







### Introduction

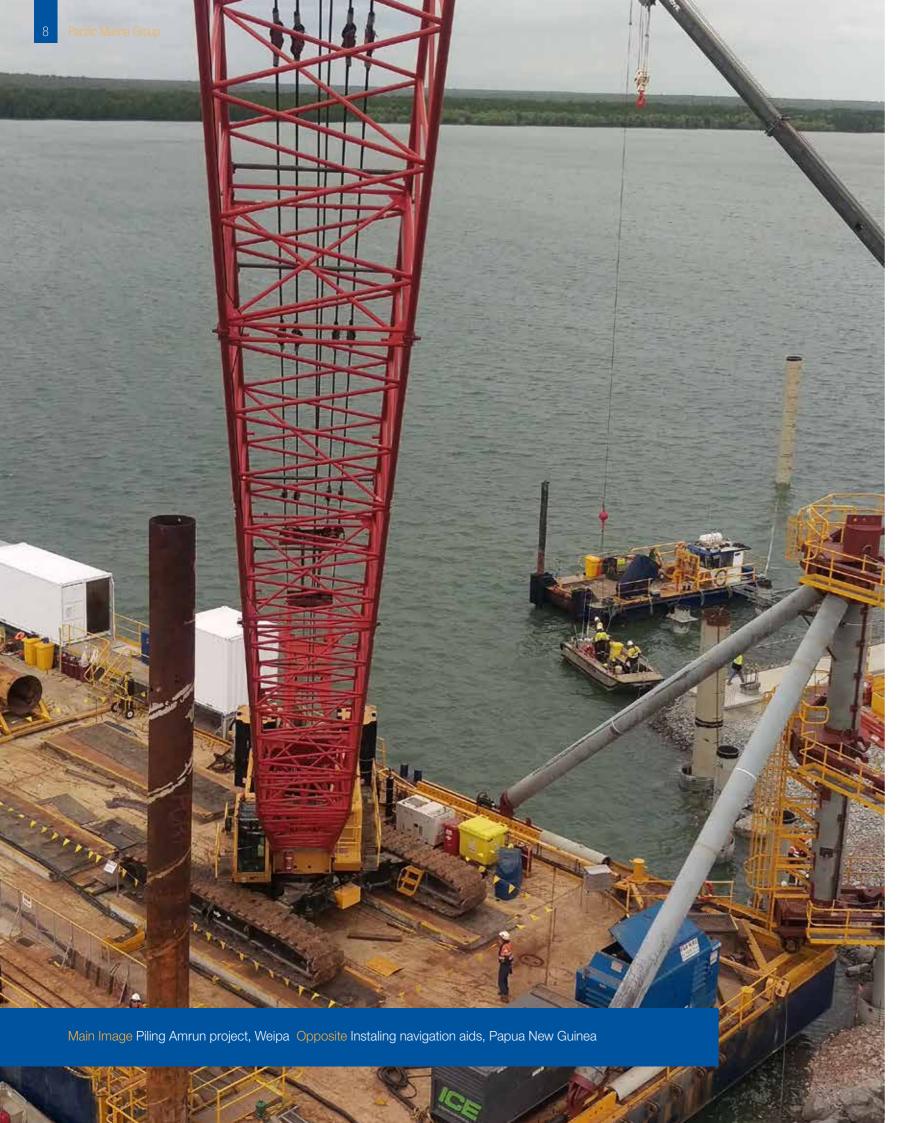
Pacific Marine Group is a leader in the Marine Contracting and Commercial Diving industries. Based in North Queensland, and operating for in excess of 30 years, PMG has an enviable track record of achievements throughout Northern Australia, Papua New Guinea and the Pacific. Clients range across many sectors including resources, ports, tourism, construction, marine parks, various public sector departments and more.

With its main base in Townsville, PMG offers the following services::

- Marine Construction / Demolition
- Dredging
- Tug and barge services
- Marine Plant / Vessel Hire
- Commercial Diving
- Towage
- Salvage
- Fender / Brow Hire
- Fabrication
- Mooring Installation
- Artificial Reefs

All works are undertaken in accordance with externally accredited systems and relevant legislation, as well as with a sense of pride and professionalism that go hand in hand with a successful and progressive contracting company. An extensive portfolio of insurances are in place to provide peace of mind to clients.





