

MVP "CAST" Gauge

ODIM Brooke Ocean has enhanced its ODIM MVP (Moving Vessel Profiler) technology to include a "CAST Gauge" (Computer Assisted Sound speed Technology). The CAST Gauge is a visual and numerical tool that will assist the hydrographer in deciding when to make a sound speed cast, how deep the cast should be, and at what times the casts should be executed. All based on the survey requirements.

The CAST Gauge is a technology that integrates the science behind the "uncertainty wedge", originating from research at the Ocean Mapping Group, University of New Brunswick, and that of the Total Propagated Uncertainty (TPU) with respect to refraction.

Sound speed through the water column is an important component to determining the Total Propagated Uncertainty (TPU) of a sounding. If correct modeling of refraction is not implemented then large errors can result in the sounding horizontal position and depth.

However, optimisation of the entire multi-beam data collection system is required in order to minimise maintenance costs as well as to apply effective survey planning and procedures. Therefore, efficient use of the MVP is necessary to ensure the collected multibeam data is adequately corrected for refraction to the point where customer accuracy requirements are achieved.

<https://www.hydro-international.com/content/news/mvp-cast-gauge>
