

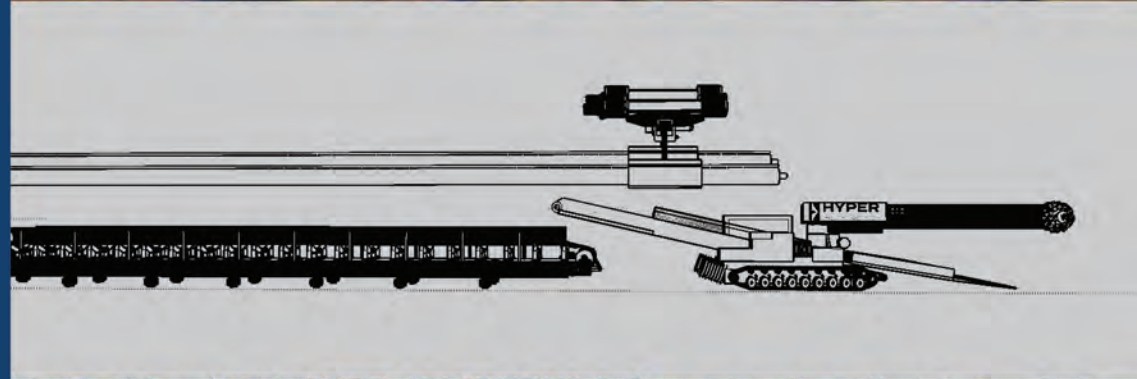
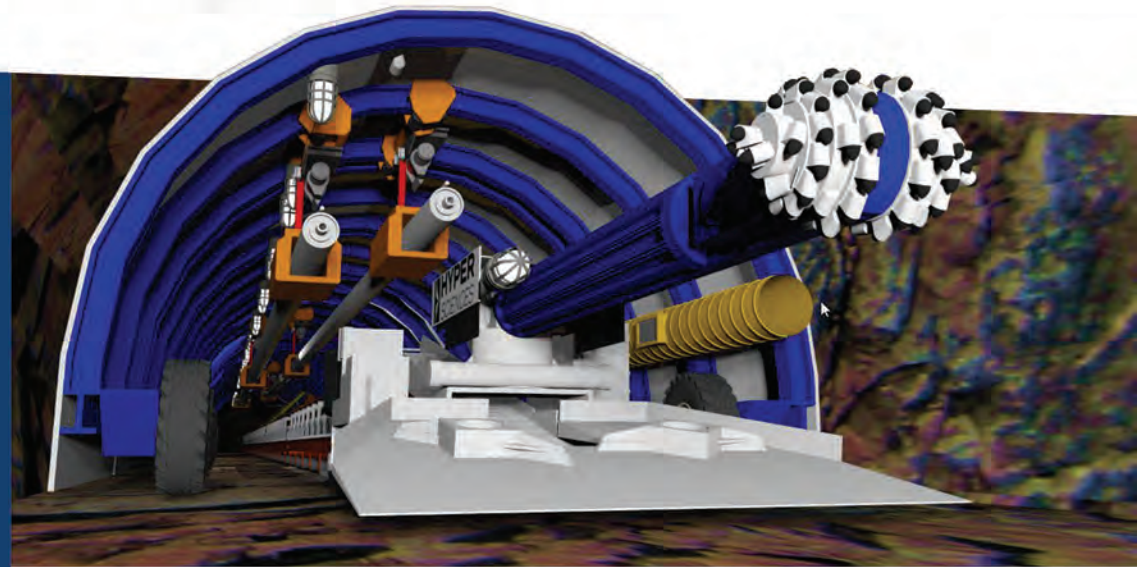
HTBM™ HYPER TUNNEL BORING AND MINING SYSTEM

The future of tunneling and mining is here!

