



TRANSNET



PORT SOUTHERN AFRICAN HANDBOOK UPSTREAM OIL AND GAS

THIRD EDITION: MAY 2015



CONTENTS

FOREWORDS	2
Foreword by Richard Vallihu	
Foreword by Ebrahim Takolia	
1 INTRODUCTION	6
Port overview	
Operation Phakisa	
Port Act Section 56 Process	
Special Economic Zones Incentives	
Commercial indicators	
Basic Services	
Transport	
Labour and Skills	
2 INDUSTRY OVERVIEW	16
3 SALDANHA BAY	20
Entering the port	
Saldanha Bay ship repair facilities	
Saldanha Bay Industrial Development Zone	
Future Plans	
4 CAPE TOWN	32
Entering the port	
Cape Town ship repair facilities	
5 MOSSEL BAY	50
Entering the port	
PetroSA logistics base	
6 NGQURA	56
Entering the port	
Rig repair at Ngqura	
Coega Industrial Development Zone	
7 DURBAN	64
Entering the port	
Ship repair facilities	
8 RICHARDS BAY	74
Entering the port	
Ship repair facilities	
Richards Bay Industrial Development Zone	
Future plans	
9 USEFUL CONTACTS	80
10 INDEX	83

PORT SOUTH AFRICAN HANDBOOK

UPSTREAM OIL AND GAS



South Africa's port infrastructure is being developed to accommodate the offshore oil and gas industry. Operation Phakisa, a government initiative to fast-track port infrastructure development, provides an aggressive set of timelines to position the country's ports as premium destinations for rig and offshore support vessel repairs and maintenance. This edition of the Port Handbook concentrates on the available facilities at Saldanha Bay, Cape Town, Ngqura, Durban as well as Richards Bay, and provides reference information about future developments in infrastructure as it relates to Operation Phakisa. As the logistics hub for PetroSA's offshore activities, Mossel Bay is also included.

PREPARED FOR:
Transnet National Ports Authority
South African Oil and Gas Alliance

COMPILED & EDITED BY:
Colleen Jacka

LAYOUT & DESIGN:
More Maximum Media



"It is necessary to urgently establish an oil and gas service hub to position South Africa in the regional oil and gas market."



In line with Operation Phakisa and the goals outlined in the National Development Plan to promote economic growth and to boost job creation, government will be chasing a growth target of five percent by 2019 - and establishing a Blue Economy is a key component of this growth.

The South African coastline spans 2,954 km with eight strategically positioned commercial seaports. Our oceans have the potential to contribute up to 177 billion rand to the Gross Domestic Product (GDP) and create just over one million jobs by 2033.

South Africa is ideally positioned to serve the East-West cargo traffic and the booming African offshore oil and gas industry through ship and rig repair, refurbishment and boat building. Despite this, we currently capture only one percent of this global market.

Of the 80 oil rigs estimated to be in the range of the Western Cape, only four rigs are serviced per year, showing significant potential for growth. As a solution, the marine transport committee has developed 18 initiatives across three categories: (1) infrastructure and operations; (2) skills and capacity building; and (3) market growth to accelerate sector growth.

Enquiries are being received at the Port of Saldanha for rigs (jack-ups and semi-submersible) and drill ships to be accommodated. In the absence of dedicated and purpose-built infrastructure, interim plans are being made to accommodate rigs either at the Mossgas quay or at one of three suitable location on the Langebaan or Saldanha side of the causeway.

Two semi-submersible rigs (draft of 18m) with dynamic positioning technology have thus far been accommodated at the Port of Saldanha with maintenance repairs being undertaken from a barge and support vessels ferrying supplies and equipment between land the rig.

It is necessary to urgently establish an oil and gas services hub to strongly position South Africa in the rapidly growing regional oil and gas market. Two specific projects were listed and endorsed during Operation Phakisa for Saldanha Bay:

- ▶ Berth 205: A deep water berth to accommodate semi-submersible rigs and large drill ships; and
- ▶ Construction of a jetty at Mossgas: Enable new build facilities, accommodate structures such as a floating dock or heavy lift to enable maintenance and repairs.

The initiatives arising out of Operation Phakisa are expected to increase the Blue Economy's GDP contribution by more than 20 billion rand by 2019.

Regards

Richard Vallihu, Chief Executive, Transnet National Ports Authority



national ports
authority



RECAPITALISATION, GROWTH AND EXPANSION

Transnet National Ports Authority leads initiatives to develop South Africa's repair facilities into a Marine Engineering hub of excellence for the continent.

EXECUTING TNPA's VISION:

- ✓ To expand direct employment
- ✓ To unlock jobs in the private sector
- ✓ To provide skills to the wider economy
- ✓ To drive and implement a supplier development programme
- ✓ To execute a regulatory and oversight role

“Our ports will play a leading role in the development of the oil and gas sector in Sub-Saharan Africa”



South Africa has a long and cherished maritime history and its early development was based around its strategic location between West and East, serving as a trade and supply port for European vessels bound for Asia. Following the construction of the Suez Canal, South Africa has continued to be a port of call for larger supply and cargo vessels, as well as oil and gas tankers transporting bulk products to Europe and other parts of the world.

Recent developments in Africa, particularly in the oil and gas sector, have seen maritime activity increase significantly, and South Africa is starting to gear its infrastructure as well as services to support the oil and gas industry. To support this growth many upstream and midstream service and equipment providers have clustered their offices in regions like Cape Town, a traditional port of call, and more recently Saldanha Bay, a specialised industrial development zone dedicated to the oil and gas industry. Ports like Durban and Ngqura have also seen increased oil and gas activity as a result of the significant finds in East Africa.

