

Pipe Supports

- to overcome underscour

Pipes on the seabed are prone to exposure often due to current erosion of sand and silt bed materials. Where monitoring shows the pipe free span to be exceeded, grout bag pipe supports can be readily installed by Divers in depths up to some 30 to 50m and by ROV beyond this depth. Pipe supports are usually filled with neat cement grout for ease of pumping.



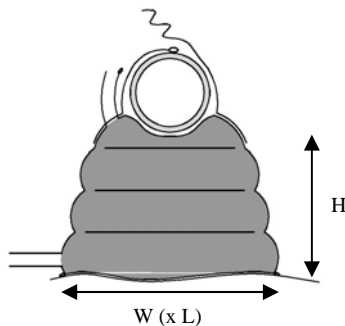
Pipe Support Block Test

Support Types

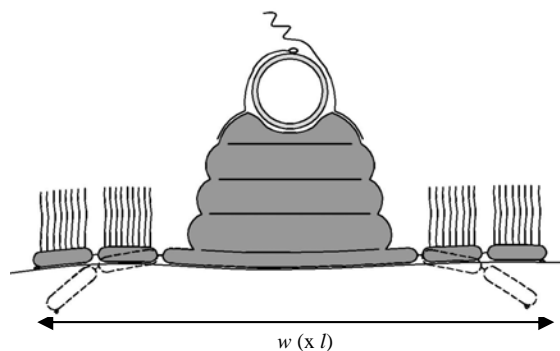
Where the exposed seabed material is no longer prone to erosion, a simple pipe support block can be used. In the majority of cases, seabed erosion will continue to progress and support blocks with an anti-scour slab base are often used.

Information Required

- Pipe diameter (\varnothing)
- Underscour/ support height (H)
- Allowance free span
- Submerged pipe weight
- Soil type and ground bearing pressure
- Repair design life
- Estimated future scour potential



Pipe Support Block



Pipe Support Block with Anti Scour Slab

Supports need to be designed to distribute the pipe load safely onto the seabed without it becoming underscoured itself. The accelerated flow around the pipe and support block can cause underscour erosion. This effect needs to be considered along with general bed erosion or sand wave movement.

Scour protection to pipe supports can be provided by an Anti Scour Slab with Flexible Edge Detail and Fronds. Due to the nature of seabed scour, an appropriate programme of inspection and necessary maintenance is usually advisable.

Proserve purpose manufacture pipe supports for their use and will design supports for land transfer. For scour protection issues, we are able to offer advise but without any obligation. An Installation Guide including materials, plant and preparation work is provided along with arrangement drawings and any design details, initial site support is also available if needed.