## Marine Construction

Pacific Marine Group has a long history of completing complex, one-off remote marine projects. We are comfortable completing these projects both in Australia and the Pacific Region, for a wide range of clients from Government Departments to Tier 1 Head Contractors to smaller private organisations.

We have been steadily building our reputation for delivering quality and cost competitive marine construction projects in the Pacific in recent years, and our recent signing of a Deed of Standing Offer with the Department of Foreign Affairs (DFAT) for infrastructure project delivery in the Pacific, demonstrates both our reputation in and commitment to the Pacific region.

Our extensive vessel fleet and experienced project team, coupled with our modern marine facility and in-house design and fabrication, fitters, blasters and painters and electricians, means we can configure barges

and tugs to exact project requirements, in a very timely fashion, with minimal reliance on outside contractors. Our Construction Team and Project Managers are experienced in most forms of marine construction, and all projects are completed in accordance with our Quality System.

Projects typically undertaken include:

- Navigation Aid
- Fabrication / Installation / Maintenance
- Piling works
- Wharf / jetty construction
- Marine Structure Demolition
- Site blasting / painting / pile wrapping
- Dredging
- Subsea pipeline construction
- Mooring installation
- Artificial Reefs







# 14 Pacific Marine Group Main Image Berth 6/7 demolition, Townsville Port Thumbnails 1. South Molle Island jetty demolition (Shute Harbour) 2. Loves Jetty demolition, Mackay Port 3. Berthing Dolphin demolition, Weipa 4. Lucinda Jetty partial demolition

# Marine Structure **Demolition**

The demolition of Marine Structures has evolved to core business for Pacific Marine Group in recent years.

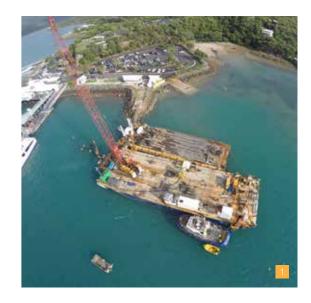
We have developed innovative equipment and procedures to enable all manner of Marine Structures to be demolished safely, efficiently, cost effectively, and in an environmentally responsible manner.

All marine demolition projects are different, and Pacific Marine Group have the ability to reconfigure barges and other floating plant, to suit the exact job.

All demolition jobs are completed in accordance with our accredited ISO 9001: 2015 Quality System, AS/NZS 4801:2001 Safety Management System, and AS/NZSISO14001:2015 Environmental Management System.

Demolition capabilities include:

- Concrete deck removal by saw cutting / diamond wire cutting
- Concrete deck removal by hydraulic shears - reduction to rubble, full capture of rubble
- Pile extraction various methods including vibrohammer, jetting, driving oversleeve etc.
- Pile cutoff above / below water
- Seabed cleanup by diving / dredging
- Timber structure removal











We have a large fleet of vessels and barges available for charter

# Marine Support & Vessel Charter Services

Core business for Pacific Marine Group is. the supply of marine plant – typically flat top barges, tugs, work boats, dive support vessels, and crew transfer vessels, both crewed and non-crewed, for projects including but not limited to:

- General tug and barge charters
- Construction
- Towage
- Dredging
- Dive support
- Buoy Deployment
- Accommodation and project support
- Ship resupply/repairs
- Navigation Aid repair/deployment
- Salvage
- Geotechnical drilling/sampling
- Marine Research















Main Image Wreck Hydrocarbon removal, Micronesia (PMG Pride) Top Left Helicopter Resupply for PMG Pride, Coral Sea. Above 1. Buoy deployment / servicing (PMG Pride) 2. Tug and barge beach landing 3. PMG Pride 4. Barge beach landing, Willis Island (PMG121) 5. Great Barrier Reef Moorings 6. Tug and barge tow

Project Logistics PMG specialises in project logistics – getting project cargo to where it needs to be. We offer: Heavy roll on/roll off (RORO) barge Use of our marine facility – hardstand for project laydown / crane pad / barge Cranage and loading of barges Cargo sea fastening installation Lashing design and tow surveys Barge reconfiguration to suit project needs - sidewalls / doors / winches • On site steel module repairs / paint repair prior to shipping Main Image Stacker reclaimer loading, Port of Townsville Thumbnails 1. Roll off, Half Tide tug harbour 2. Stacker reclaimer slew deck/C-frame 3. Ship to barge loading, Mackay Port 4. Willis Island barge delivery 5. Heavy Roll on, Port of Townsville 6. Tug and barge gravel & plant delivery



