New Hammerhead welding solution

Speciality Welds Ltd has developed solutions to the long-standing problems associated with underwater wet welding and in particular the skills required to produce high quality welds in poor and/or nil visibility. The new system, which has been named Hammerhead in keeping with the company's 'fish' brand, addresses problems in obtaining high quality wet welds in nil visibility, without the need for experienced (skilled) welder-divers.

By removing the individual welding skills from the operation, there's no need for the diver-welder to control parameters that affect quality, such as travel speed, electrode angle, arc length, accurate deposition, etc. Because the operator no longer needs to control these parameters, it's not essential to have good visibility. So, even in nil visibility conditions high quality repeatable welds can be produced time after time.

In removing the skills necessary to carry out underwater wet welding, Speciality Welds have modified the fundamental approach to how 'stick' welding is carried out. Their system allows the operator a far more simplified role.

How is all this achieved? In simple terms, by creating a spot/plug weld rather than having to deposit a fillet weld within a specified joint.

By removing the need for a fillet weld deposit they have also simplified the joint configuration (simple lap joint) and all the preparation that goes with it, while also removing the need for extensive cleaning of the joint area, chipping off metres of slag prior to additional passes, etc. In fact there's no need for additional passes as the process is designed as a 'one-shot' approach, i.e. one electrode produces one spot/plug weld.

Other than the control system/electrodes, all other equipment is exactly as conventional 'stick' welding. The control unit is connected to the welding power source via the remote control facility and is powered by 110v supply. All welding leads pass through their 400 amps Piranha safety switch before going to the diver.