

# COMPETENCY DEVELOPMENT TRAINING

## — Dive Technicians



### COURSE OVERVIEW

Competent and well-trained technicians are essential for safe offshore/inshore diving operations. Equipment used to support and conduct diving operations requires technicians for its installation, maintenance, inspection, testing and repair. The correct functioning/maintenance of the equipment is essential to the well-being of the divers and other members of the dive team.

Diving Technicians competence is established by a series of experience and training; while most dive technicians have 'trade skills / training' related to their operational involvement on the diving equipment, KBA Group have now established a training that will develop the all-round competence of the dive technician in support of the diving system maintenance and equipment. Ranging from the 'soft skill' knowledge with regards to IMCA 'Dive Technician Competence and Training IMCA D 001 Rev. 2' and industry documentation and requirements, management of change processes etc to 'hard skill' practical requirements such as oxygen clean systems, high pressure regulator service, cylinder inspections, KMB DSI Helmet technician training and more.

### COURSE OBJECTIVES

At the end of the course, course participants will be able to:

- Conduct Helmet and Band Mask inspections, and overhauls as well as face port insert testing and security, removal and repairing the side block, removal of weights and learn about the KMDSI set-up and Maintenance Check lists, and Operations and Maintenance Manuals (Delegate will receive Kirby Morgan DSI Hat Technician certificate).
- Dismantle, service, re-assemble & maintain various models of high pressure regulators commonly in use in the diving industry and many other industries.
- Plan Maintenance Systems (IMCA D018).
- Understand diving physics, physiology and basic calculations.
- Have the knowledge to perform calibration of pressure sensing equipment.
- Understand oxygen hazards and risk management approach - Oxygen Cleaning Procedures.
- Focus on the isolation of electrical equipment which is an essential requirement prior to maintenance work being carried out.
- Gain a clear understanding of how to implement the diving system assurance process (IMCA D023 & D024).
- Understand the basic principles of risk assessment.
- Understand the requirements of a planned maintenance system.
- Understand the principles and requirement for management of change.
- Acquire knowledge and practical skills to manage competently on the health and safety issues.
- Familiarise with air and saturation systems and procedures.

### COURSE CONTENT

- General Introduction, Legal & Industry Guidelines
- Basics Physics & Physiology ~ how pressure affects the diver
- Introduction to Air & Saturation Components & Procedures
- Planned Maintenance Systems and Requirements
- IMCA D018, DESIGN D023, DESIGN D024 and supporting documents

## COURSE CONTENTS

- Dive System Assurance Awareness
- Bailout & Cylinder Inspection
- Chamber Relief Valve Testing & Maintenance
- Oxygen Cleaning
- Air Purity Testing
- Gas Analysis, Calibration of Analysers
- KMDSI Hat Technician (KMB DSI Certificate will be issued)
- High Pressure Regulator maintenance
- Life Support and Pressure Gauge Calibration
- Permit to Work / Lock Out Tag Out / Confined Space Entry
- Management of Change
- Introduction to Electrical Safety / Isolations
- Diver Communication System Testing and Fault Finding Procedures
- Risk Management
- Use of LP & HP Compressors, Gas Transfer and Safety Procedures
- Review of IMCA Safety Flashes and Lessons Learnt

## BENEFITS

To gain a competency recognised qualification upon successful completion of training.

## WHO SHOULD ATTEND?

This course is suitable for the experienced mechanical / electrical or hydraulic technician or anyone who has completed formal technical training in these areas and wish to establish a career path as a diving technician in the commercial diving industry.

## DURATION

8 hours per day / 10 days = 80 hours. The course is two Five-Day blocks with a weekend break.

## ENTRY REQUIREMENT

Delegates must have experience in their relevant discipline trade training (electrical, electronic, mechanical/hydraulic). Delegates will require to submit their Curriculum Vitae (CV) for trainer review prior to being accepted onto the course.

**Note:** *New entrants to the industry should be treated as trainees until deemed competent to work unsupervised. Once a trainee has gained adequate experience and training and has demonstrated competence in the relevant equipment and operations, the employer may promote the individual to 'dive technician' level.*

## HOW IS IT ASSESSED?

Delegates, who have attended and successfully completed the course will be awarded with KBA Diving Technician competence certificate outlining the course content.

**COURSE FEE** S\$4,992.06 *Subject to 7% GST*

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