# Commercial Diving

With over 30 years of experience, our company has become an industry leader in the Australian Commercial Diving field. We have extensive experience in running complex, remote, large scale diving campaigns, but are equally comfortable running smaller scale dive campaigns. Commercial diving in the modern workplace is a highly regulated and highly controlled activity. Our approach to the activity is highly professional, with a focus on safety,

client requirements, and responsiveness. We carry an extensive suite of insurances that are applicable to all our diving activities, including \$50M Public Liability, and Workcover for all

#### Compliance

Pacific Marine Group performs all dive work in accordance with AS/NZS 2299.1:2015 Standard for Occupational Diving, and all dive personnel are trained to ADAS Part 2 or higher levels, in accordance with AS 2815.

#### **Water Inspection Certifications**

We carry in water inspection certifications from all major shipping class societies including Det Norske Veritas, Nippon Kaiji Kyokai, Lloyds Register, Germanischer Lloyd, American Bureau of Shipping, and Bureau Veritas. We also carry GBRMPA permits to allow propeller polishing off Hay Point / Dalrymple Bay.

All dive projects are supported by Pacific Marine Group's experienced team of Project Managers, Marine Crew, Fabricators, Fitters and Technicians.

Typical works carried out include:

- Underwater construction
- Class society In Water Inspections
- Underwater cutting and welding
- Large scale underwater inspection campaigns for offshore and onshore facilities - wharves / jetties / export facilities / offshore platforms
- Non-Destructive Testing
- Contaminated water diving
- Seabed surveys
- Propeller polishing
- Oilfield / Offshore Inspection / Maintenance
- SPM maintenance, floating hose change-
- Ship repairs
- Pipeline inspections and repairs
- Geotechnical drilling/sampling
- Marine Research







