Static

Static calculation of pipes

English

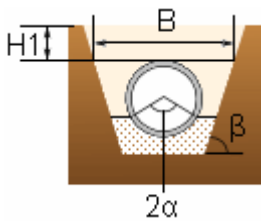
This tool calculates static loads and deformations on smooth pipes, according to **UNE 53331 IN**. Pipelife recommends using the last version of EasyPipe98 from IngSoft GmbH for calculations according the latest version of ATV-DVWK-A 127.

Pipe

- (•) Standard smooth pipe
  - Material: PVC
  - Outside diameter: 250 [mm]
  - Wall thickness: 7.8 [mm]
- ( ) Pragma pipe

Configuration

B	1	[m]
H1	2	[m]
β	70	[°]
Bedding angle 2α	120°	
Soil density ρ	20	[kN/m³]



Soil configuration (backfill and sidewalls)

Backfill installation type	Compacted backfill in all the height of the trench
Backfill soil type	Group 1 - non cohesive
Backfill compaction	95%
Sidewalls soil type	Group 1 - non cohesive
Sidewalls compaction	95%

Advice

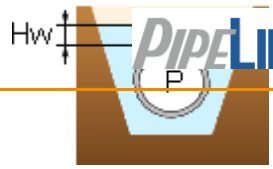
Ground water/internal pressure

- [x] Ignore ground water/internal pressure

Ground water height: 1 [m]

Static

Internal pressure 2 [bar]



Traffic

☐ Ignore traffic

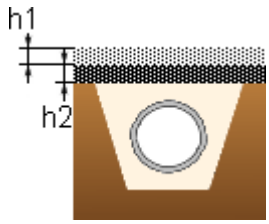
Truck LT 12 - 12 tons, 2 axles

Frequency Normal

Paving

☐ Ignore paving

h1	0.1	[m]
Ep1	2000	[MPa]
h2	0.5	[m]
Ep2	1000	[MPa]



Advice

Calculate