

Mr. Vane

Self-steering for
sensible sailing

The first self steering system especially
designed for use on a smaller boat



The concept

Mr. Vane has been developed with the use on smaller boats in mind. The main focus was on three issues:

Weight

Adding weight to the end of a boat affects its behaviour in waves. This is why it is important to keep it to a minimum. Due to clever construction and the use of modern plastics Mr. Vane is the lightest system ever: just 9 kgs or 17 lbs.

Mounting options

Smaller boats often have transom hung rudders and outboard engines. Mr Vane is the first wind vane system that can be mounted in front of and underneath most outboard mountings. For this the vane mast can be mounted off centre (optional off centre kit required).

The optional mounting kit allows for a lot of different mounting configurations.

Price

Smaller boats usually carry smaller price tags. So does Mr. Vane!

Mr. Vane has been designed for self assembly, you'll have to do all the labour intensive jobs yourself. This will not only save you money on the purchase price but also on shipping! What do they say about things in small packages?

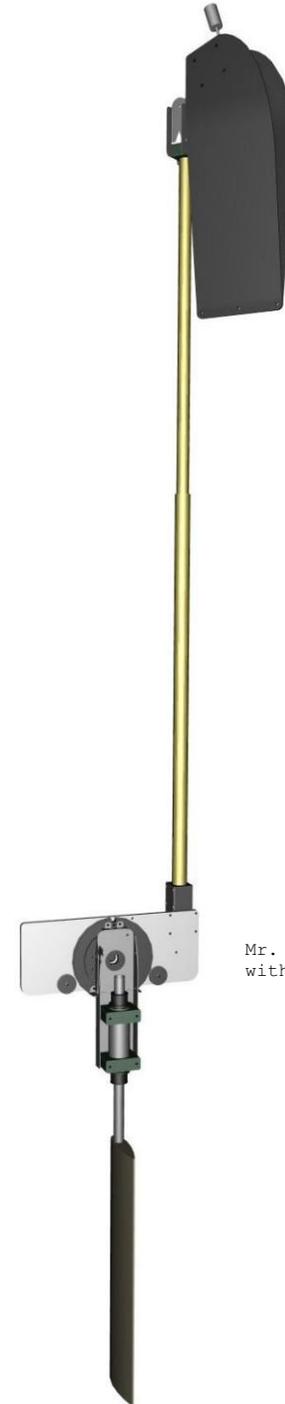
So what's the catch?

Lower weight, more mounting options AND a lower price? That sounds too good to be true! What's the downside?

As part of the design proces, expensive work was taken out of manufacturing and replaced with easy but often time consuming work that you can do yourself, with help of the manual. For instance, instead of balancing the wind vane in the factory it now has to be done by you. This can take quite a lot of time to get it right. But there is a bonus here as well: you can adjust it to a degree that no factory can provide, leading to even better performance in light airs!

The many mounting options may offer more possibilities then you are able to choose from. Feel free to contact us to get to the best solution for your boat and situation.

www.mrvane.com



Mr. Vane, basic system
with off-centre mast

About Mr. Vane

The principle

Mr. Vane works on the servo pendulum principle. This has been around for over 3 decades and has proven it self as the best self steering method.

The pendulum rudder normally is in line with the boats main rudder. It can rotate around two axis. The rotation around the vertical axis is controled by the windvane. If the windvane moves the pendulum rudder rotates around the vertical axis. Because it can also move around a horizontal axis (the big flat disk) the pendulum rudder moves sideways, generating a lot of force. This force is transmited to the boats helm via steering lines.

So Mr. Vane uses the boats own rudder as part of the self steering, keeping the windvane in the neutral position, corresponding with the desired course.

The windvane

Mr. Vane is the first system with an Up Side Down vane (USD) This results in less oversteering on running courses and also improves performance when heeled.

The complete windvane head can be removed in seconds.

Sensitivity

Mr. Vane is fitted with acetal/glass ball bearings and custom ball bearings in the pendulumrudder. This makes it the most sensitive system ever. This means that very little wind is needed to steer the boat and more importanly, it also steers very well with the wind from behind!

Removable pendulum rudder

The pendulum rudder can be removed for storage. It only takes seconds to reconnect it. The connection doubles as a safety release if the pendulum rudder gets struck by floating debris.



What's in the box?

With Mr. Vane you only pay for what you need. Parts that you may already have are not included or sold separately. So the basic system is just that: All the components that you will certainly need to put the system together and get it working.