The South African Oil & Gas Alliance is committed to the development of the upstream and midstream oil and gas sectors in Sub-Saharan Africa and is proud to develop the handbook in collaboration with the TNPA. In this handbook we also profile all of South Africa's ports that are relevant to the oil and gas industry.

Over the next five years, investments in port infrastructure for the oil and gas industry is expected to exceed 10 billion rands (US\$1 billion).

We look forward to seeing you in our ports.

Regards

Ebrahim Takolia, CEO South African Oil and Gas Alliance

Supporting the Upstream and Midstream Oil & Gas Sectors



SAOGA: your partner in Africa

The South African Oil and Gas Alliance (SAOGA) is a central point for connecting companies to each other and to opportunities. SAOGA relies on its links with local and international industry companies and a network of global partners to carry out its mission.

Companies wanting to work collaboratively with others to develop the South African upstream and midstream industry, are invited to consider joining the Alliance.

Contact us:

info@saoga.org.za
+27 21 425 8840

Membership:

bwilliams@saoga.org.za

Skills & Training

astrydom@saoga.org.za

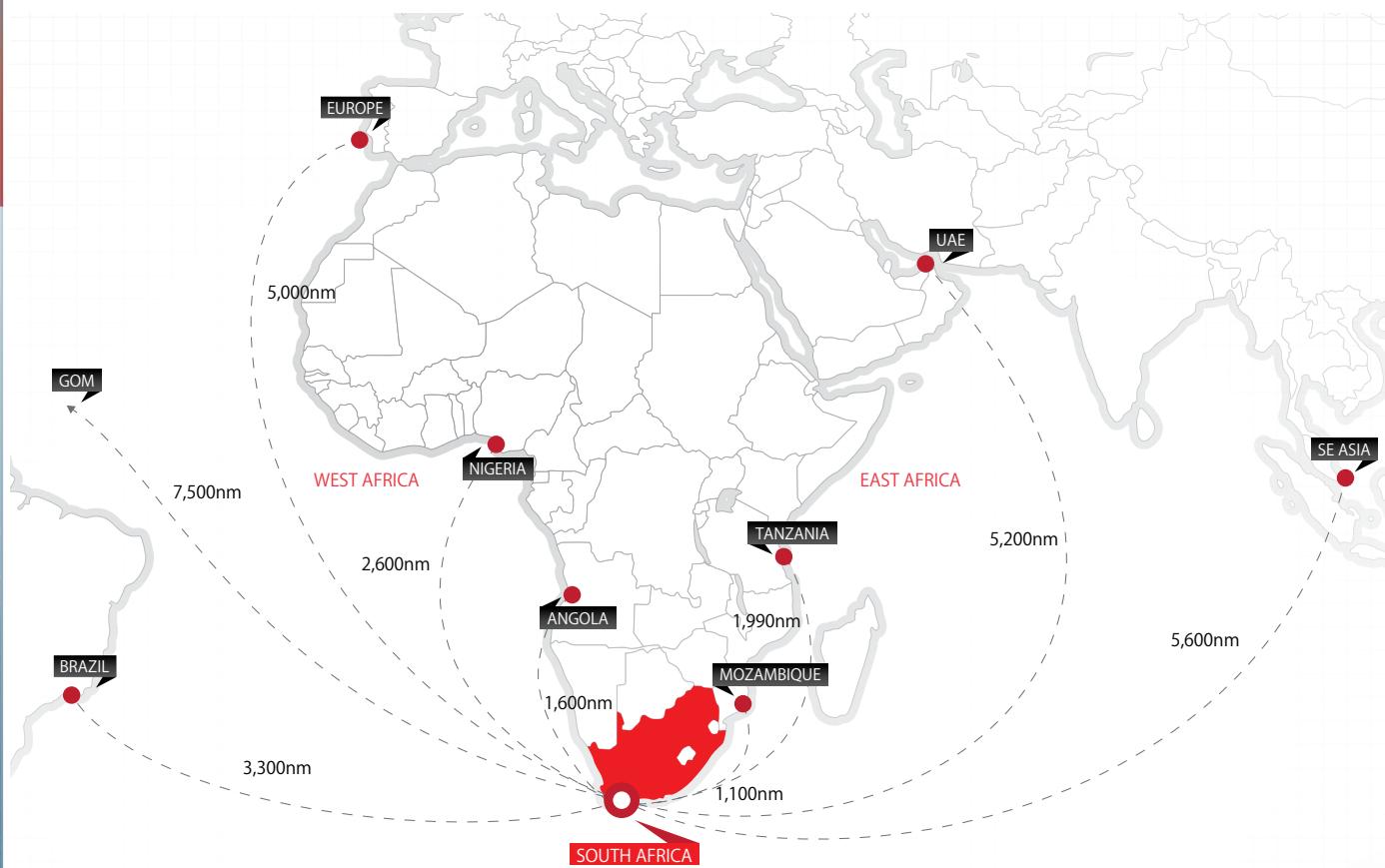




1 INTRODUCTION

INTRODUCTION 1

South Africa's port infrastructure is being developed to accommodate the offshore oil and gas industry. Operation Phakisa, which was launched in mid-2014, provides an aggressive set of timelines to position the country's ports as premium destinations for rig and offshore support vessel repairs and maintenance. South African ports remain well-placed to provide other oil and gas related services to the growing industry on the east and west coasts of Africa.



Figures represent approximate distances.

There is a real opportunity for South Africa to leverage its infrastructure, location, expertise and existing downstream industry to create permanent hubs to service the African oil and gas industry.

