

Case Study 18: Alcatel Submarine Networks

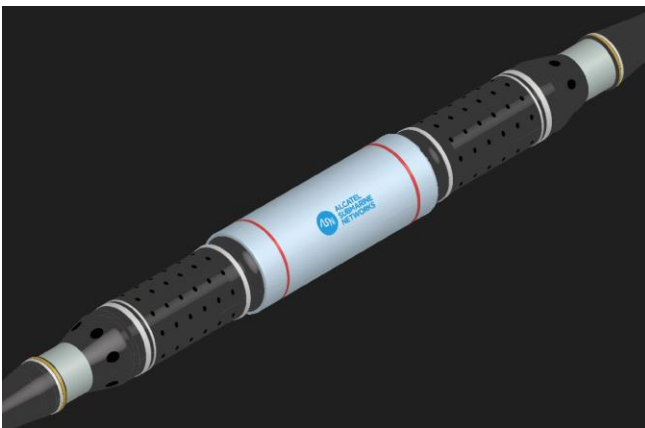
Alcatel uses Tungum® tubing in their optically amplified repeaters.

Alcatel Submarine Networks

Undersea fibre optic cables connect most of the world's people, businesses and institutions, not satellites. Lying on ocean floors, these submarine cable systems carry the vast majority of our international communications and data. Together, they form the backbone for the data centres powering the world wide web.

Alcatel Submarine Networks Optically Amplified (OAL) Repeaters for Submarine Systems are designed to meet the needs of high-capacity Terabit-per-second traffic paths. OAL refers to multiple-channel systems for short- to long-haul applications within unrepeated systems that span full transoceanic distances.

OAL Repeaters for Submarine Systems design ensures a 25-year lifespan for a 5,000 km four-fibre pair transoceanic system, but the repeater can be used at depths of 8,000 m.



Alcatel Submarine Networks Repeater- used to amplify the signal at various points along the cable.



Alcatel Submarine Networks Branching Unit - used to split off connectivity to a site that the cable passes by.

Repeaters, branching units and power feeding equipment are produced in Greenwich, UK, on the site where the world's first transatlantic cable was manufactured in 1858. Today, the site houses modern production and clean room facilities as well as office space for project management and marine operations teams.

The Tungum Solution

Tungum is used as a conduit at both ends of the repeater to contain and protect the optic fibre and carry 13,000V into the repeater housing.

The lifespan guarantee that Alcatel Submarine Networks offer is partly made possible due to Tungum's exceptional performance.

There are many examples where Tungum has been in service for over 30 years – and still going strong!

Please visit our website for more information.

For more information on Alcatel Submarine Networks - visit their website: <https://web.asn.com>