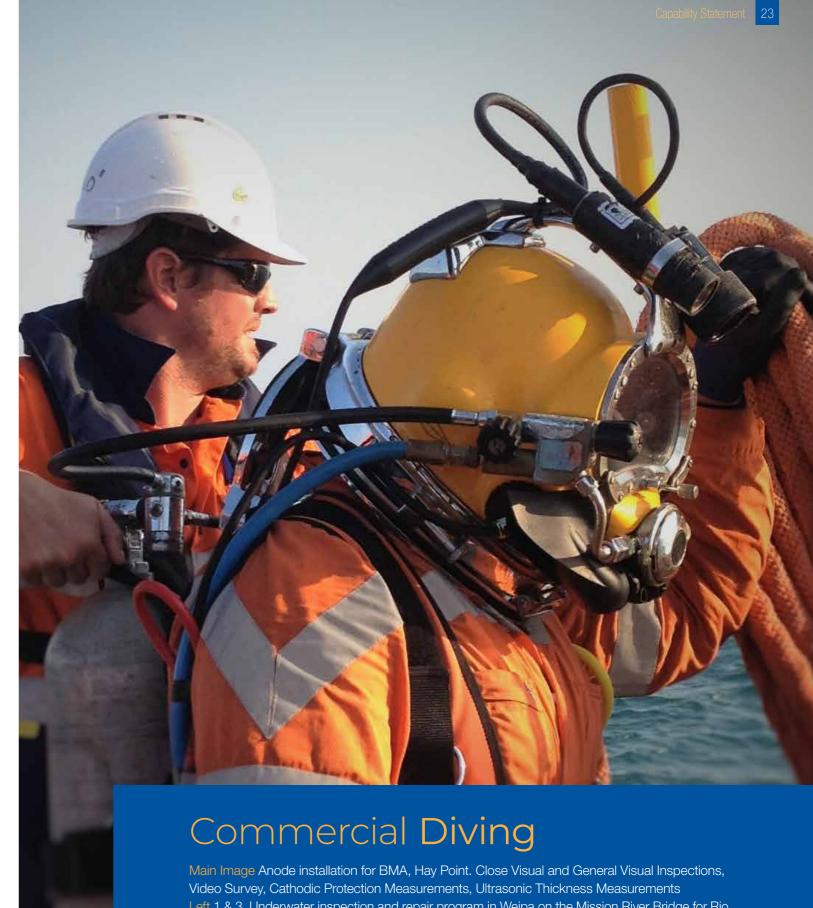






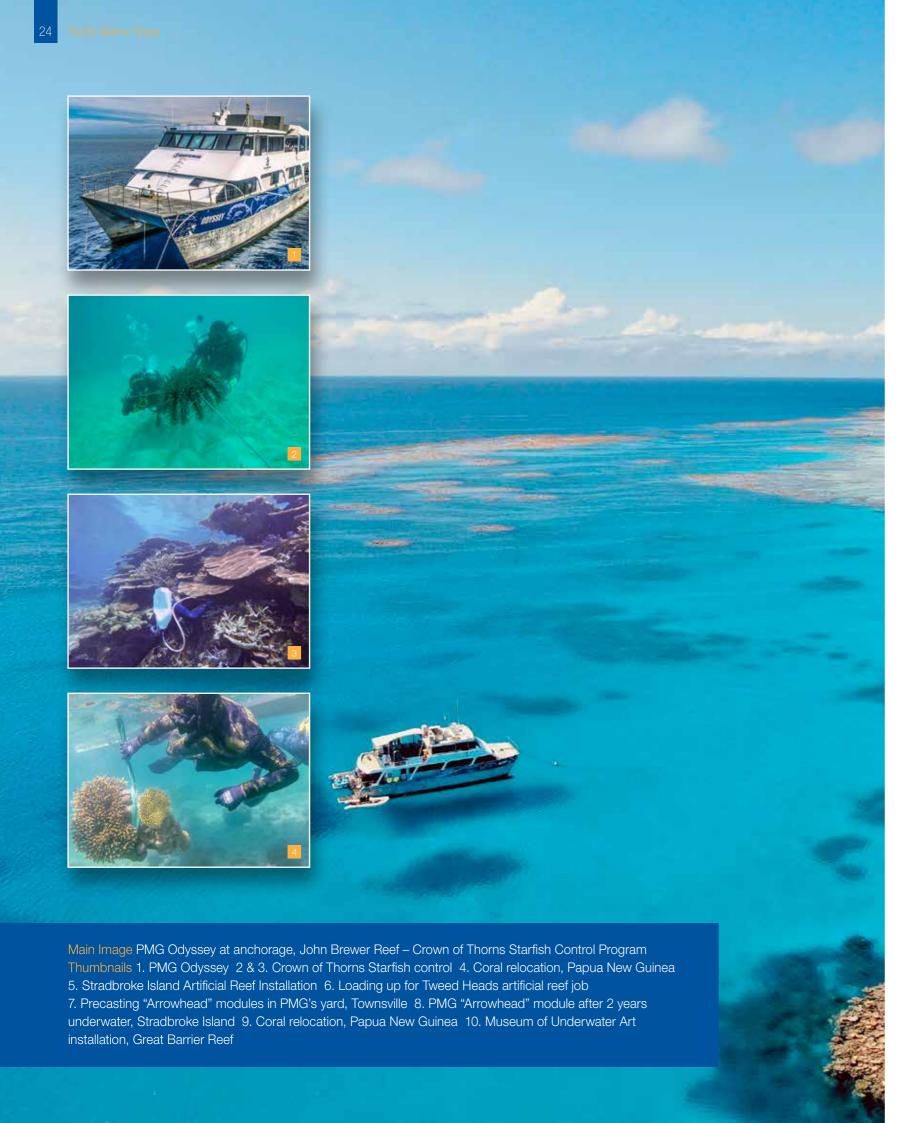






Main Image Anode installation for BMA, Hay Point. Close Visual and General Visual Inspections, Video Survey, Cathodic Protection Measurements, Ultrasonic Thickness Measurements

Left 1 & 3. Underwater inspection and repair program in Weipa on the Mission River Bridge for Rio Tinto. Up to 20 divers per campaign over a 15 year period. 2. Denso installation 4. Pile inspection repair from remote vessel (Lisa Lee) crocodile protection cage 5. ROV (Remote Operated Vehicle) topside setup 6. Predator cage diving, Weipa 7. Underwater welding 8. Underwater Broco cutting SPM (Single Point Mooring), Kumul Platform PNG Right Image Hay Point HPX3 project diving.