The parts are packed by subassembly.

You supply the following parts and materials yourself:

Materials to finish the pendulum rudder (sandpaper, underwater primer etc.)
The steering lines and all the guiding blocks to get the lines to the tiller.
Fasteners and spacers to connect the system to your boat.

The manuals are available as a download.

Mounting Mr Vane, basic system

It may be possible to mount Mr. Vane to a boat without using the mounting kit.

This depends on both the type of transom and your level of skills.

The easiest transom to mount the system to is the flat and vertical transom. This only requires 4 bolts and 55 mm long spacers with a diameter of about 30 mm. The steering lines have to be guided over the top of the transom and to towards the side of the cockpit (see picture).

If you have the skills you can figure out a way to mount the system on another kind of transom. If you like to exchange ideas, feel free to contact us!



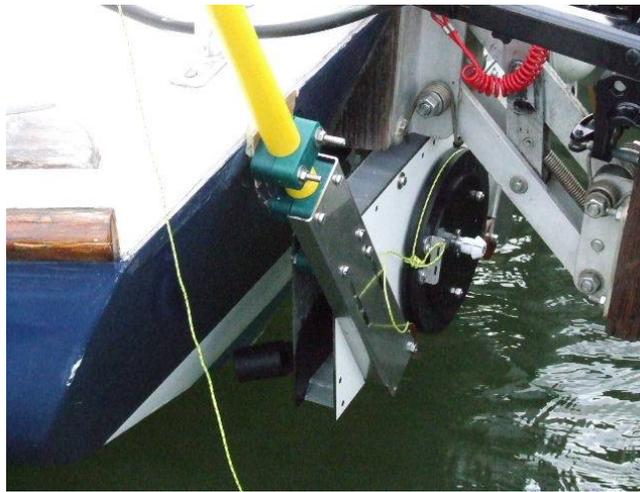
Mr. Vane xprmntl, basic system,
mounting by customer

Using the basic mounting kit

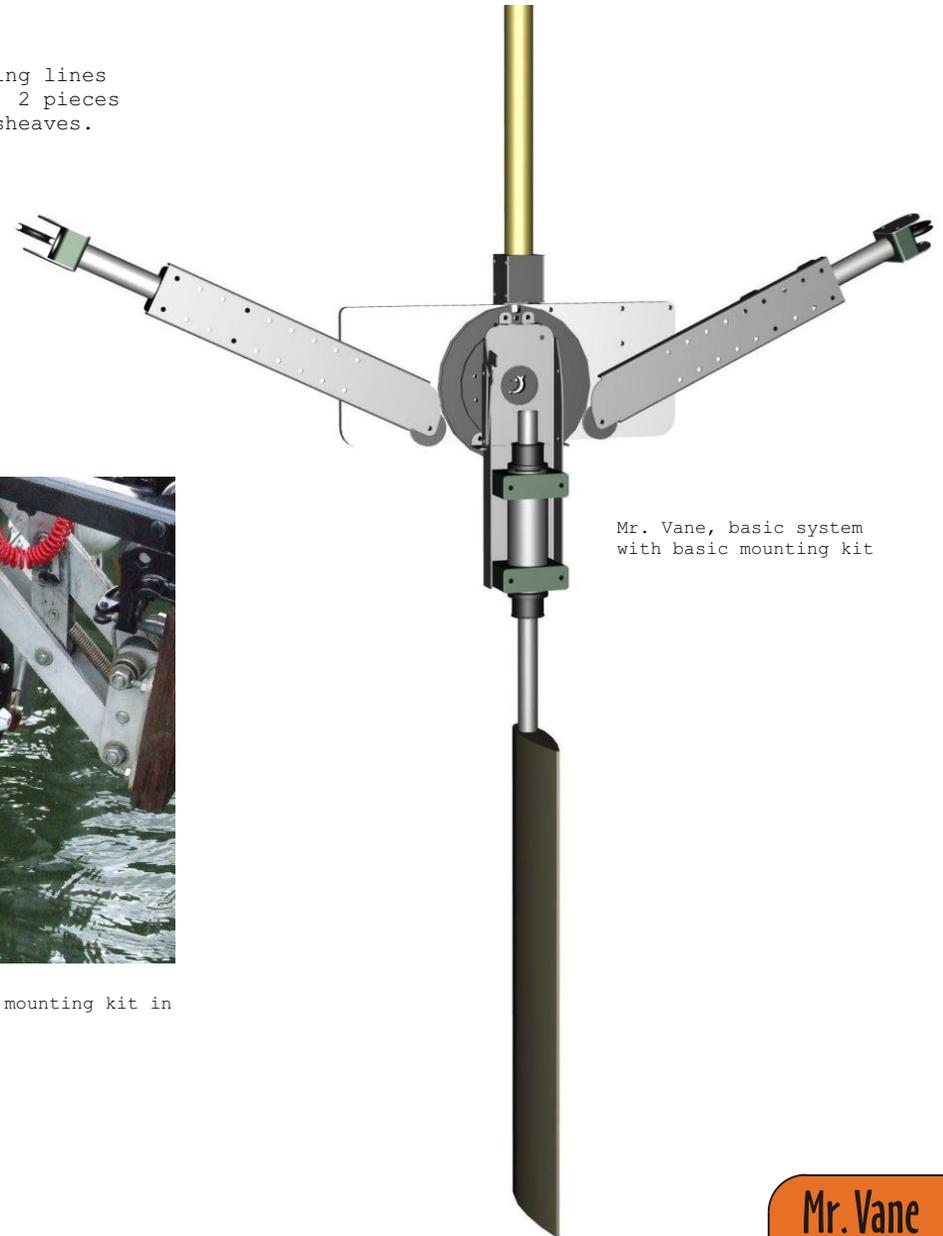
The basic mounting kit allows for a 4 point mounting and guides the steering lines to deck level at the same time. It consists of 2 stainless steel brackets, 2 pieces of 1 metre long glass fibre tube, a number of clamps and two custom made sheaves.



