

# VPRS ... velocity prediction rating system

## Yacht ratings from a VPP

VPRS uses a velocity prediction program (VPP) and a manageable set of measurements to give a scientific assessment of sailing performance. Boat speeds are predicted for a range of wind speeds over several points of sail. A weighted average of the predictions is then taken and expressed as a familiar Time Correction Coefficient (TCC).

Measurements and other data are carefully chosen to capture the equipment and design variations which have the greatest impact on yacht performance. In addition the measurement definitions are written to minimise the opportunities for rating optimisation.

The result is a fair, affordable and easy to use rating system.

## So, who's using VPRS?

Poole Yacht Racing Association (PYRA) ran a trial in 2010 and they have used the system exclusively ever since. Today it is used by all the main clubs in Poole Harbour and, following a successful trial in 2014, it has been adopted by Chichester Cruiser Racing Club.

Key benefits of VPRS cited by club captains are flexible class boundaries given by a single rating system, good close racing within classes, and increasing turnout.

There is continuing interest from clubs along the south coast and from elsewhere in the UK.

## At a glance ...

- ◆ Annual rating certificates for any boat cost £20.
- ◆ Certificates are published on the website and can be viewed by anyone.
- ◆ Two free trial re-ratings are available every year – with certificate re-issue if required.
- ◆ VPRS is strictly measurement-based and rates modern hulls, classic designs and sports boats.
- ◆ Ratings are universally applicable because the system does not depend on local adjustments.
- ◆ A VPP is used to give a scientific assessment of boat performance; the ratings are not a means of personal/crew handicapping.
- ◆ Every boat is independently assessed; this allows type evolutions throughout production to be captured, and departures from one-design class rules to be accounted for.
- ◆ Performance gains from laminated and low cut sails as well as losses from more cruising orientated sails and furling gear are reflected in the ratings.
- ◆ TCCs for both no-spinnaker classes and for mixed fleets are included on the certificate.
- ◆ The system is designed and run by engineers with racing experience – and backgrounds in naval architecture, scientific research and software design.