SOUTH AFRICAN PORTS - AN OVERVIEW

South Africa's eight commercial ports all offer facilities for ship or boat repair and maintenance, but Saldanha Bay, Cape Town, Durban and Ngqura currently present the best options to support the needs of the offshore sector. Aggressive plans to further develop facilities in Saldanha Bay and Richards Bay will see these ports become destinations of choice for rigs, jack-ups and related vessels in future.

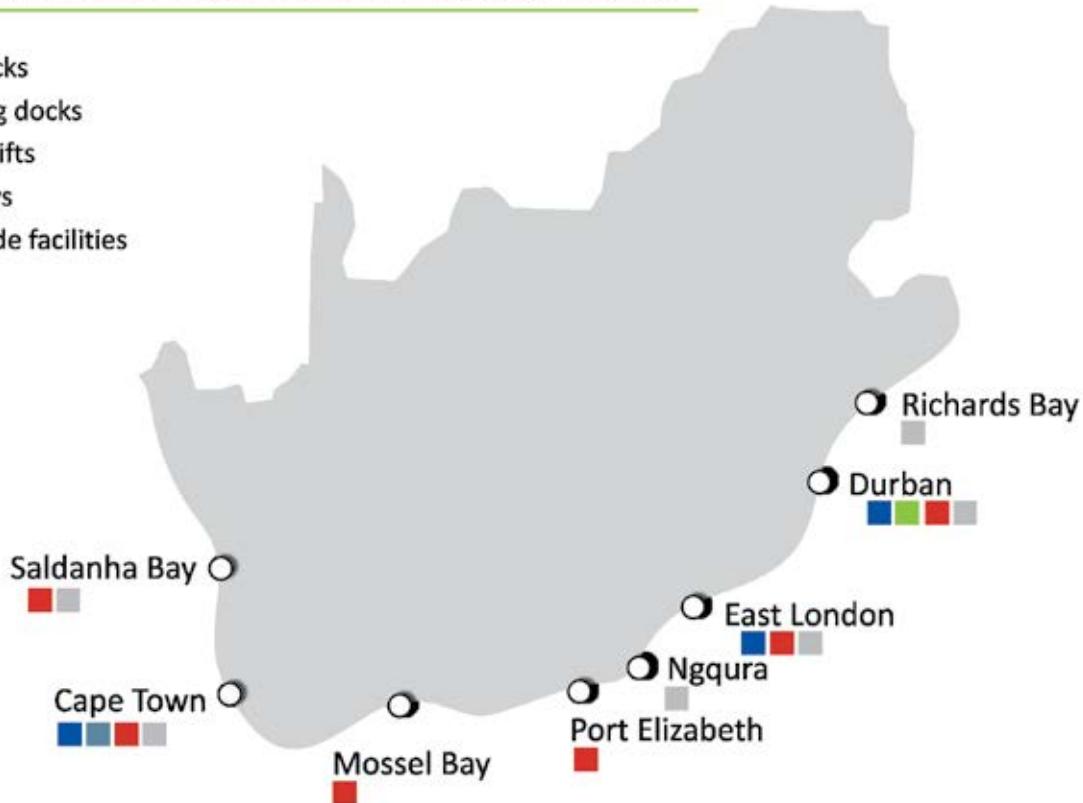
The South African ports can accommodate the following, via available facilities to varying degrees:

- ▲ Floating or wet repairs: in the bay
- ▲ Quayside repairs: some multi-purpose terminals, repair quays
- ▲ Dry repairs: drydocks, floating docks, syncrolifts, slipways

Current capacity constraints based on available facilities are being addressed by new infrastructure developments primarily under Operation Phakisa initiatives.

SHIP REPAIR FACILITIES IN SOUTH AFRICAN PORTS

- █ Dry docks
- █ Floating docks
- █ Syncrolifts
- █ Slipways
- Quayside facilities



OPERATION PHAKISA



The launch of Operation Phakisa by the State President in July 2014 resulted in an analysis of the economic potential of South Africa's oceans. Operation Phakisa's main objective was to assess how the oceans' economy can contribute to increased GDP growth and increased employment within the marine transport and manufacturing sector, aligned to the priorities of the National Development Plan.

The recommendations highlighted the opportunity for South Africa to achieve GDP growth and job creation by pursuing the development of new port repair facilities and ensuring that existing repair facilities are maintained to promote further growth in the vessel repair market. Operation Phakisa's recommendations strongly underlined and supported the role of Transnet National Ports Authority (TNPA) as set out in Section 11 of the National Ports Act 12 of 2005, which indicates that TNPA must plan, provide, maintain and improve port infrastructure.

Operation Phakisa also demonstrated that growth within the oceans' economy cannot be realised unless the proposed new port facilities are delivered as integrated Industry solutions, with strong partnerships between the ports, IDZ's and the repair Industry.

TNPA is committed to the delivery of Operation Phakisa. To deliver Operation Phakisa, new vessel repair facility opportunities will be pursued at the ports of Saldanha Bay, Richards Bay and East London, whilst maintenance and refurbishment of existing vessel repair facilities have been prioritised at the ports of Durban, East London, Port Elizabeth, Mossel Bay and Cape Town.

The repair facilities to be established at the Port of Saldanha, aimed to position the port as an offshore oil and gas services complex with dedicated rig and other vessel repair capabilities, will be developed and aligned with the Saldanha Bay Industrial Development Zone (SBIDZ). The SBIDZ has already attracted global interest and will provide land-based facilities to support offshore operations in terms of logistics, equipment servicing, rig repair and fabrication, as well as companies interested in dedicated infrastructure and quayside access for vessel fabrication, logistics and repairs.

