ADCI / IOGP / IMCA Diving Terms

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The International Marine Contractors Association (IMCA) is the international trade association representing offshore marine contractors, service companies, and the industry's supply chain.

IMCA's mission is to improve performance in the marine contracting industry. Our value proposition is to influence our industry in key technical, contractual, policy and regulatory matters that are in the collective best interest of the marine contracting industry.

For over 25 years IMCA has maintained an important body of knowledge to assist our industry in the form of published guidance documents promoting good practice across a wide range of technical and professional disciplines. Documents have a self-explanatory title and are catalogued using a code containing letters and numbers. The letter indicates the discipline, and the number is simply sequential within that discipline.

Members are expected to adopt as a minimum standard the technical guidelines (published documents, information notes and other materials) produced by the Association appropriate to the technical division(s) and region(s) to which the relevant Member belongs.

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Glossary of Diving Terms

Term	Definition	Source
A foot of seawater (fsw)	A unit of pressure at sea level generally defined as representing the pressure exerted by a foot of seawater having a specific gravity of 1.027 and is equal to approximately 0.445 pounds per square inch	ADCI
Actual cubic feet per minute (acfm)	Refers to the actual volume of gas supplied to a diver, bell, etc., at ambient pressure	ADCI
Additives	Include abrasive (grit) entrainment, abrasive slurry mixtures and chemicals that are added to the flow of high pressure water	IMCA
Adiabatic compression	Compression of gas leading to a rise in temperature	IMCA
Ambient pressure	The surrounding pressure at depth	ADCI
Amplitude	The size or strength of the signal	IMCA
Analyser	A device for measuring percentages of gases, or contaminants in breathing gas. Often fitted with hi-lo alarms.	IMCA
AODC	Association of Offshore Diving Contractors	IMCA
Appropriate breathing mix	A breathing mixture that, having regard to the system and equipment used in the diving operations, the work undertaken in those operations, and the conditions in which and the depth at which they are to be carried out, is suitable in content and temperature and of adequate pressure	ADCI
Ascent times	The time interval between leaving the bottom when the dive is terminated and reaching the surface	ADCI
Atmosphere (ATM) (atm)	Unit equivalent to 14.7 psi or 760 (mm) of mercury	ADCI
Atmosphere absolute (ATA) (ata)	Total pressure, including atmospheric, to which a diver, bell, etc., is subjected	ADCI
Audit	An evaluation of a person, organisation, system, process, enterprise, project or product	IOGP
Bailout bottle (EGS)	See Diver-worn or carried emergency gas supply	ADCI
Bar	A unit of pressure equal to 1 atmosphere (atm)	ADCI
Beacon	A colloquial term for a transponder or other seabed unit that transmits acoustic ranges or data	IMCA
Bell (open bell and closed bell)	An enclosed compartment, pressurised (closed bell) or un-pressurised (open bell), that allows the diver to be transported to and from the underwater work area and that may be used as a temporary refuge during diving operations	ADCI
Bell-run	A bell-run begins when the clamp between the bell and the chamber is first loosened and ends when the clamp is reconnected, ready for pressure equalisation and final transfer of the divers back to the chamber complex	IMCA
Bends	See Decompression sickness	ADCI

Term	Definition	Source
Bendwatch	Period of time required for divers to be in the vicinity of a recompression chamber following decompression	IOGP
Bleed valve	A valve for draining liquids, or venting gas, from a pressurised system	IMCA
Blind flange	A component for closing an open end of pipework which is suitably rated to maintain the pressure rating of the pipe	IMCA
Block valve	A valve which provides a tight shut-off isolation purpose	IMCA
Bottom door	The door located outside a diving bell which, when closed, allows the bell to be lowered to depth while maintaining the internal pressure at atmospheric for observation or bell-bounce diving. Also prevents the bell from flooding should it be lowered to a depth greater than the bell internal depth	IMCA
Bottom time	The total elapsed time, measured in minutes, from the time that the diver leaves the surface in descent to the time that the diver begins his direct ascent	ADCI
Bounce diving	A form of bell diving where the diver is exposed to pressure for an insufficient time for the dissolved gas in body tissues to reach saturation	IOGP
Breathing system	Device or apparatus for delivering appropriate breathing mixture	ADCI
Burst pressure	The pressure at which a pressure containment device would fail structurally	ADCI
Certification	Certification confirms that a particular test or examination has been carried at an identified time on a specific piece of equipment and witnessed by a competent person (recorded with inspector's name, organisation and qualification). However, it does not confirm that a piece of equipment is fit for purpose or safe to use but records what examination and testing has been carried out	IOGP
Class certification	A type of certification used to confirm that vessels and offshore systems comply with classification society requirements	IOGP
Classification	A diving system built in accordance with a classification society's own rules can, at the owner's request, be assigned a class	IMCA
Cleaned for oxygen service	Cleaning of equipment or system to ensure elimination of all hydrocarbons and other potentially dangerous contaminants when system is to be used in oxygen service. See also Oxygen cleaning	ADCI
Company medical adviser	A nominated diving medical specialist appointed by a diving contractor to provide specialist advice	IMCA
Competent	Having sufficient training or experience (or a combination of both) to be capable of carrying out a task safely and efficiently	IMCA
Compression	The period in which a diver is exposed to continual increases in pressure while being transferred from the surface to working depth	IOGP
Compressor	A machine that raises air or other gases to a pressure above 1 atmosphere	ADCI
Communications (comms) box	Communication device which allows the supervisor to talk with divers in the water or in a decompression chamber	IMCA

