Safe Electricity Use Under Water

Preventing the dangerous hazards which may arise from the use of electricity under water are dealt with in †Code of Practice for the Safe Use of Electricity Under Water', a seminal publication from the International Marine Contractors Association (IMCA, UK). The Code covers all types of electrical equipment used by a diver - employed for his benefit, either under his control, or under the control of the diving support team.

"The Code deals with vital issues such as the prevention of electric shock, and other concerns, including the degradation of electrical insulating material by heat, which can result in the emission of toxic or explosive products, and hot surfaces or electric arcs from faulty equipment, or switching devices, that can ignite some gas mixtures and pollute the diver's breathing gas supplies," explains IMCA's Chief Executive, Hugh Williams.

The Code (IMCA D 045) also covers any electrical equipment or supply that the diver may work on, or which is in the vicinity while gaining access to the work site. The Code considers the risks arising from the various environments encountered and makes recommendations for the selection, installation and maintenance of electrical apparatus used to enable an adequate level of safety to be achieved.

The wide-ranging 68-page Code has sections on physiology, derivation of values used, definitions and explanations, basic assumptions, ensuring electrical safety, application scenarios and in the appendix topics covered include a bibliography, calculation of 'safe distance', residual current devices, salinity of water, design considerations, batteries, installation practices, methods for protection against shock, and a summary table of safe practises.

Printed copies of the Code are available for GBP10.00 plus VAT for IMCA members, and GBP20.00 + VAT for non-members (plus delivery charge where applicable) from www.imca-int.com/publications and publications@imca-int.com.

https://www.hydro-international.com/content/news/safe-electricity-use-under-water