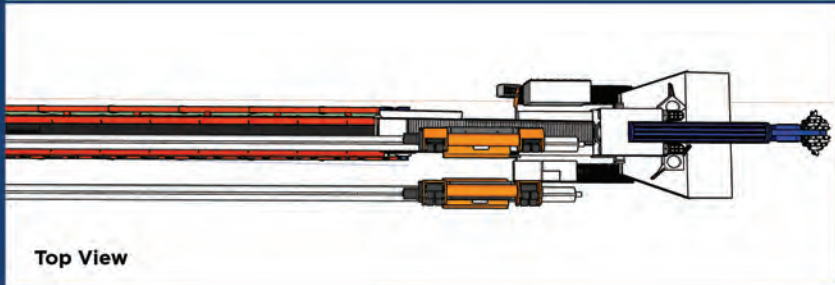
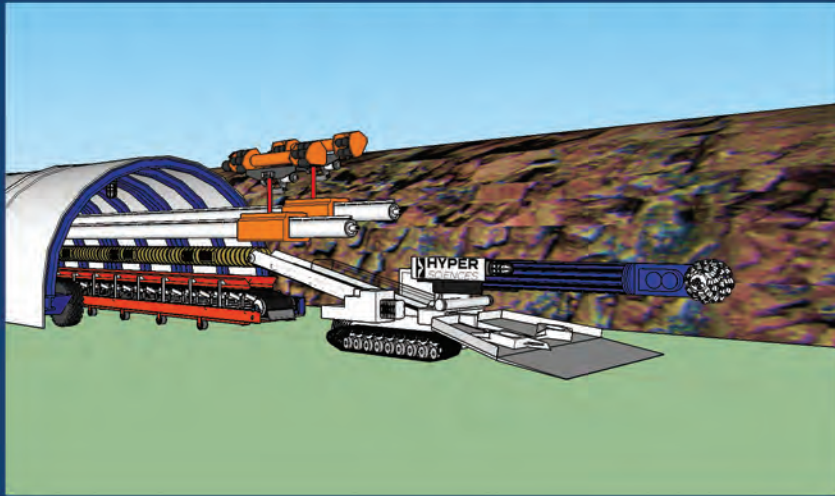
- 5x Faster
- 30% Lower OpEX
- 5x Lower CAPEX vs. Traditional TBM
- Versatile & Nimble

Declare your independence from rock type and rock strength. Guarantee performance through any rock.

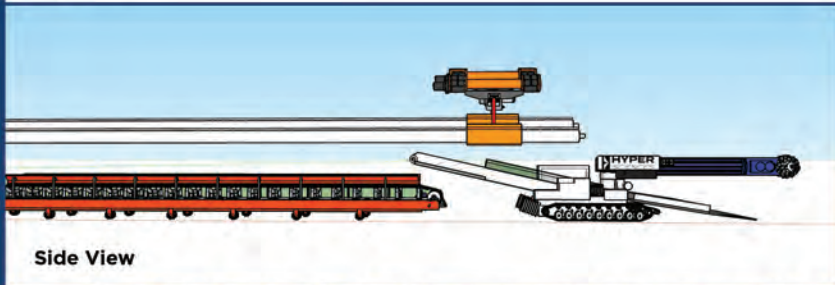
Eliminate drill and blast safer, more cost effective, and faster.



HYPER TUNNEL BORING AND MINING SYSTEM (HTBM)



Top View



Side View



HyperCore

	Drill and Blast- Atlas CopCo 1998 10m x 7m (70m ²) [33 x 23 ft]	Conventional TBM	HTBM-050 mm 4 Barrels	HTBM-100 mm 4 Barrels	Dimension
Tonnes/round (2.7 Tonne/m ³)	926		926	926	[Tonnes]
Pull of the round (Length)	4.9		4.90	4.90	[meters]
Drilling	2.75		0.00	0.00	[hours]
Charging and Blasting	1.25		3.90	1.70	[hours]
Scale, Muck, gnd suppt, etc	7.5		0%		
Sum for a round	13		4.65	2.45	[hours]
Advance Rate per hr	0.38	0.83	1.05	2.00	[m/hr]
Advance Rate per day (24 hr)	9.0	20.0	25.3	48.0	m/day
Tonne/day	1710	3780	4780	9069	[tonne/day]
Tonnes / hour	71	158	199	378	tonne/hr
Tonnage / minute	1.2	2.63	3.3	6.3	tonne/min
	Rate factor over conventional D&B		2.8x	5.3x	
	Rate factor over conventional TBM, and 5X lower CapEx		1.3x	2.4x	

PROJECTILE BLAST SEQUENCE