Term	Definition	Source
CPR	Cardio-pulmonary resuscitation. A combination of artificial respiration and artificial circulation	ADCI
Cylinder	A pressure vessel for the storage of gases	ADCI
Dead man anchor (DMA)	Independent anchor point which, after assessment, is a suitable fixed point from which to restrain the load	IMCA
Deck decompression chamber (DDC)	A pressure vessel for human occupancy which does not go under water and may be used as a living chamber during saturation diving, diver decompression or treatment of decompression illness. Also called compression chamber, recompression chamber, deck chamber or surface compression chamber	IMCA
Decompression	Releasing from pressure or compression following a specific decompression table or procedure during ascent; ascending in the water or experiencing decreasing pressure in the chamber	ADCI
Decompression chamber	A pressure vessel for human occupancy especially equipped to recompress, decompress, or treat divers (see Deck decompression chamber)	IOGP
Decompression schedule	A time-depth profile with a specific bottom time and depth, whose application is calculated to safely reduce the pressure on a diver	ADCI
Decompression sickness	A condition with a variety of symptoms that causes the formation of bubbles of gas in the blood or other tissues of the diver during or subsequent to ascent or other pressure reduction	ADCI
Decompression table	A set of decompression schedules	ADCI
Depth	The pressure attained by a diver; expressed in feet or meters of seawater	IOGP
DESIGN	Diving Equipment Systems Inspection Guidance Note	IOGP
Design work pressure (DWP)	Maximum working pressure at which a hose or tube is rated for continuous operation	IMCA
Differential pressure (Delta P)	Occurs when there is suction of water, or where water moves from an area of high pressure to one of low pressure	ADCI
Disconnected	Describes equipment (or part of an electrical system) which is not connected to any source of electrical energy	IMCA
Dive control panel	The panel from where a supervisor runs a dive or operates a chamber. Fitted with valves, supply pressure gauges, depth gauges and analysers	IMCA
Dive location	The vessel or other structure from which dives are conducted and supported. More specifically, the point from which the actual dive is controlled	ADCI
Dive plan	A plan prepared for each dive or series of dives to brief the diver(s) about the work to be undertaken including the necessary safety precautions to be taken	IMCA
Dive station	The site from which diving operations are directly controlled	ADCI

Term	Definition	Source
Dive supervisor	A dive supervisor is responsible for diver's overall safety and ensures that all control measures identified through the risk assessment process are implemented	IOGP
Dive team	Tender/divers, divers and diver support personnel involved in a diving operation, including the diving supervisor	ADCI
Diver's indicator light	A light attached to a diver for the purpose of indicating the position of the diver when he or she is on the surface of the water	ADCI
Diver medical technician	A member of the dive team who has undertaken advanced training in emergency care and the management of diving related illnesses	IMCA
Diver-worn or carried emergency gas supply (bailout)	The gas required to be worn/carried by the diver, while underwater	ADCI
Dives	A person 'dives' if they enter either (1) water or any other liquid, or (2) a chamber in which they are subject to a pressure greater than 100 millibars above atmospheric pressure and, in order to survive in such an environment, they breathe air or other gas at a pressure greater than atmospheric pressure	IOGP
Diving	Underwater activity and related recompression facility operations where personnel are subjected to elevated ambient pressure	IOGP
Diving basket	A diver deployment device normally designed with an open cage	IMCA
Diving bell	A pressure vessel for human occupancy which is used to transport divers under pressure either to or from the underwater worksite. Also called closed diving bell or submersible decompression chamber	IMCA
Diving medical	A check carried out by a physician trained as a medical examiner of divers to determine a person's fitness to dive. Diving medicals are normally carried out annually	IMCA
Diving medical specialist	A doctor (diving medicine physician) who is competent to manage the treatment of diving accidents, including, where appropriate, mixed gas and saturation diving accidents. Such a doctor will have undergone specialised training and have demonstrated experience in this field	IMCA
Diving method	The combination of diving equipment, breathing medium and compression/decompression used for a diving operation, e.g. surface supplied air, nitrox and saturation	IOGP
Diving operating personnel	Any member of the dive team whose activities are regularly scheduled as necessary to conduct diving operations at or from the dive station	ADCI
Diving operation	A diving operation is a portion of a diving project that can be safely supervised by one person. Can be a single dive or a number of dives	IOGP
Diving project	The overall diving job, whether it lasts two hours or two months. A diving project ends when all divers have safely returned to atmospheric pressure	IOGP

Term	Definition	Source
Diving project plan (DPP)	Documents and information available on-site at a diving project and should include mobilisation and demobilisation plans, the diving technique/procedures to be used, step-by-step diver work procedures, identification of hazards and control and contingency procedures for any foreseeable emergency	IMCA
Diving Superintendent	A superintendent or designated diving supervisor having complete responsibility for the safety of the diving operation, including responsibility for the safety and health of all diving personnel. Sometimes referred to as Offshore project manager (OPM)	ADCI
Diving Supervisor	An individual who, through training, experience, demonstrated competency and certification, is appointed as the person responsible for executing the diving operation, ensuring the safety protocols are followed, and ensuring the overall safety of the diving operation	ADCI
Diving system	The equipment and facilities required to execute the planned diving activity, including compression, decompression, rescue and recovery	IOGP
Diving system classification	A diving system built in accordance with a classification society's own rules can, at the owner's request, be assigned a class. Records should record classification society, certificate number and any notations	IMCA
Double block and bleed valve (DBB)	An isolation method consisting of an arrangement of two block valves with a bleed valve located in between	IMCA
Double seated valve	A valve which has two separate pressure seals within a single valve body. It is designed to hold pressure from either direction as opposed to a single seated valve	IMCA
Dry suit	A diving suit designed to exclude water from the surface of the body	ADCI
Dual-lock chamber	Multi-lock deck decompression chamber	ADCI
Dump line	This is attached to the dump valve inside the lift bag and is used in conjunction with the dump valve for fine control and adjustment of the bag buoyancy by the diver	IMCA
Dynamic positioning (DP)	A system that automatically controls a vessel's position and heading by means of thrusters	IMCA
Dynamic positioning officer/operator (DPO)	An individual who operates the dynamic positioning system	IMCA
Electrical equipment	Includes anything used, intended to be used or installed for use, to generate, provide, transmit, transform, rectify, convert, conduct, distribute, control, store, measure or use electrical energy	IMCA
Embolism	See Gas embolism	ADCI
Excursion tables	Tables for use with saturation excursion diving that limit upward and downward excursions and provide a zone in which the diver can move freely without regard to the number of excursions or their duration without incurring a decompression penalty	ADCI
Exhaust valve	A valve controlling the venting of gas from any higher pressure source such as a DDC, diver's helmet, suit, buoyancy system, volume tank, lift bag etc.	ADCI

