

HELICAL STRAKES: CUSTOMIZE A CLASSIC



Helical strakes are a popular choice for suppressing vortex-induced vibration (VIV) of subsea tubulars. Protruding fins disrupt the correlation of vortex shedding along a tubular's span, resulting in lower and randomly-phased lift and drag forces. Strakes are often a feasible candidate for risers, tendons, jumpers, and horizontal pipeline spans.

At VIV Solutions™, each strake we build is designed for maximum performance in the field. Our engineers will work with you to determine the best geometric profile, manufacturing materials, and fastening mechanisms required for your application. Variables such as fin height, strake pitch, etc., are all optimized prior to production.

We provide custom products to solve unique challenges such as improving cathodic protection or accommodating riser shrinkage at depth due to hydrostatic pressure. For example, our Spacer Strakes™ utilize a molded-in channel to offset the strake body away from the pipe. Seawater is able to freely circulate in the space between, thereby improving the cathodic properties of the riser system. On insulated risers that experience diameter changes after installation, we use specialized designs to prevent strakes from slipping axially.

Our strakes are lightweight and durable, proven in even the toughest of offshore environments. Choose from regular, anti-fouling, or abrasion resistant strakes depending upon your technical

requirements. We conduct a detailed material qualification program for each project, and invite customers to witness full-scale factory-acceptance testing of the strake bodies.

Quality control and safety are key elements of our manufacturing operations. Trained technicians visually inspect each strake body, and tolerance checks are conducted regularly throughout the manufacturing process. A detailed data book accompanies delivery of the strakes and includes items such as dimensional drawings, material certifications, inspection reports, job safety analyses, and shipping records.

For additional information about VIV Solutions helical strake products, please contact us or visit us online. We look forward to working with you on your next suppression project.

Common strake design parameters*:

Fin height = 0.25D

Strake pitch = 12-18D

Strake efficiency = 90% or greater

Drag coefficient = 1.4-1.8

**Values are dependent upon factors such as surface roughness, coverage density, etc.*

VIV Solutions
THE VIV SUPPRESSION EXPERTS