The basic mounting kit gets the steering lines to deck level



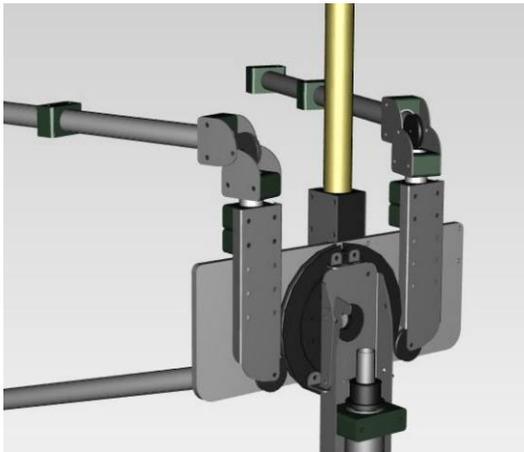
Mr. Vane xprmntl, basic system with basic mounting kit in the proces of being mounted



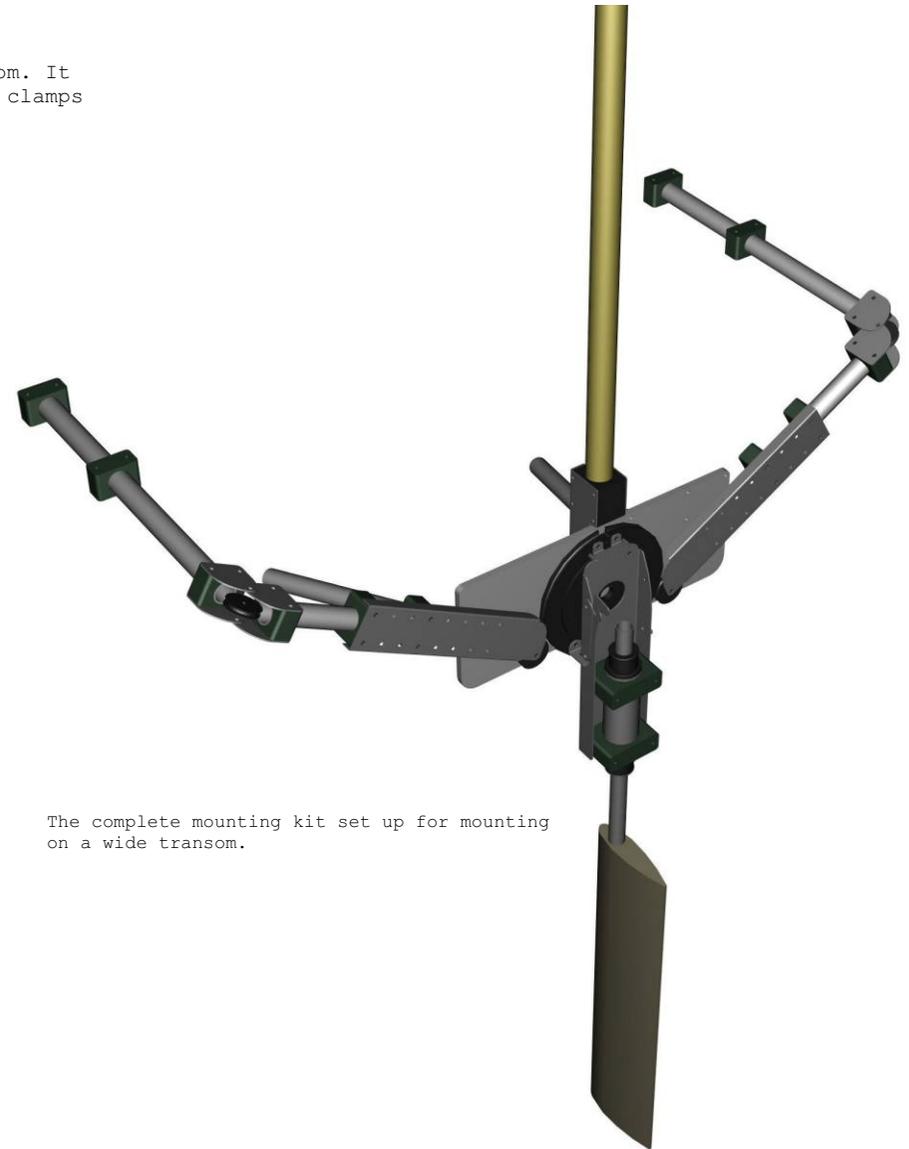
Mr. Vane, basic system with basic mounting kit

