

IMCA is the international trade association representing offshore, marine and underwater engineering companies

It seeks to:

- strive for the highest possible standards with a balance of risk and cost in: health and safety; technology; quality and efficiency; environmental awareness and protection;
- achieve and sustain self-regulation in the industry;
- ease the free movement of equipment and personnel globally;
- achieve equitable contracting regimes;
- provide the framework for training, certification, competence and recruitment to support and sustain the industry globally;
- resolve industry issues; and
- promote co-operation across the industry.

Members include pipelay, heavy lift, diving, remotely operated vehicle, survey and offshore construction contractors, plus various contractors operating specialist marine equipment.

IMCA has two core activities in which all members participate:

- **Competence & Training** includes a comprehensive framework devoted to promoting safety by defining and encouraging training and competence in key safety-related positions.
- **Safety, Environment & Legislation (SEL)** includes monitoring national and international regulatory bodies, circulation of relevant information to members and advancement of industry positions where necessary

Members join in one or more technical divisions relevant to their own activities:

- Diving
- Marine
- Offshore Survey
- Remote Systems & ROV

IMCA works with a global focus, but also has regional sections covering the key offshore areas: Asia-Pacific, Central & North America, Europe & Africa, Middle East & India and South America.

IMCA has published substantial and comprehensive good practice guidance on marine operations based on its members' experience in a range of related areas. More details on specific activities are set out on these factsheets.

Lifting is a key part of almost all offshore and subsea operations. It can range from lifting of stores and spares handling through to complicated and heavy lifts and there could be in excess of 200 different lifting operations on a vessel.

Each lift brings with it the possibility of injury to people and damage to equipment but, with proper planning, hazards can be identified and risks reduced or eliminated. Regardless of whether the lift is a complex and perceived high-risk project or a comparatively straightforward, every day task, proper risk assessment, comprehensive lift planning and safety awareness throughout a lift team can help to avoid incidents. Indeed, it is very often the 'routine' lifts that result in incidents. This is not just because routine lifts are more numerous; it is usually because of the false sense of security that routine operations can instil.

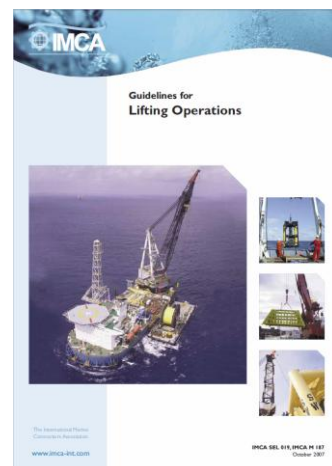
IMCA has a wide range of guidance, developed over many years, to assist its members in ensuring safe and efficient lifting operations throughout its members' offshore activities. More recently, this has been co-ordinated by our dedicated Crane & Winch Operations Workgroup which has focused on the production of a broad suite of new and updated guidance. Its members represent international offshore contractors whose personnel, vessels and equipment operate in the offshore industry around the world, together with specialist consultants and equipment manufacturers, bringing together a wealth of expertise.

Guidelines for Lifting Operations

The IMCA *Guidelines for lifting operations* (reference **IMCA SEL 019/ M 187**), published in 2007, is the flagship product of the Crane & Winch Operations Workgroup. It sets out procedures and basic criteria to show the essential components that should be included in company procedures for lifting operations and to offer advice on the steps within a lifting operation process that will promote safety.

While primarily aimed at subsea lifting operations, the principles described are relevant to all offshore lifting operations and generally to lifting operations anywhere.

An extensive list of references refers to more detailed guidance on specific aspects, as addressed below by IMCA and in relevant documentation produced by other organisations.