Operation Phakisa will create opportunities for the private sector to invest in port facilities. The investment in new facilities has been projected at R13 billion, to support both the oil and gas industry and expanding marine manufacturing within ports. Growth and development of the South African oceans' economy can only be realised by ensuring capacity at the South African ports; and execution and delivery of Operation Phakisa will position the country to capture its share of these economic opportunities.

The recommendations highlighted the opportunity for South Africa to achieve GDP growth and job creation by pursuing the development of new port repair facilities and ensuring that existing repair facilities are maintained to promote further growth in the vessel repair market.

Operation Phakisa's recommendations strongly underlined and supported the role of Transnet National Ports Authority (TNPA) as set out in Section 11 of the National Ports Act 12 of 2005, which indicates that TNPA must plan, provide, maintain and improve port infrastructure.

PORT INITIATIVES UNDER OPERATION PHAKISA

Saldanha Bay For more details on these developments, see pages 26 & 27.	OFFSHORE OIL AND GAS SUPPLY BASE: Development and extension of the General Maintenance Quay – this facility will be operated as an offshore oil and gas supply base with a berth length of 280 m and a water depth of -8.5 m. The supply base will, amongst others, be a service hub to offshore rigs to supply food, materials and collect waste. BERTH 205: The construction of a new deep-water dedicated oil rig repair facility at a new berth 205 will provide a 380 m long berth with a water depth of -21 m. JETTY: Lengthening the Mossgas Quay through the construction of a jetty structure of 500 m and a water depth of -8.5 m will enable repairs and maintenance to rigs and supply vessels not requiring deep water. Pockets of water depths of -12 m will accommodate floating docks to enable these type of repairs.
Richards Bay For more details on these developments, see page 75.	REPAIR FACILITY: The port will pursue the establishment of a vessel repair facility utilising the existing repair quay or potential new sites to facilitate vessel repairs. Further studies will be conducted to assess the type of facility, which could include a floating dock or drydock.
East London	BOAT-BUILDING HUB: The refurbishment of the slipway and backup area as a boat building hub has been identified at the Port of East London. Detailed studies will be undertaken to determine how a boat-building hub at the port will complement the existing boat-building facilities at the ports of Cape Town and Durban.
Refurbishment Projects	MAINTENANCE: Existing repair facilities are located at Durban, East London, Port Elizabeth, Mossel Bay and Cape Town. Extensive refurbishment and maintenance are planned at these facilities. This will ensure that facilities are safe, operational and that capacity can be utilised to sustain existing repairs and allow ship yards to pursue new business opportunities.

PORTS ACT SECTION 56 PROCESS

TNPA is tasked with the responsibility to enter into agreements with any person to allow the design, construction, rehabilitation, development, financing, maintenance and operation of a port terminal or port facility. This must be done in accordance with a process that is fair, equitable, transparent, competitive and cost effective.

The new facilities at the Port of Saldanha, Richards Bay and East London will follow a Section 56 process. The process requires bidders to respond to a request for proposal. Bids are evaluated taking into account the New Growth Path/Supplier Development/BBBEE criteria as well as the technical fit, with threshold targets for each of the two stages.

Only if the bid passes the required thresholds, will the financial evaluation be done. Negotiations will then follow with the successful bidder and an agreement concluded.



SPECIAL ECONOMIC ZONE INCENTIVES

The Department of Trade and Industry (DTI) offers investors in South Africa's Special Economic Zones a new set of incentives as listed in the Taxation Laws Amendment Act No. 43 of 2014:

- ▶ A 15 percent corporate income tax rate for businesses who qualify and contribute through value-added activities within the zone;
- ▶ An employment incentive allowing for a tax deduction for employment of workers earning less than R60,000 per year as per the Employment Incentives Act;
- ▶ Accelerated depreciation allowance for buildings in the zones based on the existing rates for urban development zones, to encourage developers to invest in industrial premises; and
- ▶ Donation to public-benefit organisations: Currently deductible up to 10 percent of taxable income and current proposal allows donations of more than 10 percent to be rolled over in future years.

SOUTH AFRICAN INDUSTRIAL DEVELOPMENT ZONES:

Attached to ports:

- ▶ Saldanha Bay IDZ
- ▶ Coega IDZ
- ▶ Richards Bay IDZ
- ▶ East London IDZ

Attached to airports:

- ▶ Dube Tradeport (KwaZulu Natal at King Shaka airport)

South Africa's IDZ's exist as Special Economic Zones.

COMMERCIAL INDICATORS



TIME: South African Standard Time is two hours ahead of Greenwich (UTC). There is no "summer time" in South Africa with the result that, during the northern summer, South African Standard time is only one hour ahead of British Summer Time.



LANGUAGE: South Africa has a large number of official languages including English. With few exceptions, however, English is understood throughout the country and is the accepted language of business. English is universally understood in the Western Cape, but the Saldanha Bay region has a strong Afrikaans influence.



LEGAL SYSTEM: Despite being strongly influenced by British practice, South Africa still uses the Roman Dutch system of law.

This "mixed system" incorporates a civil law drawn from Roman Dutch Law; a common law drawn from English Common Law and, where appropriate, elements of the customary laws of the various ethnic groups. In general, South African law follows English practice in criminal and civil procedure, in company law and in the law of evidence. It follows Roman Dutch Law in contract law, law of delict (tort), law of persons, law of things, family law, etc.

The adoption, in 1996, of a new constitution imposed an additional layer to the legal system that includes a legally binding, comprehensive bill of rights; provision for an independent judiciary and a Constitutional Court as a court of final recourse.