Term	Definition	Source
Factor of safety (FoS)	The factor of safety is the ratio between the minimum breaking load (MBL) and the working load limit (WLL). Factor of safety values, i.e. the co-efficient of utilisation, can be found in codes such as DNV GL and Lloyd's Register and are based on the relationship between MBF and WLL/SWL	IMCA
Failure modes and effects analysis (FMEA)	This is a methodology used to identify potential failure modes, determine their effects and identify actions to mitigate the potential failures	IMCA
Failure modes, effects and criticality analysis (FMECA)	This is an extension of the FMEA. In addition to the basic FMEA, it includes a criticality analysis, which is used to chart the probability of failure modes against the severity of their consequences. The result highlights failure modes with relatively high probability and severity of consequences, allowing remedial effort to be directed where it will produce the greatest effect	IMCA
Final isolation	Subsea isolation, local to the worksite. This isolation should consist of a secure physical separation. It is a readily understood way in which prevention of the uncontrolled release of energy can be confirmed to diving personnel tasked with carrying out the work	IMCA
Fixed diving system	A diving system installed permanently on a vessel or fixed/floating structure	IMCA
Flow fuse	A safety device fitted to large bore pipework inside a chamber which will close maintaining internal chamber pressure should the external ECU pipework fail	IMCA
Fluid dynamics	An aspect of the physics engine responsible for solving the way fluids move within the system	IMCA
Gas embolism	A condition caused by expanding gases as a result of breathing gas under pressure being forced into the bloodstream or other tissues during ascent or decompression	ADCI
Gas status board	A board where gas pressures and mixes are logged for quick reference	IMCA
Global positioning system (GPS)	A radio navigation system that allows land, sea and airborne users to determine their exact location, velocity and time, 24 hours a day in all weather conditions, anywhere in the world	IMCA
Ground fault circuit interrupter (GFCI/GFI)	Attached to the topside AC power source having receptacles, any of which may be attached to underwater cables supplying power to tools or lighting	ADCI
Habitat	An underwater structure inside which divers can carry out dry welding and which is fitted out with life support facilities	IMCA
Harness	The combination of straps and fasteners used to attach equipment and umbilical to the diver that can be utilised as a lifting point to remove the diver from the water in the event of an emergency	ADCI
Hazard identification (HAZID)	A process of defining all potential hazards on a job by task identification and then identifying all mitigations (barriers) to prevent an incident, as well as recovery efforts defined in the event the incident does occur	IOGP

Term	Definition	Source
Heliox	Helium/oxygen breathing mixture used to reduce the risk of diving related physiological disorders	IOGP
Helium unscrambler/ Unscrambler/Speech unscrambler	An electronic device designed to render intelligible the words spoken in a helium hyperbaric environment	ADCI
High capacity dump valve	A high capacity dump valve is commonly fitted to the top centre of open parachute type underwater air lift bags. It is used in conjunction with the dump line for fine control and deflation of the bag buoyancy by the diver	IMCA
High voltage (HV)	Used to refer to any voltage over 1000V and up to 30KV	IMCA
High-pressure nervous syndrome (HPNS)	A group of symptoms, including a lack of co-ordination, tremors of the extremities, disorientation, nausea, dizziness, and brief lapses of consciousness, symptoms can get worse as the depth or speed of compression increases generally occurring at depths of 500 feet/ 150m or deeper	ADCI
Hold-back line/rigging	This is provided to restrain or hold-back the positive buoyancy of the lift bag when it is attached to the load	IMCA
Hot-water machine	A machine used to heat freshwater or seawater to be delivered by hose to a diver's hot-water suit. Diesel or electricity are used to heat the water	
Hot-water suit	A diving suit normally made of neoprene or heavy duty denim which allows hot water to be circulated around the diver's body via perforated hoses running through the suit. Mainly used for heliox diving and cold surface orientated diving operations	
HP	High pressure. Pressures up to 1,700 bar (25,000 psi)	IMCA
Hydrophone	An underwater microphone device designed to receive sound waves under water. It is sometimes used to refer to the combined projector and hydrophone assembly but strictly speaking it is simply the listening device	IMCA
Hyperbaric conditions	Conditions where ambient pressure exceeds surface atmospheric	ADCI
Hyperbaric evacuation	Evacuation of a diver(s) at a pressure from a saturation chamber to a hyperbaric rescue craft via a pressurised transfer system	IOGP
Hyperbaric evacuation system (HES)	This term covers the whole system set up to provide hyperbaric evacuation. It includes the planning, procedures, actual means of evacuation, reception facility, contingency plans, possible safe havens and anything else involved in a successful hyperbaric evacuation	IMCA
Hyperbaric rescue chamber (HRC)	Normally a pressure vessel adapted to act as a means of hyperbaric evacuation but not fitted inside a conventional lifeboat hull	IMCA
Hyperbaric rescue unit (HRU)	The term used for the unit to evacuate the divers away from the saturation system. This may be an HRC or a SPHL or some other pressure vessel. Note: May also be known as hyperbaric evacuation unit (HEU)	IMCA
Hypothermia	Loss of body heat	ADCI

