

HSS Visibility Sensors

on the Severn Bridges linking England and Wales

Biral has recently supplied HSS Visibility Sensors to replace the older Pharos Marine type detectors that have previously been used on both of the UK Severn Bridges.

The sensors are in place to warn approaching ships of the proximity of the bridge structures in poor visibility. The sensors continuously monitor the visibility and at specified levels automatically switch fog horns to provide an audible alert. In addition, the old bridge also operates navigational warning lights on the bridge support pillars on the east side to assist vessels heading out to sea. Both systems are set up to work only when the tide is high enough for shipping to navigate the channel. The visibility sensors are mounted on the pylons below the transport decks of both bridges. Each bridge operates the warning systems independently and they require little or no supervision or maintenance.

The HSS sensors used are the VF-500 analogue output model with a fog discriminator board installed to 'switch' the safety equipment when the visibility drops below half a mile and only after the fog has been present for at least 5 continuous minutes (to avoid the alarm being set off in error by a passing ship's exhaust). This set-up ensures that no unnecessary noise or light pollution is produced unless absolutely vital to safety as well as keeping economical factors to a minimum in terms of power requirements.

As the Severn River bridges are such an important transport link between England and Wales reliability and accuracy are absolutely critical factors. The Biral HSS units are well known for these traits and with our location close by in Portishead it is good to see such an important and visible UK landmark using locally manufactured safety equipment.

If you wish to know more about the Severn Bridges please check out the following web site;

www.severnbridge.co.uk

For more information on HSS visibility sensors in coastal and offshore applications please contact the Biral Met Team via email: met@biral.com or tel: +44 (0)1275 847 787



A view from beneath the new Severn Bridge where one of the Biral HSS VF-500 fog detectors is positioned.

The first Severn bridge was opened in 1966 to replace the ferry crossing. The second crossing, necessary because of the increased amount of traffic and the fact that the original bridge has to be closed in very high winds, was completed in 1996.

Both Severn bridges link England and Wales, carrying the M48 and M4 respectively.