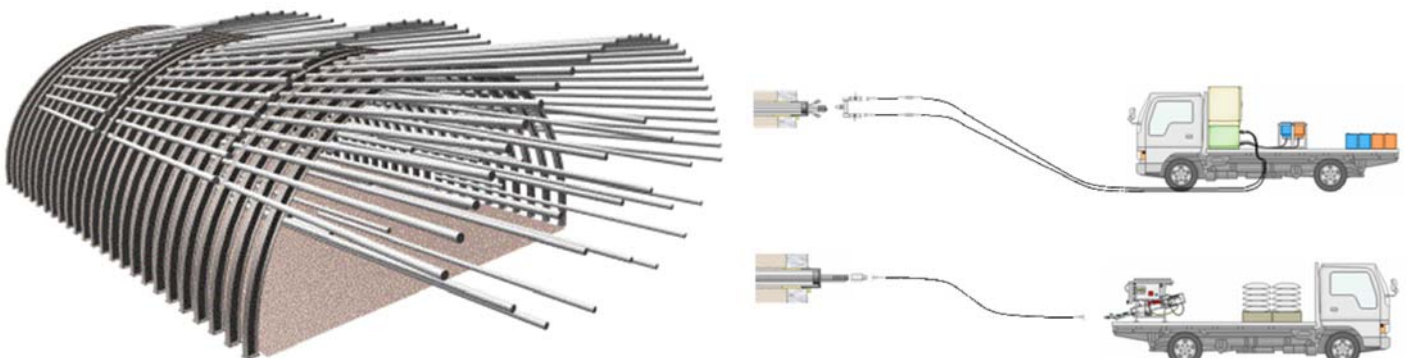


Generally, urban tunnels are subject to severe excavation conditions e.g. in unconsolidated sandy layers, with a thin earth cover, right under existing structures and near underground structures. Under such difficult conditions, and in accordance with NATM (New Austrian Tunnelling Method), forepoling has been introduced as one of the most cost-effective auxiliary methods.

Forepoling has been frequently used to stabilize the ground around the cutting face, and to control the settlement of ground surface.

Steel tubes (spiles) are installed in an umbrella shape and then injected to form a protective arch that is further supported with steel arches.

LTM Forepoling system allows the steel tubes to be simultaneously drilled in the cutting face with an additional time and cost reduction of the project.





# CASING ADVANCING SYSTEM

## FOREPOLING RING BIT SYSTEM

Thanks to the cooperation with Mincon PPV, LTM provides the following drilling systems:

System	OD (inch)	Max wall	Ring bit ID	Ring bit OD	Pilot bit OD
F76-8-47	76,1 (3")	8	47	89	59
F89-8-60	88.9 (3 1/2")	8	60	105	71
F102-10-68	101,6 (4")	10	68	118	80
F114-10-76	114,3 (4 1/2")	10	76	130	89
F140-10-102	139.7 (5 1/2")	10	102	156	116
F159-10-120	159 (6 1/4")	10	120	175	136
F168-10-128	168.3 (6 5/8")	10	128	184	145
F216-12.7-171	215,9 (8 1/2")	12.7	171	237	186



A breve disponibili altri ..... Sui .....

