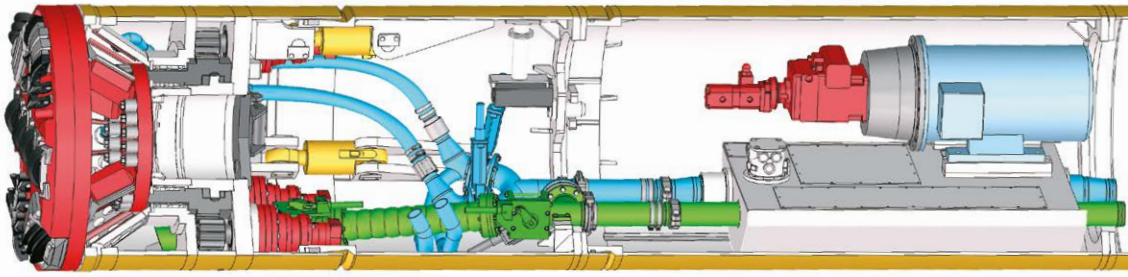


# AVN1200TB – AVN1800TB PIPE JACKING



## Special Features

- › Designed for soft ground, mixed ground and especially hard rock conditions by use of different cutting wheels (full face excavation)
- › Central access to cutting wheel for tool replacement (backloading system)
- › Highly reliable steering operation due to inductive measuring system
- › Different (variable) flushing modes/jet systems to suit different ground conditions
- › Medium pressure water system for operation in cohesive soil
- › Providing highly effective cone crusher
- › Equipped with heavy duty long-life main bearing and high torque peripheral drive
- › Hydraulic power pack in machine can
- › Completely remote-controlled
- › All machines compatible with TUNIS MT Navigation System

TECHNICAL DATA	AVN1200TB		AVN1400TB		AVN1500TB		AVN1600TB		AVN1800TB	
	Std*	Ext*	Std	Ext	Std	Ext	Std	Ext	Std	Ext
<b>1. Articulated Shield</b>										
› Outer diameter (mm)	1,505	1,810	1,740	1,970	1,810	2,150	1,970	2,150	2,150	2,425
› Pipe OD (mm)	1,490	1,780	1,720	1,940	1,780	2,120	1,940	2,120	2,120	2,400
› Pipe ID (mm)	1,200	1,500	1,400	1,600	1,500	1,800	1,600	1,800	1,800	2,000
<b>Main Drive</b>										
› Max. torque	258kNm		258kNm		474kNm		474kNm		554kNm	
› Revolution (LH/RH)	0–6.7 rpm		0–6.7 rpm		0–7.7 rpm		0–7.7 rpm		0–11.9 rpm	
› Rated power	132kW		132kW		160 kW		160 kW		250 kW	
› Roll correction	x		x		x		x		x	
<b>Steering</b>										
› Steering cylinders	3		3		4		4		4	
› Force per cyl./oil pressure	646kN/420bar		646kN/420bar		844kN/420bar		844kN/420bar		1,068kN/420bar	
› Stroke per cylinder	60mm		60mm		60 mm		60mm		100mm	
<b>Control</b>										
› Computer data logging system	x		x		x		x		x	
› Fuzzy control (automatic steering)	opt.		opt.		opt.		opt.		opt.	
› Fully visualized process control	x		x		x		x		x	
› Active roll protection (el.-hydr.)	x		x		x		x		x	
› Suitability TUNIS MT Navigation System:										
› Laser	x		x		x		x		x	
› HydroLevel	x		x		x		x		x	
› Gyro	x		x		x		x		x	
› LaserTotalStation	–		–		–		x		x	
<b>2. Machine Can</b>										
› Lubrication system	x		x		x		x		x	
<b>3. General Information</b>										
› Pipe Jacking	x		x		x		x		x	
› Drive length (recommended)	500m		500m		700m		900m		900m	
› Access to cutting wheel	x		x		x		x		x	
› Waterproofness	–		–		opt.		opt.		opt.	
› Airlock	3 bar		3 bar		3 bar		3 bar		3 bar	
› Telescopic and interjacking station	opt.		opt.		opt.		opt.		opt.	
› Slurry line diam.	125mm		125 mm		125 mm		150 mm		150 mm	
› High pressure water system	x		–		–		–		–	
› Medium pressure jet system	x		x		x		x		x	

