

Highly resilient vortex induced vibration suppression

Tri-Strakes® S (Stinger)

In deepwater riser applications where the use of steel catenary risers (SCRs) is common, these risers can be introduced to the phenomenon of Vortex Induced Vibration (VIV). This is caused by the regular shedding of vortices from the pipe when subjected to a steady current. The shedding of the vortices can “lock into” the resonant frequency of the pipe along a significant length and can cause the pipe to vibrate. VIV causes accelerated fatigue damage and can give rise to problems such as pipe girth weld failure or premature pipe failure. Other applications prone to VIV are rigid steel flowlines unsupported over free spans and major deepwater field developments requiring a large number of thermally insulated pipelines.

Trelleborg Applied Technologies recognizes that this is an increasingly common problem and therefore, in order to suppress the damaging vibrations to an acceptable level, have put together a comprehensive design package which provides a successful VIV suppression system.

To perform at every level, Trelleborg Applied Technologies built up a wealth of in-house VIV knowledge through consultation with industry renowned hydrodynamicists, alongside computational analysis. Physical hydrodynamic

testing combined with in-house impact, axial slip and load bearing capacity testing has produced a hydrodynamically efficient and load bearing capable product. All materials and geometries used are fully qualified for long term subsea use.

To provide you with performance at every level, Trelleborg Applied Technologies offers a range of VIV Suppression Strakes to meet your needs.



PU VIV Suppression Strakes

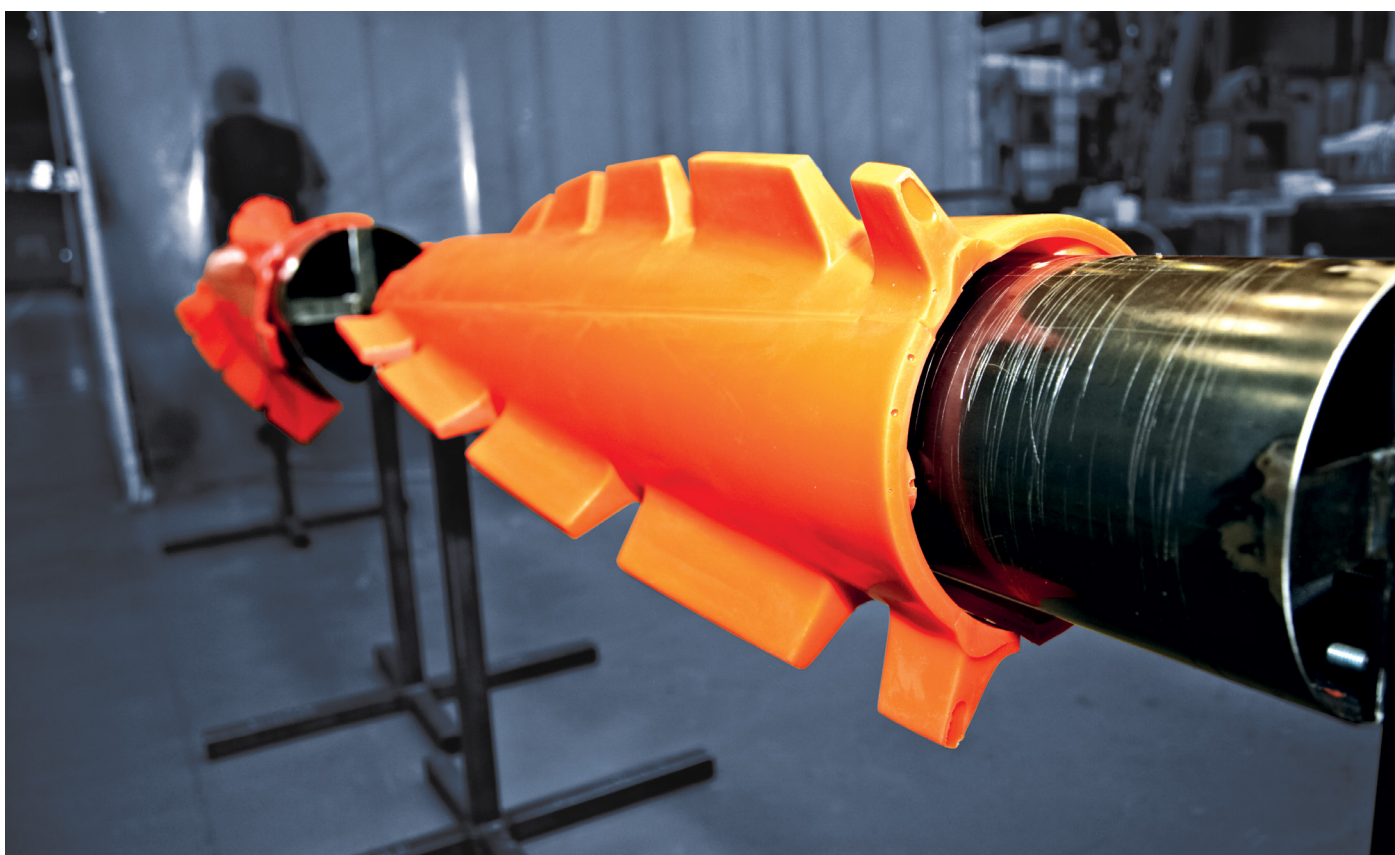
PU VIV suppression strakes combine the benefits of traditional cable and flowline impact and abrasion protection with an effective VIV suppression profile. The product is manufactured in marine grade polyurethane (PU).

Integral Strakes

Trelleborg Applied Technologies is able to mould strakes profiles into many of its products during manufacture. This is ideally suited for thermal insulation shells, where strakes can be molded in, to provide effective VIV suppression.

For a stackable and lightweight vortex induced vibration suppression solution take a look at our Tri-Strakes® L (Lite) product.

For a combination of the stackability of the Tri-Strakes® L Lite with the load resilience of the Tri-Strakes® S Stinger take a look at our Tri-Strakes® C Combi product.



Contact Us

Trelleborg Applied Technologies division is an industry expert in delivering innovative and reliable solutions that maximize performance for our customers. Our vast range of specialized, customizable materials ensure peace of mind at every stage of your project. With reliable and efficient project management and manufacturing we endeavour to take performance to new levels by achieving your goals safely, on time and within scope.



Brazil: +55 22 2106 4040
Skem: +44 1695 712 000
Houston: +1 832 456 8300



Email: appliedtechnologies@trelleborg.com



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