Term	Definition	Source
Intake	The part of a compressor where air is drawn in from the atmosphere. Must be carefully positioned to avoid risk of contamination from exhaust fumes or other contaminants, e.g. H_2S	
Inverter line	This is a line attached to the top of an open parachute bag. Its purpose is to invert and thus empty the bag if it becomes detached from the load	IMCA
Isolation	The separation of plant and equipment from every source of energy (pressure, electrical, mechanical and optical), in such a manner that the separation is secure	IMCA
JSA	Job safety analysis. Also called safe job analysis (SJA), job hazard analysis (JHA), task risk assessment (TRA)	IMCA
Life support package (LSP)	A collection of equipment and supplies kept in a suitable location such that when the HRC or SPHL arrives at the safe haven it can carry out support or complete) a decompression using the LSP components externally to maintain the environment, power, gas mixtures, heating and cooling. Note: This may be known by other names such as 'fly-away package'	IMCA
Life-support technician (LST)	Can also be referred to as rack operator. Responsible for safe operation of hyperbaric system chambers	ADCI
Lift bag	A bag which is filled with air or gas to provide uplift to an underwater object. Often used for lifting purposes by divers	IMCA
Live	Equipment which is energised	IMCA
Live boating	Diving from a vessel underway, making way not using dynamic positioning (DP)	IOGP
Lock-off time	The time at which a diving bell under pressure is locked off (disconnected) from the compression chamber(s) on deck	IMCA
Lock-on time	The time at which a diving bell under pressure is locked on (reconnected) ready for equalisation to the compression chamber(s) on deck	IMCA
Low pressure (LP)	Less than 500 psi	ADCI
Low specific activity (LSA)	LSA scale is a radioactive deposit inside pipes and other production equipment. LSA scale is a type of NORM	IMCA
Low voltage	Used to refer to any voltage up to 50V	IMCA
Management of change	A formal process by which changes to normal operational procedures and/or policies are managed	ADCI
Manifold	Panel for the distribution of diver breathing gas	ADCI
Manifold operator	An individual such as an LST, diving supervisor, or mixed-gas diver, who is designated to perform the duties of gas distribution on a surface-supplied mixed gas (HeO_2) diving operation, who is experienced and trained in the operation of the manifold and whose primary responsibility is to operate the manifold	ADCI

Term	Definition	Source
Manufactured attachment point	This is a strong point at or near the crown of the lift bag. It is the point at which an inverter line must be attached to the bag. The manufactured attachment point is capable of arresting any uncontrolled ascent of the lift bag without being damaged or breaking	IMCA
Master	Normally considered to be the person in charge of a marine asset	ADCI
Master control station (MCS)	Generic name for the topside computer system dedicated to control and monitoring of the entire subsea control and umbilical system	IMCA
Maximum depth	Maximum depth attained during a dive used for excursion limits or for decompression calculations during a surface orientated dive	
Maximum permissible exposure (MPE)	Level of laser radiation to which, under normal circumstances, persons may be exposed without suffering adverse effects (see BS EN 60825-1: 1994)	IMCA
Maximum working pressure	The maximum pressure to which a pressure containment device can be exposed under normal operating conditions	ADCI
Medical examiner of divers	A doctor who is trained and competent to perform the annual assessment of fitness to dive for divers. Medical examiners of divers may not possess knowledge of the treatment of diving accidents	IMCA
Medical lock	A lock located in the inner lock of a hyperbaric chamber, to facilitate the transfer of medical supplies, food or other articles between the chamber occupants and personnel outside	ADCI
Medium voltage	Within this document used to refer to any voltage between 51V and 1000V	IMCA
Minimum breaking force (MBF)	Minimum breaking force is commonly referred to as minimum breaking load (MBL)	IMCA
Minimum breaking load (MBL)	The minimum load at which an item of equipment can fail when it is new	IMCA
Mixed-gas diving (HeO_2)	A surface diving technique in which the diver is supplied with a bottom mix of helium and oxygen	ADCI
Mobile diving system	Mobile diving systems that are not fixed, i.e. can be demobilised, transported and re-sited. Includes surface supplied air, nitrox, HeO_2 and saturation diving systems	IMCA
Neurological examination	An examination of the human nervous system. Conducted as part of a diving medical and during diagnosis and treatment of decompression illness	IMCA
Nitrox (enriched air) diving	A diving technique in which the diver is supplied a bottom mix of nitrogen, plus oxygen in excess of 21%	ADCI
No-decompression diving	Diving that involves depths and times shallow and short enough so that the ascent can be made directly to the surface without water stops or subsequent chamber decompression	ADCI
Nominal (value)	Minimal value in comparison with the normal expected value	IMCA
Non-destructive examination	Also commonly referred to as non-destructive testing (NDT)	IMCA