ECONOMY: South Africa is ranked as an upper-middle income economy by the World Bank. It has a reasonably diversified economy that includes mining, agriculture and fishing, vehicle manufacturing and assembly, food processing, clothing and textiles, telecommunication, energy, financial and business services, property, tourism, transport, and wholesale as well as retail trade.



Compared to developed countries, however, South Africa has a heavily regulated economy influenced by State ownership and controlled labour regulations.

Compared to other emerging economies, South Africa rates highly on affordability and availability of capital, financial market sophistication, business tax rates and infrastructure. It does not rate as highly, however, on measures of cost and availability of labour, education and the use of technology and innovation.



CRIME AND SECURITY: Crime levels can be a concern in South Africa and visitors are advised to be vigilant.



BANKING: The banking and financial services in South Africa operate under a strong regulatory and legal framework that is highly regarded internationally. A full range of services including commercial, retail and merchant banking, mortgage lending, insurance and investment is available. The introduction of new technology such as Internet banking, mobile phone banking and various self-service products, is an integral part of this service.

The merchant banking and investment banking components can serve most of the requirements of business and foreign investment for banking and provide advice to both local and international clients on taxation and legal aspects.



TAXATION: Personal Tax: Expatriates may reside in South Africa for up to 183 days in any tax year before they are liable for personal tax on their world-wide earnings. South African income tax tops out at 41 percent and corporate tax at 28 percent. Value Added Tax (VAT) is currently levied at a rate of 14 percent on most purchased items, although basic necessities are exempt.

Other deductions include contributions to the Unemployment Insurance Fund (UIF) that insures workers against the risk of loss of income.



CUSTOMS AND EXCISE: Goods imported into South Africa are in general subject to import duty and to VAT. The Customs Act, read in conjunction with Schedule 1 to the VAT Act, requires the South African Revenue Service (SARS) to secure this duty and VAT liability pending the completion of the customs procedure. Schedule 1 to the VAT Act specifically requires that “the tax is secured, in part or in full, by the lodging of a provisional payment or bond, except where the Commissioner, in exceptional circumstances, otherwise directs...”

However, where goods are:

- ❑ Temporary imports for storage purposes;
- ❑ Temporary imports for repair or reconditioning purposes;
- ❑ A combination of the above;
- ❑ Operations in South African Territorial Waters;

the import duty may, on compliance with the procedure as set out in Schedule 4 of the Customs Act, be rebated. Similarly, the VAT payable in terms of Section 13 of the VAT Act may be exempted on compliance with these procedures.



This rebate of the import duty liability and exemption of the VAT liability is, however, contingent on the re-exportation of the goods in compliance with the relevant rebate item. To limit risk SARS usually requires a security deposit related to this potential VAT liability.

Time limits: The time limits allowed by Schedule 4 of the Customs Act and Schedule 1 of the VAT Act for the temporary import procedure are:

- ▲ Six months for temporary imports where the goods will be exported in the same condition; and
- ▲ Twelve months for temporary import for repair purposes.

These time limits may be extended by SARS in “exceptional circumstances,” but there is uncertainty around whether SARS will allow such extension.

Security deposits: The amount of security that will be required when goods are imported under one of these customs procedures is, to a certain extent, determined by the SARS “External Policy Securities” under reference SC-SE-05. In terms of this policy document, SARS should secure the full amount of duty and VAT that may become due.

While generally manageable, potential clients should be aware that these procedures can be time consuming and it is advisable to use a good agent.

BASIC SERVICES



ACCOMMODATION: All of South Africa’s major centres offer a wide variety of accommodation options from upmarket hotels to bed and breakfasts and self-catering apartments. Hostel-type accommodation for contract employees is less widely available.



FRESH WATER: South Africa has a modern water supply. The quality of the fresh water supply is of a very high standard and it is safe to drink the tap water. Supplies of fresh water are adequate and there are no restrictions on consumption although there is a sliding scale of tariffs for the use of water.



ELECTRICITY: Domestic and industrial electricity supply is 50 Hz generally at 220/380 V throughout the country.



INFORMATION AND COMMUNICATIONS: The national post office operates a spread of post offices throughout the country strategically placed in all towns and cities. Many leading international and a number of local courier services are in operation. Delivery by post or by courier conforms to international norms respectively.

Fixed line phones, mobile (cell) phones, Internet and email are all available. Submarine cable and satellite networks provide international communications. SAT2 fibre optic submarine cable links Cape Town to Europe and the USA and this system is being extended to the Far East. Mobile networks are based on the international GSM standard and 3G data networks are widely available. LTE data networks have also been introduced.



Electricity supplies in South Africa operate under strain and Eskom has been forced to implement scheduled load-shedding. Companies operating within the ports fall under National Key Point Areas and are therefore free from load-shedding.

Foreigners can obtain pay-as-you-go SIM cards or 24-month contracts from these operators, but will have to register in accordance with the Regulation of Interception of Communications and Provision of Communication-Related Information Act (RICA). As such, a valid passport and proof of address (from hotel or accommodation provider) must be provided when purchasing a SIM card or data package.

TRANSPORT

DRIVING:

Drive on left hand side
Freeway speed limit: 120km/hr
Urban speed limit: 60km/hr

CAR HIRE:

Most of the car hire operators are available at all domestic and international airports.

RAIL:

Comprehensive rail network, but less effective as public transport.



AIRPORTS: All major centres in South Africa are linked by a network of domestic and international airports.

There are direct international flights into Cape Town from the main international centres including London, Frankfurt, Namibia, Mozambique and Amsterdam. Many more international centres, such as those from the Far East, are linked to Johannesburg by direct flights and there are frequent flights between these two cities on low-cost domestic airlines.