# Scientific Diving & Artificial Reefs

Pacific Marine Group has moved into the ever expanding field of artificial reefs. These are increasingly popular for enhancing recreational fishing & diving opportunities. Pacific Marine Group has developed inhouse our unique "Arrowhead" precast concrete reef module, which can be customised to suit various fish species & environmental conditions. The reinforced concrete modules are 5m tall, 4m square in base and weigh approximately 17T each.

Steel modules are also able to be custom designed, built and installed. We are also experienced in underwater art projects, including the recently completed "Museum of Underwater Art" project on the Great Barrier Reef.

Our Crown of Thorns Starfish (COTS) Control Program for GBRMPA is successfully delivering results on high value reefs between Townsville and Mackay.

The aim of the program is to reduce COTS densities to allow for coral growth to outpace COTS feeding capacities, as well as undertaking reef Surveillance, Reef Health Impact Surveys and supporting research activities.



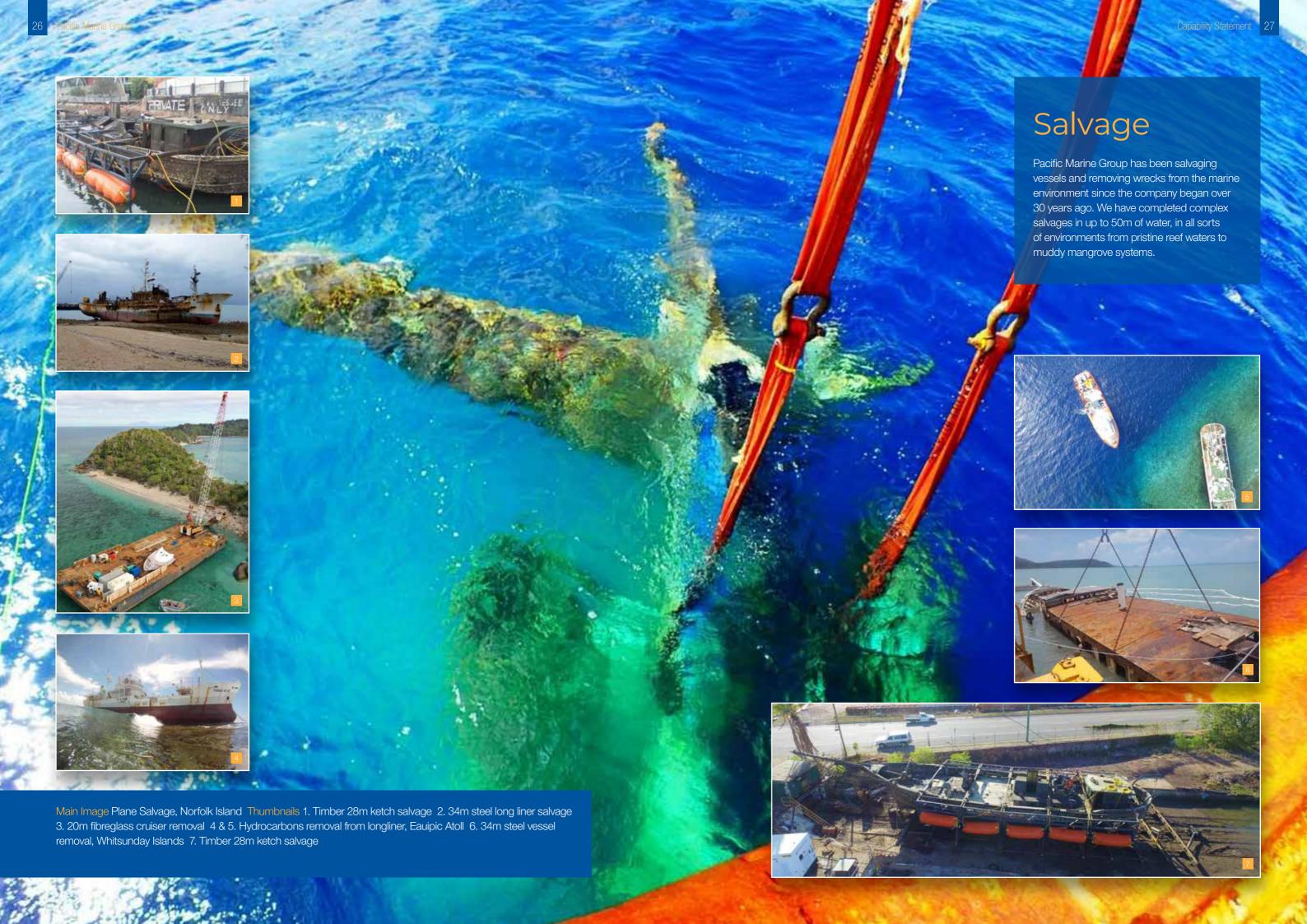




















#### **Cyclone Moorings**

Pacific Marine Group is experienced in cyclone mooring installation, maintenance, and removal where required. We have completed a number of large scale cyclone mooring projects, typically for large scale dredging and construction projects, using anchors in the

2T – 8T range, and chains in the 40mm – 80mm

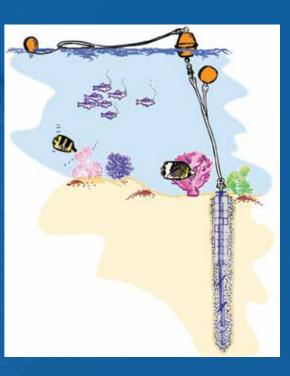
#### **Grouted Screw Moorings**

In addition to cyclone moorings, Pacific Marine Group has developed an eco-friendly Grouted Screw Mooring (GSM) system. The system has been developed in conjunction with James Cook University and an international patent is held by Pacific Marine Group for this system. Over 300 GSM's have been installed along the Great Barrier Reef, Whitsunday Islands, Rowley Shoals (WA), Ashmore Reef (WA) and as far as Hawaii.