Term	Definition	Source
Non-return valve (check valve)	A one-way check valve installed in a fluid or gas system to permit flow in one direction only	ADCI
NORM	Naturally occurring radioactive material that can be encountered in the oil and gas industry. Sometimes it is referred to as low specific activity (LSA) material	IMCA
Normally open	A device which, when closed, will perform the function of a closed isolation	IMCA
Observation dives	Using a diving bell, or similar, as an observation chamber when the internal pressure is at atmospheric pressure and external pressure ambient	IOGP
Obturator	An internal part of a valve such as a ball, gate, disc, plug or clapper which is positioned in the flow stream such that the flow may be either blocked or permitted to pass	IMCA
Oxygen cleaning	Special cleaning process for equipment to be used in oxygen systems	ADCI
Oxygen compatibility	The ability of a substance to come in contact with oxygen without reaction	ADCI
Oxygen toxicity (CNS O_2)	An acute condition usually encountered when the ppO_2 approaches or exceeds 1.6 ATA	ADCI
Oxygen toxicity (pulmonary O_2)	A condition from long exposures to breathing increased ppO_2, causing a direct pulmonary irritation	ADCI
Partial pressure	That portion of the total gas pressure exerted by a particular constituent of a gas or breathing mixture	ADCI
Perception current	The lower limit of current which can be felt	IMCA
Person in charge (barge captain – installation manager)	In relation to the craft /barge/structure, includes the captain or any other person made responsible by the owner for the vessel or facility, its operation, and the safety, health and welfare of those on board	ADCI
Physics engine	A software or hardware device which accurately calculates real world physics phenomena	IMCA
Pig	A device that can be driven through a pipeline by means of fluid pressure for purposes such as cleaning, dewatering, inspecting, measuring, etc.	IMCA
Pinger	An acoustic beacon set to transmit at a fixed and regular interval	IMCA
Planned maintenance system (PMS)	A system set up to record and verify maintenance carried out on equipment or system periodically	IOGP
Pneumofathometer (Kluge-Pneumo)	A depth-measuring device consisting of an open-end hose fixed to the diver, with the surface end connected to a gas supply and pressure gauge (usually marked in msw)	ADCI
Portable diving system	Portable – also known as a mobile diving system. This is a diving system which is installed on a vessel or installation on a temporary basis	IMCA
Pounds per square inch (psi)	An expression of pressure per unit area. Example, 1 atmosphere equals 14.7 psi	ADCI

Term	Definition	Source
Pounds per square inch absolute (PSIA)	Pounds per square inch gauge plus 1 atmosphere (14.7)	ADCI
Pounds per square inch gauge (PSIG)	Pounds per square inch absolute minus 1 atmosphere	ADCI
Preliminary isolation	Initial isolation. Set as precursor to facilitate the obtaining of a further final isolation local to the worksite. Generally it is a physical separation or (exceptionally) a software inhibit	IMCA
Principal failure mode (PFM)	Refers to the most commonly observed combinations of failure modes (combinations of failure and cause)	IMCA
Programmable logic controller (PLC)	A microcomputer embedded in or attached to a device to perform switching, timing, or machine or process control tasks	IMCA
Pyromechanism	A mechanical cutting method that uses a charge of pyrotechnic fuel in lieu of hydraulics to activate the mechanical striker	IMCA
Quad	Framework containing a number of permanently mounted gas cylinders used to transport large quantities of compressed gas	IMCA
Rated working pressure	The maximum internal pressure which the equipment is designed to contain and/or control	IMCA
Reception site	A place where the evacuated divers are in safe environmental conditions and transfer can be made to a decompression facility or where decompression can safely be carried	IMCA
Rectifier	A device that transforms an alternating current into a direct current	IMCA
Relief valve	A pressure-relieving device that prevents pressure from rising above a pre-set level	ADCI
Remotely operated vehicle (ROV)	A remotely operated vehicle is a tethered subsea vehicle controlled from the surface capable of engineering, inspection and remedial work	IMCA
Responder	A beacon which on receiving an electrical trigger supplied via a cable or umbilical which replies after a short, fixed time delay after the interrogation signal (this delay is the responder turnaround delay). A responder has the same function as a transponder, but is connected via a cable to the signal that commands the unit to transmit. It does not need to 'hear' a remote surface or sub-surface acoustic signal	IMCA
Risk assessment	The determination of quantitative or qualitative value of risk related to a concrete situation and a recognised hazard. Risk is calculated using the probability and severity of a hazard where the resulting risk should be as low as reasonably practicable. The findings and actions should be documented. A risk assessment is part of the risk management process	IOGP
ROV System	Remotely operated vehicle system (ROV) is a tethered underwater vehicle used in subsea operations as well as for emergency intervention in the event of a diving emergency	IOGP
Safe body current	The maximum current which can be allowed to flow through the diver's body safely	IMCA
Safe haven	A place where the HRU can be initially taken as part of the evacuation plan. This can also be within a subsea welding habitat	IMCA

Term	Definition	Source
Safe working load (SWL)	The maximum load the lifting equipment is certified to withstand under normal use	IMCA
Safety critical element	Item of equipment or process whose purpose is to prevent or limit the consequences of a high risk hazard that if realised could result in the fatality of one or more diver's or support crew	IOGP
Saturation diving	Procedures in accordance with which a diver is continuously subjected to an ambient pressure greater than atmospheric pressure so that his or her body tissues and blood become saturated with the constituent elements of the breathing gas	ADCI
SCUBA replacement	Mobile or portable surface supplied diving system that provides the flexibility of SCUBA while still providing the safety benefits of surface supplied air and support systems	IOGP
Scrubber	A cannister or housing containing soda lime. Used to remove carbon dioxide from exhaled gas. Found in bells, chambers and Environmental Control Units (ECU)	IMCA
Self-propelled hyperbaric lifeboat (SPHL)	May also be known as hyperbaric lifeboat (HLB) or hyperbaric rescue vessel (HRV). Normally a pressure vessel adapted to act as a means of hyperbaric evacuation, and fitted inside a conventional lifeboat hull	IMCA
Simulator	A simulator can be defined as the creation of certain conditions by means of a model, to simulate conditions within the appropriate sphere of conditions	IMCA
Simultaneous operations	Refers to two or more potentially clashing operations occurring, for example, at the same time/same location	IMCA
Squeeze	A lack of equalisation between parts of the body or between the body and the equipment	ADCI
Standby diver (s)	A diver other than the working diver(s) who is dressed and with equipment immediately available to provide assistance to the working diver(s) in an emergency or in the case of bell diving would be the bell man	IMCA
Submersible decompression chamber (diving bell)	Used for transferring divers under pressure to and from the worksite	IOGP
Subsystem and instrument models	Individual components of the dive system (i.e. analysers, flow meters, hyper gas alarms, communication devices)	IMCA
Suitable fixed point	A point to which a hold-back line can be attached	IMCA
Surface supplied diving	Diving operations that do not use a closed bell. The diver is supplied compressed breathing gas, communication and other functions. These are supplied through a multi-core umbilical from the surface	IOGP
Survey planning document	A DNV survey planning document provides the system operators and the DNV surveyor criteria to follow when carrying out the periodic surveys to ensure compliance with DNV-RP-E401	IOGP
Diving bell survival bag	A thermal suit which protects a diver from hypothermia when services have been lost to a bell or welding habitat	IMCA