Cape Town International Airport is also connected to many African destinations such Gaborone, Maputo, Windhoek and Luanda.



ROADS AND FREEWAYS: Roads in major centres are all tarred and are kept in good condition. The country is well served with a system of freeways linking the various regions.

South African road users drive on the left hand side of the road. On multi-lane freeways the rule: keep left, pass right applies.

Speed limits are generally:

- ▲ National roads: 120 km/hr
- ▲ Urban roads: 60 km/hr
- ▲ Or otherwise as indicated on the roadside.

Speed control is maintained through a number of fixed roadside cameras, speed over distance systems or ad-hoc speed traps. If pulled over, drivers are required to produce a valid local or international drivers' licence.



CAR HIRE: Cape Town has a well-developed car-hire industry with a number of multi-national firms represented. The main car-hire depots are situated at all domestic airports with ancillary depots in towns.



RAIL: South Africa has inherited a comprehensive freight rail network, but as a means of public transport it is not as well developed as in most developed countries and has become subservient to other means of transport.



The Airport Company of South Africa (ACSA) was formed to own and operate the nine principal South African airports, including the three main international gateways of OR Tambo, Cape Town and King Shaka International Airports. For more information visit: www.airports.co.za



LABOUR AND SKILLS



WORK PERMITS: The Immigration Amendment Act, 2007 came into effect in May 2014. Work permits are required by expatriates working on projects in South Africa and guiding South African industry. These are obtained from the Department of Home Affairs (DHA), but it is advisable to work through a reputable ship's agent familiar with local laws.

Work permits are issued only to foreigners where South African citizens with the relevant skills are not available for appointment. These permits are not open-ended and applications must be made at any regional office of the Department of Home Affairs (DHA) or nearest South African embassy, mission or consulate abroad.

The following types of work permits may be applicable in this industry sector depending on the circumstances:

- ▲ General work visas (not exceeding five years)
- ▲ Critical skills work visas (not exceeding five years)
- ▲ Intra-company transfer work visas (not exceeding four years and not renewable)

There are a number of stipulations and requirements attached to each form of visa as per Section 18 of the Act, which can be downloaded from the DHA website.



LABOUR & SKILLS: The South African labour market is characterised by an oversupply of unskilled workers reflecting the high levels of unemployment and a shortage of skilled workers. However, there is a South African pool of workers skilled in the various components of oil and gas as well as other heavy plant work who move between projects in South and in West Africa. As a rule, the major players try to coordinate their planning well in advance to level-out the labour demand.

Labour costs: With the proviso that relative labour costs are sensitive to fluctuations in exchange rates, costs in South Africa with respect to offshore oil and gas work are generally cheaper than Western Europe and America, broadly similar to Singapore and significantly higher than China.

Training: The larger firms generally have extensive training programmes both for new entrants to the field and for upgrading and improving the skills of existing workers.

Trade Unions: South Africa has a very strong trade union movement, but in general it is proactive and works well with the industry. Strikes do, however, occur and usually centre around wage negotiations.

Engineering professionals: Although South Africa has a number of universities with full engineering faculties conforming to international standards, none offer either naval architecture or marine engineering. These faculties do have many experts who are available for specialised consulting.

The Engineering Council of South Africa (ECSA) provides for the registration of engineering professionals and the regulation of engineering practice in order to promote the safety, health and interests of the public in relation to the Engineering Profession.



The Engineering Council of South Africa (ECSA)

provides for the registration of engineering professionals and the regulation of engineering practice in order to promote the safety, health and interests of the public in relation to the Engineering Profession.

FOR MORE INFORMATION

Department of Home Affairs
www.home-affairs.gov.za



2

INDUSTRY OVERVIEW

INDUSTRY OVERVIEW 2

South Africa's rig/ship repair and engineering sector is well developed to offer a wide range of services. Offering close proximity to the west and east African oil and gas fields, the country's ports are able to supply a full range of ship and rig services ranging from routine maintenance and inspection through repairs to fabrication of additional add-ons and complete jackets. In addition to the industrial and marine engineering in the port cities, the development of the mining industry in the interior has seen the growth of major heavy engineering services in Gauteng.



While many of the port-based engineering firms continue to invest and gear up for the larger machining requirements of the offshore industry, Johannesburg-based heavy engineering services are also available. Although some distance from the ports, they represent only a road haul each way for heavy loads.

The marine engineering sector is generally based within the harbour precincts of the various ports with establishments, offices and workshops on sites leased from the port authorities and making extensive use of the facilities offered by the port:

- ▲ General harbour services
- ▲ Repair jetties and other berthing sites
- ▲ Drydocking facilities