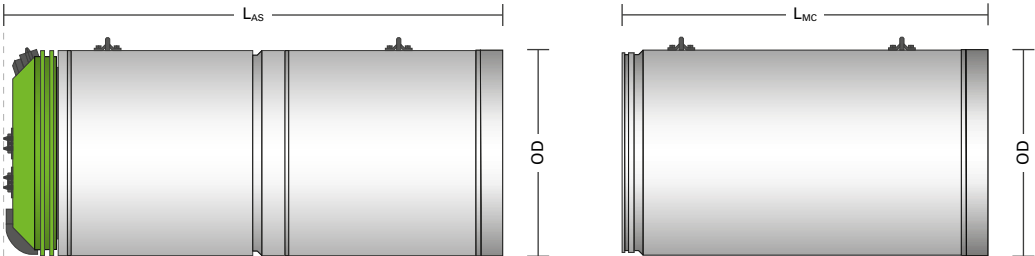
\* Std = standard; Ext = extension kit

**PIONEERING  
UNDERGROUND  
TECHNOLOGIES**



# Machine dimensions

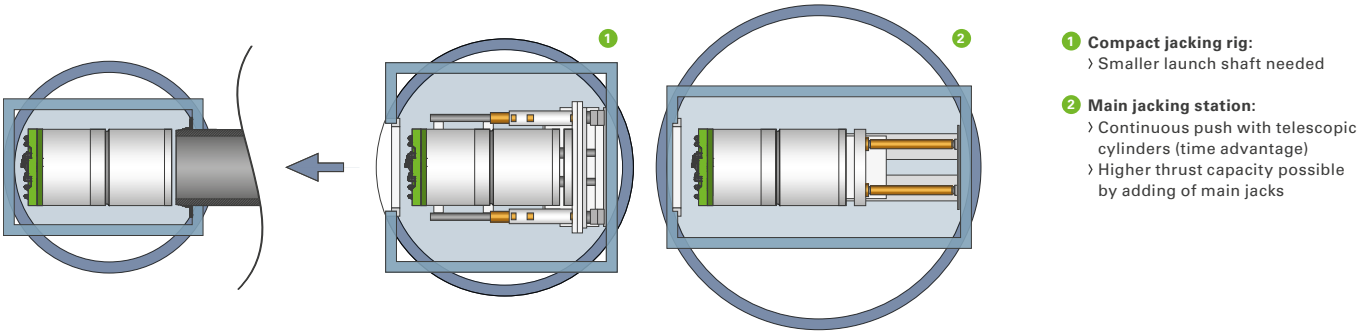
TECHNICAL DATA	AVN1200TB	AVN1400TB	AVN1500TB	AVN1600TB	AVN1800TB
› Outer diameter (OD)	1,505 mm	1,740 mm	1,810 mm	1,970 mm	2,150 mm
› Length artic. shield (L <sub>AS</sub> )	3,750 mm	3,750 mm	3,800 mm	3,900 mm	4,200 mm
› Length machine can (L <sub>MC</sub> )	3,200 mm	3,200 mm	3,200 mm	3,200 mm	3,200 mm
› Max. single weight	13,000 kg	17,000 kg	22,000 kg	24,000 kg	29,000 kg



# Shaft dimensions

TECHNICAL DATA		AVN1200TB	AVN1400TB	AVN1500TB	AVN1600TB	AVN1800TB
Launch Shaft	Pipe length	Shaft size	Shaft size	Shaft size	Shaft size	Shaft size
› Compact jacking rig	2,500 mm	Ø = 4.87m 5.0m x 4.5m	Ø = 5.27m 5.0m x 4.5m	Ø = 5.27m 5.0m x 4.5m	Ø = 6.5m 5.5m x 4.5m	Ø = 6.5m 5.5m x 4.5m
	3,000 mm	Ø = 4.87m 5.0m x 4.5m	Ø = 6.5m 5.5m x 4.5m	Ø = 6.5m 5.5m x 4.5m	Ø = 6.5m 5.5m x 4.5m	Ø = 6.5m 5.5m x 4.5m
Launch Shaft	2,500 mm	Ø = 8.5m 8.0m x 3.5m	Ø = 8.5m 8.0m x 3.5m	Ø = 8.5m 8.0m x 3.5m	Ø = 8.5m 8.0m x 4.0m	Ø = 9.0m 8.5m x 4.0m
› Main jacking station	3,000 mm	Ø = 8.5m 8.0m x 3.5m	Ø = 8.5m 8.0m x 3.5m	Ø = 8.5m 8.0m x 3.5m	Ø = 8.5m 8.0m x 4.0m	Ø = 9.0m 8.5m x 4.0m
Reception Shaft (L <sub>AS</sub> )	3,750 mm	3,750 mm	3,750 mm	3,800 mm	3,900 mm	4,200 mm
› Circular		Ø = 4.5m	Ø = 4.5m	Ø = 5.0m	Ø = 5.0m	Ø = 5.5m
› Rectangular		4.5m x 2.5m	4.5m x 2.5m	4.5m x 2.5m	5.0m x 3.0m	5.0m x 3.0m

All dimensions according to 15m shaft depth.



Machine type description e.g. **AVN<sup>1)</sup> 1200<sup>2)</sup> T<sup>3)</sup> B<sup>4)</sup>**

- <sup>1)</sup> Machine type
- <sup>2)</sup> ID of jacking pipe
- <sup>3)</sup> Access to cutting wheel
  - X = no access
  - T = central door
  - A = door above main drive or in top of pressure wall
- <sup>4)</sup> Type of container, power transfer from container to machine
  - B = electric cable to machine, power pack in machine power pack in machine
  - C = hydraulic drive from container directly into machine
  - E = electric cable from container directly into machine
  - H = medium voltage supply to machine (> 1,000 V)

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