Term	Definition	Source
Tender	A term reserved for an apprentice diver or diver helper	ADCI
Tested	Integrity has been proven and/or can be monitored	IMCA
Thermocline	A cooler and denser layer of water between warm and cold water. In many seas and oceans the speed of sound in water does not change constantly from seabed to surface, owing to the thermocline. At the thermocline, sound velocity profiles often display a change in direction of the trend of measured values, meaning that decreasing speed of sound suddenly 'changes direction' and begins to increase. This causes acoustic signal paths to be bent with resultant loss of acoustic positioning if this is not adequately planned for	IMCA
Thermodynamics	An aspect of the physics engine associated with the transfer of heat in the system (i.e. diver hot water)	IMCA
Through water communications	A communication system fitted to a diving bell which allows the supervisor to communicate with the bell should the bell umbilical become damaged causing failure of the primary communication system	IMCA
Toolbox talk (TBT)	A meeting held at the start of each shift or prior to any project critical operation, where the diving supervisor and/or the diving supervisor's delegate and shift personnel discuss the forthcoming tasks or jobs and the potential risks and necessary precautions to be taken	IMCA
Top door	The door located inside a diving bell which when closed allows the bell to be pressurised on surface. Also prevents loss of pressure inside the bell when it is raised to surface	IMCA
Towfish	Towed body	IMCA
Treatment tables	A depth, time and breathing gas profile designed to treat a diver for gas embolism or decompression sickness	ADCI
Ultra-high pressure (UHP)	Pressures above 1,700 bar (25,000 psi)	IMCA
Ultra-high voltage	Within this document used to refer to any voltage greater than 30KV	IMCA
Umbilical	A hose bundle between the dive location and the diver or bell that supplies a lifeline, breathing gas, communications, power and heat, as appropriate, to the diving mode or conditions. Underwater television cameras and cabling can also be carried as a component part of the umbilical or can be taped or banded to it on a temporary basis	ADCI
Valve	A device that starts, stops or regulates the flow of fluids or gas	ADCI
Vent valve	A valve for draining liquids, or venting gas, from a pressurised system	IMCA
Volume tank	A pressure vessel connected to the outlet of a gas supply and used as a gas reservoir	ADCI
Wet bell	A safe haven used to deploy and recover divers fitted with a dome and main supply umbilical from the surface providing breathing gas to a manifold inside the wet bell and diver excursion umbilicals terminated at the wet bell	IMCA

Term	Definition	Source
Wet suit	A snug fitting diving suit made from neoprene rubber. The diver is kept warm by their body heat warming up a thin layer of water trapped in the suit	IMCA
Working load limit/safe working load (WLL/SWL)	WLL is the ultimate permissible load, assigned by the manufacturer of the item. The SWL may be the same as the WLL but may be a lower value assigned by an independent competent person taking account of particular service conditions	IMCA
Working pressure	The pressure to which a pressure containment device is exposed under normal operating conditions	ADCI

List of Diving Acronyms

Acronym	Meaning	Source
µPa	MicroPascal – a unit of pressure energy of sound in water	IMCA
AAV	Annulus access valve	IMCA
ABS	American Bureau of Shipping	IMCA
AC	Alternating current	IMCA
ACFM (acfm)	Actual cubic feet per minute	ADCI
ACOP	Approved Code of Practice	IOGP
ACPI	Annulus choke position indicator	IMCA
ACV	Annulus choke valve	IMCA
ADCI	Association of Diving Contractors International	IMCA
ADS	Atmospheric diving suit	IOGP
AFC	Approved for construction	IMCA
AFE	Authorisation for expenditure – a document that lays out the proposed expenses for a particular project	IMCA
AHT	Anchor handling tug	IMCA
AJC	Abrasive water jet cutting	IMCA
ALARP	As low as reasonably practicable	IMCA
ALST	Assistant life support technician	IMCA
AMV	Annulus master valve	IMCA
AODC	Association of Offshore Diving Contractors	IMCA
APT	Annulus pressure transducer	IMCA
ASME	American Society of Mechanical Engineers	IMCA
ATA (ata)	Atmosphere absolute	ADCI
ATM (atm)	Atmospheric (atm)	ADCI
AUV	Autonomous underwater vehicle	IMCA
BA	Breathing apparatus	IMCA
BBB	Block, block and bleed (valve)	IMCA
BBV	Block, block and vent (valve)	IMCA
BCD	Buoyancy compensation device	IMCA
BIBS	Built-in breathing system	IMCA
BOP	Blowout preventer	IMCA
BPR	Back pressure regulator	IOGP
CASS	Conformity Assessment of Safety Related Systems	IOGP

Acronym	Meaning	Source
CCTV	Closed circuit television	IMCA
CE	Conformité Européenne	IOGP
CIV	Chemical injection valve	IMCA
CNS	Central nervous system	ADCI
COMAH	Control of Major Accident Hazard Regulations 2015 (UK-specific)	IOGP
COSHH	Control of Substances Hazardous to Health	IMCA
CPR	Cardio-pulmonary resuscitation	ADCI
CTD	Conductivity, temperature and depth	IMCA
DB	Double block (valve)	IMCA
DBB	Double block and bleed valve	IMCA
DC	Direct current	IMCA
DCI	Decompression illness	IMCA
DCS	Distributed control system	IMCA
DCV	Directional control valve	IMCA
DDC	Deck decompression chamber	IMCA
Delta P	Differential pressure	ADCI
DESIGN	Diving Equipment Systems Inspection Guidance Note	IMCA
DGNSS	Differential global navigation satellite system	IMCA
DHPT	Down-hole pressure and temperature (sensor)	IMCA
DHSV	Down-hole safety valve	IMCA
DMA	Dead man anchor	IMCA
DMAC	Diving Medical Advisory Committee	IMCA
DMS	Diving management system	IMCA
DMT	Diver medical technician	ADCI
DNV	Det Norske Veritas	IMCA
DNV GL	Det Norske Veritas/Germanischer Lloyd	IOGP
DP	Dynamic positioning	IMCA
DPDSV	Dynamically positioned dive support vessel	
DPIC	Designated person in charge	ADCI
DPO	Dynamic positioning officer (or operator) – an individual who operates the dynamic positioning system	IMCA
DPP	Diving project plan	IMCA
DPS	Dynamic positioning system	