Personnel

The competence of the lifting team is vital to ensuring safe operations. Lifting-related roles and activities are covered in detail by IMCA's guidance on competence assurance and assessment, with information also set out in the *Guidelines on lifting operations* mentioned above. Key documents include:

- ◆ *Competence assurance and assessment – Guidance document and competence tables: Marine Division (IMCA C 002)*;
- ◆ *Crane operator's logbook (for offshore vessels)*, which provides a common, transferable and recognisable format for recording working experience, training courses and certificates and details of competence assessments;
- ◆ *Crane logbook (for offshore vessels)*, which assists in keeping a useful operational history of cranes;
- ◆ pocket safety cards on topics such as lifting operations and lifting equipment help personnel keep important messages available as a handy reminder while working.

Equipment

Choosing suitable equipment and ensuring it is maintained, tested and certified in an appropriate way is also of high importance. Through a range of focused guidance documents relating to specific items of equipment, IMCA helps its members ensure that those documents cover every aspect that needs to be considered when planning, specifying, purchasing, maintaining and operating lifting equipment. Such guidance documents include:



- ◆ **IMCA SEL 022/M 194** – Guidance on wire rope integrity management for vessels in the offshore industry;
- ◆ **IMCA M 171** – Crane specification document (Soon to be included in *Guidance on crane integrity management*);
- ◆ **IMCA M 179** – Guidance on the use of cable laid slings and grommets;
- ◆ **IMCA D 016** – Underwater air lift bags;
- ◆ **IMCA D 028** – Guidance on the use of chain lever hoists in the offshore subsea environment;
- ◆ **IMCA M 194** – Guidance on wire rope integrity management for vessels in the offshore industry;
- ◆ **IMCA M 197** – Guidance on non-destructive examination (NDE) by means of magnetic rope testing.

Guidance on wire rope integrity management for vessels in the offshore industry has been of great interest to the industry, because it provides pragmatic criteria for the safe maintenance and discard of wire ropes. *Guidance on non-destructive examination (NDE) by means of magnetic rope testing* was added to help those who may need to be involved in NDE. A vessel crane logbook will be published shortly.

Guidance on lifting aspects is also contained in the following:

- ◆ **IMCA D 023/024/037/040** – Diving equipment systems inspection guidance notes (*DESIGN*)
- ◆ **IMCA D 032** – Cross-hauling of bells
- ◆ **IMCA R 004** – Code of practice for the safe and efficient operation of remotely operated vehicles
- ◆ **IMCA M 202** – Guidance on the transfer of personnel to and from offshore vessels

Communications

Members of the lifting team need to be able to communicate what is expected and what actually happens before and during a lift, as well as providing feedback once the operation is complete. *Guidance on operational communications (IMCA M 205/D 046)* has been developed to assist members in this area with a specific section dealing with communication in lifting operations, that replaces IMCA SEL 020/M 193.

Work Programme – August 2010

Guidance is currently under development on topics including integrity management of cranes and the use of crane simulators.

Reporting and Analysis of Incidents

By providing systems for sharing information on lifting incidents, near-misses and potential hazards, IMCA disseminates the lessons learnt, identifies key contributory factors, liaises with equipment suppliers and training providers and develops industry good practice guidance as required, all to help its members avoid repeat incidents and ensure safe operations.

Working with Others

IMCA works closely with a range of other organisations to promote its own specialist guidance for the subsea/marine contracting sector, to share its members' expertise and contribute to work in other parts of the industry. Among the organisations with which IMCA works are:

- ◆ International Maritime Organization (IMO);
- ◆ International Organization for Standardization (ISO) and British Standards Institute (BSI);
- ◆ International Association of Oil & Gas Producers (OGP) and its Lifting & Hoisting Task Force;
- ◆ Offshore Mechanical Handling Equipment Committee (OMHEC).

Rope Forum

The Rope Forum is intended to facilitate discussions on the issues that arise from the use of all types of rope in the offshore industry. It will be made open to all, so that manufacturers of cranes, winches, wire and fibre ropes will have a forum where they can meet the users of their equipment and discuss issues. International input is encouraged and a contact list will be developed for those who are only able to contribute by correspondence.

Find out more at www.imca-int.com/lifting

International Marine
Contractors Association

www.imca-int.com