#### **Grouted Screw Moorings Installation Process**

Divers use an underwater drill rig to screw a 4m long screw shaft into the seabed. As drilling occurs, grout is pumped out through the lead

helix (tip), resulting in a 4m deep, 600mm concrete column. Once the concrete is set, a pad eye is bolted on and the rigging attached. The system is typically used for vessels up to 35m / 300T, but larger vessels can be accommodated with the use of "Tri" moorings. Essentially three GSM's linked together with a common pad eye.











Pacific Marine Group

Capability Statement 33

# Equipment - Tugs/Supply Vessels



#### 'PMG Emerald'

Utility vessel for offshore support operations 41.8m length, 10m beam, 2 x 1400 HP, 10 knots, Bollard pull 36.5T, 90T brake capacity towing winch/36T line pull, 20 beds



#### 'PMG Tarka'

Damen 2609 Tug for coastal support operations 26m length, 9m beam, 2 x 1100 HP, 10 knots, Bollard pull 30T, 50T towing winch. Removable Damen dredging ploughing system 25T Aframe



#### 'PMG Sailfish'

Harbour tug for various coastal support operations 16m length, 6m beam, 2 x 499 HP, 8 knots, Bollard pull 13T, 15T towing hook, 6 beds



#### 'PMG Pride'

Utility vessel for offshore support operations 34m length, 8.5m beam, 2 x 550 HP, 10 knots, Bollard pull 15T, 15T tow winch, 10T A-frame, 20 beds



#### 'Black Panther'

Utility vessel for offshore support operations 24m length, 7.8m beam, 2 x 600 HP, 10 knots, Bollard pull 15T, 20T towing hook, 8 beds



#### 'PMG Swordfish'

Harbour tug for various coastal support operations 16m length, 6m beam, 2 x 499 HP, 8 knots, Bollard pull 13T, 15T towing hook, 6 beds



#### 'George Doyle'

14m Catamaran Work Boat, 2x Cummins 355 HP, dive support, crew transfer, hydrographic survey



#### 'PMG Odyssey'

Expedition style aluminium catamaran 24m length, 2 x 420 HP, 3T crane, 2x 5.5m tenders high quality fitout, 26 beds