Acronym	Meaning	Source
DSA	Diving System Assurance	IOGP
DSAA	Diving System Assurance Audit	IOGP
DSCC	Diving system class certificate	IOGP
DSSC	Diving system safety certificate	IOGP
DSV	Diving support vessel	IMCA
DVT	Deep vein thrombosis	IMCA
DWP	Design work pressure	IMCA
E/E/PES	Electrical/electronic/programmable electronic systems	IOGP
EAD	Equivalent air depth	IMCA
ECU	Environmental control unit	IMCA
EDB	Electrical distribution box	IMCA
EGS	Emergency gas supply	ADCI
EGS	Emergency gas supply (bailout)	ADCI
ELCB	Earth leakage circuit breaker	IMCA
EPIRB	Emergency position indicating radio beacon	IMCA
EPU	Electrical power unit	IMCA
ESD	Emergency shutdown device	IMCA
FAT	Factory acceptance test	IMCA
FDS	Functional design specification	IOGP
FEA	Finite element analysis	IMCA
FMEA	Failure modes and effects analysis	IMCA
FMECA	Failure modes, effects and criticality analysis	IMCA
FoS	Factor of safety	IMCA
FPSO	Floating production storage and offloading	IMCA
FRC	Fast rescue craft	IMCA
FSW (fsw)	A foot of seawater	ADCI
ft	Foot, a unit of length or depth equal to 0.3048 m	IMCA
GFCI (GFI)	A ground fault circuit interrupter	ADCI
GNSS	Global navigation satellite system	IMCA
GPS	Global positioning system	IMCA
HACCP	Hazard analysis critical control point	IOGP
HAZAN	Hazard analysis	IOGP

Acronym	Meaning	Source
HAZID	Hazard Identification	IOGP
HAZOP	Hazard and operability study	IMCA
Heliox	Helium/oxygen breathing mixture	IOGP
HEP	Hyperbaric evacuation plan	IOGP
HES	Hyperbaric evacuation system	IMCA
HEU	Hyperbaric evacuation unit	IMCA
HF	High frequency	IMCA
HiPAP	High precision acoustic positioning	IMCA
HIPS	High integrity protective system	IOGP
HIRA	Hazard identification and risk assessment	IMCA
HLB	Hyperbaric life boat	IMCA
HMCS	Hyperbaric monitoring and control system	IOGP
HMI	Human–machine interface	IOGP
HP	High pressure	IMCA
HPNS	High pressure nervous syndrome	ADCI
HPR	Hydroacoustic position reference	IMCA
HPU	Hydraulic power unit	IMCA
HRC	Hyperbaric rescue chamber	IMCA
HRF	Hyperbaric reception facility	IOGP
HRS	Hyperbaric rescue system	IOGP
HRU	Hyperbaric rescue unit	IMCA
HRV	Hyperbaric rescue vessel	IMCA
HSE	Health, safety and environment	IMCA
HSE	UK Health & Safety Executive	IMCA
HV	High voltage	IMCA
IACS	International Association of Classification Societies	IOGP
ICOP	International Approved Code of Practice	IOGP
ID	Internal diameter	IMCA
IDIF	International Diving Industry Forum	IMCA
IEC	International Electrotechnical Commission	IMCA
IL	Integrity level (1, 2, 3 or 4)	IOGP
IMCA	International Marine Contractors Association	IMCA

Acronym	Meaning	Source
IMO	International Maritime Organization	IMCA
IOGP	International Association of Oil and Gas Producers	IOGP
IPL	Independent protection layer	IOGP
IRCA	International Register of Certificated Auditors	IMCA
IRM	Inspection, repair and maintenance	IMCA
ISM	International Safety Management (ISM) Code, issued by IMO	IMCA
ISO	International Organization for Standardization	IMCA
ISPS Code	International Ship and Port Facility Security (ISPS) Code, issued by IMO	IMCA
IUC	International underwater contractor	IMCA
JHA	Job hazard analysis	ADCI
JSA	Job safety analysis. Also called safe job analysis (SJA), job hazard analysis (JHA), task risk assessment (TRA)	IMCA
kg	Kilogramme	IMCA
LARS	Launch and recovery system	IMCA
lb	Pound, a unit of weight equal to 0.45359237 kg	IMCA
LOLER	Lifting Operations & Lifting Equipment Regulations (UK-specific)	IMCA
LOPA	Layer of protection analysis	IOGP
LP	Low pressure	ADCI
LR	Lloyd's Register	IOGP
LSA	Low specific activity	IMCA
LSP	Life support package	IMCA
LSS	Life support supervisor	IMCA
LST	Life-support technician	ADCI
LT	Long ton, equal to 2,240 lb	IMCA
m	Metre	IMCA
MAOP	Maximum allowable operating pressure	IMCA
MARPOL	International Convention for the Prevention of Pollution from Ships	IOGP
MAWP	Maximum allowable working pressure. See Maximum working pressure	ADCI
MAX	Maximum	IMCA
MBF/MBL	Minimum breaking force/minimum breaking load	IMCA
MBL	Minimum breaking load	IMCA
MCS	Master control station	IMCA
Med-lock	Medical lock	ADCI

