



popcom\_design



## subholer

Dimensions on pipe  
in 2 meters length

4"	Dim.	114,3 mm
6"	Dim.	168,3 mm
8"	Dim.	219,1 mm
10"	Dim.	273,8 mm

Subject to changes in prices  
from manufacturer and supplier of tubes.

**ahlsell**

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**subholer**

Patent Pending  
[www.subholer.com](http://www.subholer.com)



The **Subholer** is a new innovative Norwegian product - researched, developed and produced for supply to industries worldwide, engaged in the provision of subterranean utilities.

The **Subholer** is unique in its simplicity, and provides a cost effective, environmental friendly, fast and efficient- ready made "utility sleeve" through most types of terrain and sub soil - penetrating land mass from 0 to 400 mm random Ø in density.

The product offers numerous advantages over the conventional methods of {post-laying} of utilities, where a trench is traditionally excavated. It is particularly suited to new developments, roads, railway embankments, and other land features where post- infrastructural changes and modifications are required.

The **Subholer** is a product that can be operated by the individual entrepreneur, driven by normal heavy plant. The Subholer consists of a front section with a hardened steel conical nose, which performs the penetration. Individual, high quality steel pipe sleeves are then attached to this, joined by interference fit couplings. Another driving pipe is attached to the rear sleeve.

An area of ground is excavated on one side of the area to be bored - which is the access area for the operation. To keep this excavation to a minimum, it is recommended to use pipes of maximum 3 meters in length. Where a road is the subject, the whole operation can then be carried out either from the road-side, or by closing one lane of the road, allowing for through traffic during the whole operation.

Operation is simple; an excavator equipped with a hammer is used to punch the Subholer through the intended mass. As it penetrates, the vibration from the hammer induces compression around the pipe sleeve, thus causing little disruption to the surrounding mass. As the penetration progresses, sleeves and couplings are added to suit the length required. Upon completion, the rear driver is removed, and the sleeve is ready for utilizing. In the event of the Subholer failing to penetrate an obstacle, or miss-direction, a chain connecting the front and rear components allows for retrieval, and a new attempt.

Tests carried out in Norway, where land mass is predominantly rock, have shown the product to be successful in 80% of penetrations. Tests have shown that in substrates of medium densities a 10 meter bore is achievable in 1 hour. Conventional methods are incomparable.

With favourable ground conditions, and quality heavy plant, up to 30 meters of sleeve can be laid.

The manufacturer of Subholer is ISO 9001 approved, all steel sleeving pipes supplied are fully certified, and material certification is supplied to Customer. Lifetime of the piping is estimated at 50 – 100 years. The product requires minimal maintenance, and spares - if needed, are readily available from manufacturers stock.

#### Main Advantages of **Subholer**

1. Simple in use, no special competence needed for operators
2. Fast, cheap and efficient in comparison to conventional methods
3. No road traffic disruption – can be used at times to suit the entrepreneur
4. No re-filling and re-surfacing of roads necessary
5. No subsequent road surface maintenance
6. ISO 9001 approved manufacturer
7. Material Certificates verify quality approval
8. HSEQ friendly product
9. Easily transportable product

#### References:

Engineer: John Alvseike Consultants in Engineering

*"In connection with crossing of highways where utilities are required, the product known as the Subholer has been developed. The equipment consists of a hardened front piece, steel pipes joined by couplings as required, and a hammer function that punches the product through the ground, with use of an excavator and hammer. Pipes with a diameter of 110 & 125 mm have been driven in under roads where the substrate is of loose mass and small to medium stones"*

*John Alvseike, Haugesund, 14-02-2008*

Otar Skjold Maskin Ltd:

*We now use the Subholer as our primary method for all such operations. Håvard Skjold tel: 0047 90846284*

Norwegian State Highways Authority (Statens Vegvesen)

*"Haugaland & Sunnhordland county office have attended several demonstrations and actual operations of the Subholer in use, where highways have been bored & sleeved. At this time, the product is still in its early stages, but the Highways Department are extremely positive towards the product, and see it as the future for bisecting of roads where utilities shall be laid, as opposed to conventional digging of trenches."*

*Solfrid K.B. Agdestein*