#### **Project Vessels**

Vessels not currently in our fleet are able to be sourced on a project basis



#### **Project Barges**

Barges not currently in our fleet are able to be sourced on a project basis

# **Equipment - Barges**



#### 'PMG183W'

Flat top deck cargo barge for offshore operations 54m x 21m, 15T/m<sup>2</sup> deck rating, bow door & side walls available



#### 'PMG181'

Flat top deck cargo barge for offshore operations 55m x 18m, 15T/m<sup>2</sup> deck rating, winches available to 20T line pull, bow door & side walls available



#### 'PMG150'

Flat top deck cargo barge, offshore operations, 45m x 15m, 10T/m<sup>2</sup> deck rating, 180T crane pad strengthening bow door, side walls & 20T line pull winches available



#### 'PMG182'

Flat top deck cargo barge for offshore operations 55m x 18m, 15T/m<sup>2</sup> deck rating, winches available to 20T line pull, bow door & side walls available



#### 'PMG151'

Flat top deck cargo barge, offshore operations, 45m x 15m, 15T/m<sup>2</sup> deck rating



#### 'PMG124'

Flat top deck cargo barge for offshore operations 36m x 12m, 15T/m<sup>2</sup> deck rating, winches available to 20T line pull, bow door & side walls available



#### 'PMG123'

Steel deck cargo barge, offshore support operations 36m x 12m, 10T/m<sup>2</sup> deck rating, sister ship to PMG 122, bow door & side walls available



#### 'PMG121'

Heavy duty construction barge, offshore operations 36m x 12m, 20T/m<sup>2</sup> deck rating, towing brackets 6 x mooring bollards, bow door & side walls available



#### Road Transportable Barges 14m

14m x 3.5m barges (two available) Able to be bolted together



#### 'PMG122'

Steel deck cargo barge, offshore support operations 36m x 12m, 10T/m<sup>2</sup> deck rating, bow door & side walls available



#### 'Sheerlegs'

Crane barge for various offshore support operations 24m x 13m, 75T American pedestal crane, 8m<sup>3</sup> bucket, bow door & side walls available



#### Road Transportable Barges 12m

12m x 3m x 1.2m barges (four available) Able to be pinned together



# Equipment - Workboats



**Construction Punts / Dinghies** Numerous shapes, sizes and specifications



'Samsson 2' Work Punt 7.5m, 1x 80 HP Yamaha outbard



'Titan' Work Boat 7.5m, 2x 140 HP Suzuki outboards



'Lisa Lee'

Work boat for various coastal support operations 11.3m, 1x 250 HP, coastal services, dive support and small mooring, accommodation for 3 in 1 cabin



'Dive Punt' 6m dive / work punt, 115hp Yamaha outboard



'PMG Catfish' Work Boat 7m cat., 2x Suzuki 140 HP outboards, crew transfer, dive support, barge handling



'Harry Jon' Work Boat 10m, 2x 200 HP Honda outboards, crew transfer, dive support



'PMG Pusher'

Work boat for various coastal support operations 5.5m, 1x 150 HP Honda outboard, barge handling and marine support



Vibro Hammers ICE44B | ICE416 | ICE23RF Vibro Hammers



**Piling Drop Hammers** 3T & 7T / 1.2m stroke



2 Gate Hydraulic Piling Frame

450mm – 1000mm pile diameter



**Junttan Hammers** HHK 10/12/14S | HHK 7/9A or hired as required



**Hydraulic Impact Hammer** Dawson HPH4500 double-acting



3 Gate Piling Frame Up to 1200mm diameter



2 Gate Hydraulic Piling Frame 450mm – 1200mm pile diameter



80T, 100T & 150T **Crawler Cranes** 

80T 100T 150T Sany Crawler Cranes



180T Crawler Crane 180T Kobelco Crawler Crane

# Equipment - Ancillary



Yokohama Fenders

Typically 6m long x 3m diameter



**Cyclone Moorings** 

Complete moorings for hire or sale



**Complete Anchor Winch sets** 

15 / 20T line pull, fairleads, control panels, silenced hydraulic packs to suit requirements



20T Excavators

Komatsu 20T excavators



Anchors 2T - 6T

Flipper Delta and other configurations



14T & 25T Cranes

14T & 25T Franna Cranes