Acronym	Meaning	Source
MEG	Monoethylene glycol	IMCA
MIN	Minimum	IMCA
mm	Millimetre	IMCA
MOC (MoC)	Management of change	IMCA
MOPO	Manual of permitted operations (MOPO)	
MPE	Maximum permissible exposure	IMCA
MSDS	Material safety data sheet	IMCA
MSL	Mean sea level (sea surface reference level)	IMCA
msw	Metres of seawater	IMCA
MSW	Meters of sea water	ADCI
NCR	Non-conformance report	IMCA
NDE	Non-destructive examination	IMCA
NDT	Non-destructive testing	IMCA
NORM	Naturally occurring radioactive material	IMCA
Normobaric	Barometric pressure equivalent to sea level pressure	IOGP
NORSOK	Norwegian Shelf Competitive Position	IOGP
O&M	Operating and maintenance	IOGP
OEM	Original equipment manufacturer	IMCA
OGP	International Association of Oil & Gas Producers	IMCA
OHSAS	Occupational Health and Safety Advisory Services	IOGP
OIM	Offshore installation manager	IMCA
OPM	Offshore project manager	IMCA
OSV	Offshore supply vessel	IMCA
P&ID	Process and instrumentation diagram	IMCA
PCPI	Production choke position indicator	IMCA
PCV	Production choke valve	IMCA
PDF	Portable document format	IMCA
PFD	Probability of failure on demand	IOGP
PFM	Principal failure mode	IMCA
PIC	Person in charge	IMCA
PIG	Pipeline internal gauge	IMCA
PLC	Programmable logic controller	IMCA

Acronym	Meaning	Source
PLMV	Production lower master valve	IMCA
PMS	Planned maintenance system	IOGP
POB	Personnel on board	IOGP
PPE	Personal protective equipment	IMCA
PRV	Pressure relief valve	IMCA
PSI (psi)	Pounds per square inch	ADCI
PSIA	Pounds per square inch absolute	ADCI
PSIG	Pounds per square inch gauge	ADCI
PSV	Platform supply vessel	IMCA
PTW	Permit to work	IOGP
PUMV	Production upper master valve	IMCA
PUWER	Provision and Use of Work Equipment Regulations 1998	IMCA
PVHO	Pressure vessels for human occupancy	IMCA
PWV	Production wing valve	IMCA
QA	Quality assurance	IMCA
RA	Risk assessment	IOGP
RCD	Residual current device	IMCA
RIB	Rigid inflatable boat	IMCA
ROT	Remotely operated tool	IMCA
ROV	Remotely operated vehicle	IMCA
RP	Recommended Practice	IOGP
RRF	Risk reduction factor	IOGP
RWP	Rated working pressure	IMCA
SAM	Subsea accumulator module	IMCA
SAT	Site acceptance test	IOGP
SAT	Saturation diving	IOGP
SBB	Single block and bleed (valve)	IMCA
SBM	Single buoy mooring	IOGP
SCADA	Supervisory control and data acquisition	IMCA
SCE	Safety critical element	IOGP
SCM	Subsea control module	IMCA
SCMMB	Subsea control module mounting base	IMCA

Acronym	Meaning	Source
SCSSSV	Surface controlled sub-surface safety valve	IMCA
SCUBA	Self-contained underwater breathing apparatus	IMCA
SDC	Submersible decompression chamber (diving bell)	IOGP
SDDE	Surface demand diving equipment	IMCA
SEM	Subsea electronic module	IMCA
SHEQ	Safety heath environment and quality	IOGP
SIF	Safety instrumented function	IOGP
SIL	Safety integrity level	IMCA
SIMOPS	Simultaneous operations	IMCA
SIS	Safety instrumented system	IOGP
SJA	Safe job analysis	IMCA
SMS	Safety management system	IMCA
SMSID	Safety management system interface document	IMCA
SNR	Signal to noise ratio	IMCA
SOLAS	International Convention for the Safety of Life at Sea	IMCA
Sonar	SOund, NAvigation and Ranging	IMCA
SPHL	Self-propelled hyperbaric lifeboat; may also be known as hyperbaric lifeboat (HLB)	IMCA
SRS	Safety requirements specification	IOGP
SSDE	Surface supplied diving equipment	IMCA
SSIV	Subsea isolation valve	IMCA
SSSV	Sub-surface safety valve	IMCA
SST	Spheri-seal test	IMCA
ST	Short ton, equal to 2,000 lb	IMCA
STCW	Standards of Training, Certification and Watchkeeping for Seafarers	IMCA
SUDA	Subsea umbilical distribution assembly	IMCA
SUT	Subsea umbilical termination	IMCA
SUTA	Subsea umbilical termination assembly	IMCA
SWL	Safe working load	IMCA
TBT	Toolbox talk	IMCA
TCT	Tree-cap test	IMCA
TEMPSC	Totally enclosed motor propelled survival craft	IMCA
TMS	Tether management system	IMCA

Acronym	Meaning	Source
TOR	Terms of reference	IOGP
TRA	Task risk assessment	IMCA
TUP	Transfer under pressure	IOGP
TUTU	Topside umbilical termination unit	IMCA
UHF	Ultra-high frequency	IMCA
UHP	Ultra-high pressure	IMCA
UPS	Uninterruptible power supply	IMCA
URS	User requirements specifications	IOGP
USCG	United States Coast Guard	IMCA
USN	US Navy	IMCA
VHF	Very high frequency	IMCA
VOC	Volatile organic compound	IMCA
WLL	Working load limit	IMCA
WLL/SWL	Working load limit/safe working load	IMCA
WROV	Work class ROV	IMCA
XOV	Cross-over valve	IMCA
XT	Christmas tree	IMCA