Using the complete mounting kit

The complete mounting kit allows for mounting Mr. Vane to almost any transom. It consists of the basic mounting kit with the addition of 2 more tubes, more clamps and extra fittings.



The complete mounting kit with shortened brackets for mounting on a small transom.



The complete mounting kit set up for mounting on a wide transom.

What do you need to assemble Mr. Vane?

Time

Obviously it will take time for you to assemble the system. It is important that you don't have to rush things.

If you are in a hurry it is very easy to drill a hole in the wrong spot or cut away too much. A relaxed approach helps to prevent this.

Skills:

Part of the concept of Mr. Vane is to let you do labour intensive jobs. This way you save a lot of money. This also means that precision that other brands have to machine in to their product (expensive!) is adjustable in Mr. Vane (very sensitive!).

The assembly is mostly a bolt together exercise. You will need to drill some holes, finish some rough edges. Some holes need to be counter sunk (see picture) and you may need to cut down the pendulum rudder tube. The pendulum rudder blade is bonded to the tube but remains to be finished.

To mount the system to your boat you will need to make some spacers, even if you use the mounting system.

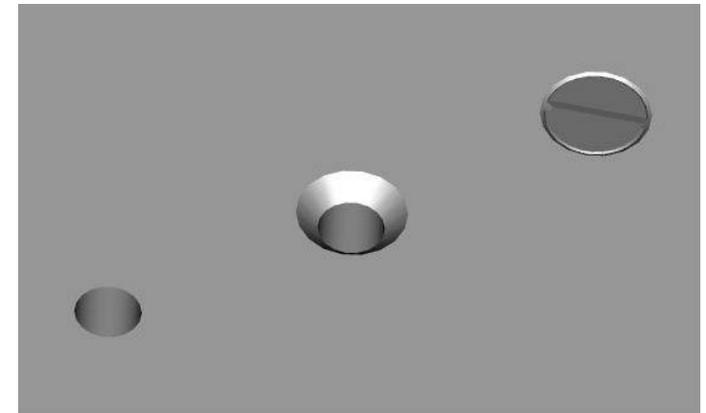
Tools

hacksaw with NEW fine toothed blade
utility knife
adjustable wrench or spanners
hexagonal key 2mm (available from web shop)
counter sink drill bit (available from web shop)
whiteboard marker and pencil
fine round file less than 6 mm and fine flat file (6 mm is less than 1/4")
screwdriver, flat
screwdriver, philips
metric measuringtape
electric drill and drill bits, a drill stand or bench drill is recommended
A workbench with vice, aluminium covers for the vice's beak

Materials:

fresh 220 & 400 grid sandpaper
clear tape
super glue
under water wood primer or epoxy & varnish
washing-up liquid

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Some holes need to be counter sunk. This can be done with a hand drill but it is best to use drill stand or benchdrill with depth gauge



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