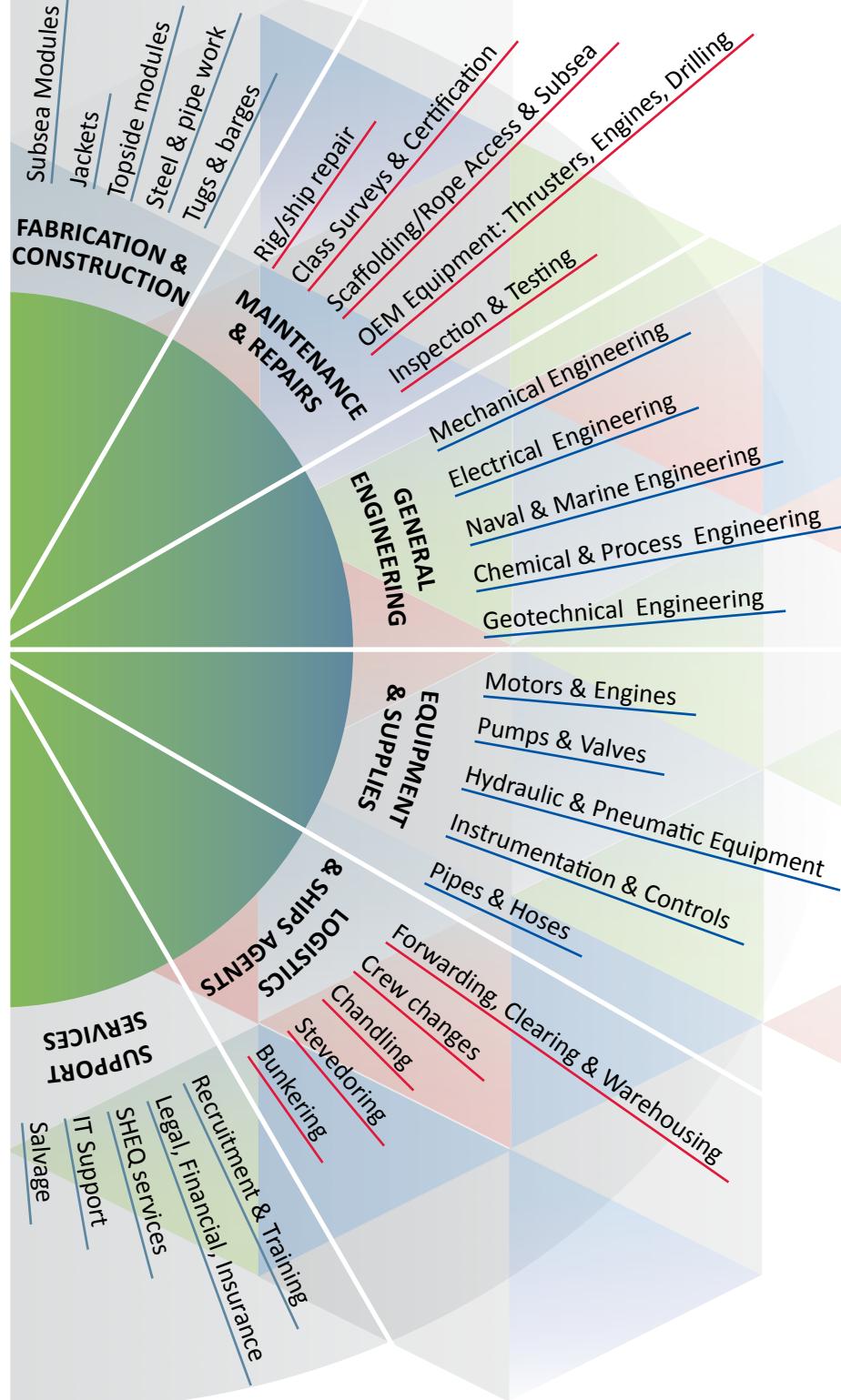
Not all ship repair firms, however, are located inside the port precincts, but are generally within close proximity in nearby industrial areas. While most of the major repair and maintenance contracts are handled by a handful of large players with project managing experience, they are supported by numerous smaller ship repair firms, ancillary engineering firms and other service providers.

All leading firms are certified as compliant with ISO 9001, ISO 14001 and OHSAS 18001 or can obtain certification as needed. They are able to comply with all recognised international standards applicable to the work they perform and submit willingly to industry-related audits to establish compliance.

Aside from repair work, the local industry has the ability to fabricate many of the sub-units required by the offshore industry. Many of these are currently fabricated locally and the industry is keen to become involved in a wider range of projects.

ANCILLARY SERVICES	
Jackets	Subsea Modules
Topside modules	
Steel & pipe work	
Tugs & barges	
Rig/ship repair	
Class Surveys & Certification	
Scaffolding/Rope Access & Subsea	
OEM Equipment: Thrusters, Engines, Drilling	
Afloat repairs	
Classification Societies and Inspections Services	
Cofferdam repairs	
Crane hire	
Crane repairs	
Drydockings	
Electrical installation, fault finding and repair	
Electronics	
Fabrication	
Grit blasting and coating	
Hot Dip Galvanising	
Hydraulic repairs	
Machinery inspections	
Machining	
Mechanical and valve testing	
Mooring Services	
Motor Rewinding	
Naval Architects	
Navigational/Radar systems	
NDT services	
Propulsion repairs	
Rig leg repairs	
Rope Access	
Scaffolding	
Spud can repairs	
Steelwork fabrication and installation	
Travelling squads	
UWILD inspections	

PRODUCTS AND SERVICES



REFER TO WEBSITE
FOR SAOGA
MEMBERSHIP
 DIRECTORY







3 SALDANHA BAY

SALDANHA BAY 3

Saldanha Bay is one of the largest and deepest natural harbours in southern Africa with dredged depths to -23 m below chart datum. An artificial breakwater improves the conditions within the bay. Future developments will centre around the oil and gas industry with the natural draft making Saldanha Bay ideal for the sector.



Slipway

Quay Space

IDZ



WIND: During the winter months, the winds are predominantly north north-east and often with rain. During the summer months, the winds are usually south-east in the mornings, but swinging to south-west in the afternoon.

Saldanha Bay is periodically affected by heavy swells particularly in the winter months. This can sometimes affect ships on the jetty causing them to break lines.

In extreme cases ships may have to be taken off the berth and go to anchor or stand out to sea. Ships should therefore not immobilise without written permission from the Harbour Master and sufficient crew must always be kept on board.

