An umbilical is a line that links equipment on the seabed both together and to the control station on the surface. It comprises a mixture of small diameter tubes, cables and/or optical fibers for utility purposes. Umbilicals are a key component in a subsea installation even though they do not transport any produced oil or gas. In 2013 Vallourec will launch its latest offer, Vallourec Umbilicals. The plant intends to have its first order in production by the second quarter of the year. Vallourec Umbilicals produces premium welded stainless steel tubes with higher mechanical characteristics than competitor tubes. These tubes for umbilicals have a lower wall thickness, making them lighter and easier to install. Vallourec Umbilicals will complete the Group’s offshore offer, which already includes tubes and pipes for many offshore applications such as flowlines and risers.

Umbilicals, especially dynamic ones, and the tubes inside of them, must be able to withstand three main challenges.

They must be resistant to extreme pressures (internal and external), fatigue due to the movement of the sea, and corrosion due to seawater and chemical injectors.

Umbilicals can either be dynamic or static. Dynamic refers to a vertical umbilical that links the platform or FPSO (floating production, storage and offloading) unit to the well. Static refers to a horizontal umbilical resting on the seabed.

Vallourec Umbilicals’ tubes will be inserted in the umbilical alongside other components (electric cables, carbon rods, optical fibers). Specifically, Vallourec’s tubes will carry utility fluids necessary for production operations.

Vallourec’s premium tubes are made of high alloy steel containing 25% chromium and 7% nickel. The diameter ranges from half an inch, to one and a half inches, with a wall thickness between 1 and 3 mm.