



Screen CF 130

Composite Trasch racks Icing on intake trasch racks?

Traditional intake are susceptible to ice accretion, which can very quickly lead to significant cases losses. An easy way to get rid of the problems is to use the Comp Rack.

A maintenance-free solution, all elements of the composite or stainless steel.

Minimal need for maintenance during the intake trasch racks entire life. Should local injuries occur, these easily remedied by the modular structure. This allows the individual elements of a section can be replaced.

A reduction of any ice problems.

The flow-optimized profile reduces ice problems.

The profiles have a very low thermal conductivity, which also reduces conductivity for cooling.

The profiles regains its shape after local dynamic load-stresses which may occur in connection with ice. This considerably simplifies any repairs when the intake trasch rack section recovers its shape when it is unloaded.

The fine surface roughness of <1 micron is also relevant to any ice not be secured and at the same time it easier to loosen, then contact forces between ice and profile reduced.

For comparison, steel, cold drawn bar 5-10 microns, hot-drawn 15-25 microns, in output mode, it has since begun to corrode, it is of course much higher.

Reduced risk of vibrations

Thanks to a flow-optimized profile minimizes Comp Rack the emitted Karman vortex energy that could otherwise give rise to harmful vibrations.

Minimal case losses

Lower case losses, thanks to a flow-optimized profile (shape factor of ~ 0.76, to comparing with a rectangular profile that has the form factor of 2.42)

A lightweight system

A low weight for simplified installation and maintenance. A Comp Rack Solution weighs only about 1/3 - part of a similar steel solution.

Reduced risk of fouling

The fine surface roughness of <1 micron reduces the risk of fouling by marine organisms.

We perform an authenticating FEM analysis of each project.

With CompRack® intake trasch rack you receive:

Excellent mechanical properties

Material Data acc. testing to EN ISO14125: 1998 rendered by Sicomp (www.sicomp.se).

Flexural Strength, Average ± standard deviation (MPa) 928 ± 45

Flexural modulus, average ± standard deviation (GPa): 47.6 ± 0.6

Elongation to break, average ± standard deviation (%) 1.99 ± 0:07

Comp Rack profiles, which consists of a specially designed fiberglass composite, is linearly elastic up to tensile strength (tensile / flexural > 900 MPa, cf. yield strength steel, 235 MPa, tensile 340-470 MPa), which means that the profiles do not remain deformed by local stresses which does not create crime in the profiles.

This type of local dynamic load stresses can occur in connection with ice.

This together with the modular build-up in turn makes it possible to easily can repair the gate sections by replacing only the profiles possibly damaged if exposed to this type of loads.