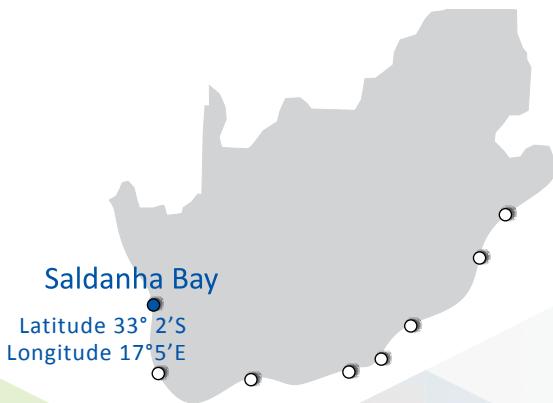


CONTACTS:

Port Manager:
+27 22 703 5472

Harbour Master:
+27 22 703 5481

Port Control:
+27 22 703 5310



Cape Town International Airport is situated about 140 km from the port and is linked to many international destinations as well as to all domestic airports.



LOCAL TIME
GMT/UTC + 2 hours

WORKING HOURS

TNPA Administrative offices:

08:00-16:00 (Monday to Friday)

TNPA Marine Services:

24-hour service, 7 days a week, except Christmas Day.

Terminals:

24-hours, 7 days a week.
(Note: Closures over public holidays vary per terminal)



Bunkering: Bunkering is available on request via road tankers.



Channel: -23.7 m LAT reducing to -23 m LAT

Approach Channel width: 400 m

Schneider tugs of 42 tons bollard pull are based in Saldanha Bay

and extra tugs can be brought from Cape Town. The cost of bringing in the extra tugs will be an additional charge to the vessel's account should they be required.

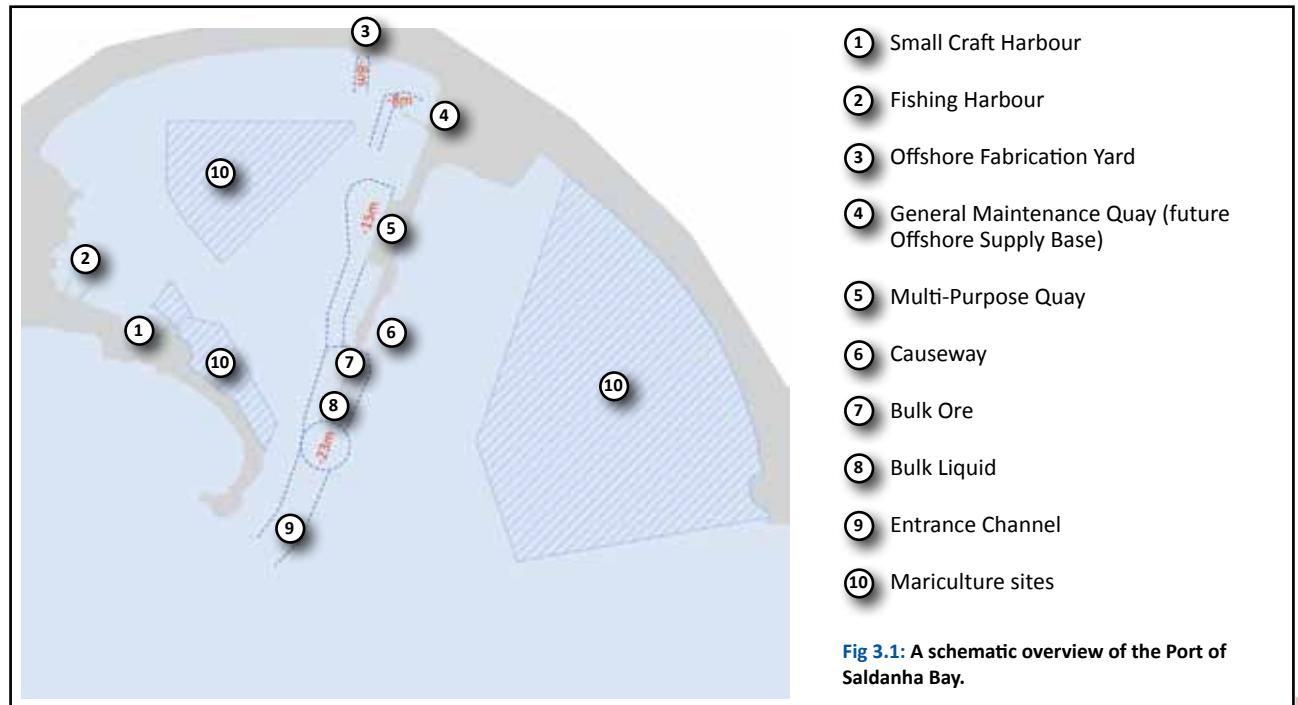
All tugs are fitted for fire-fighting and salvage. Smaller, conventional, twin-screw tugs, and three diesel launches assist with running lines and the movements of smaller craft. Work outside normal hours can be undertaken by special arrangement with the Harbour Master and at overtime rates.

HARBOUR FLEET

42 ton bollard pull Voith Schneider tug	4
Pilot Cutters	2
Oil Recovery Barge (OPCSA)	1
Launch	1

Ballast requirements: Vessels should be sufficiently ballasted to navigate safely within the harbour. Only clean, locally loaded ballast water may be discharged within the port.

LAYOUT OF THE PORT OF SALDANHA BAY



SALDANHA BAY SHIP REPAIR FACILITIES

Saldanha Bay has accommodated a number of significant oil and gas related repair and maintenance contracts over the last few years. Future plans will improve the facilities at the port, but will see certain areas of the port traditionally used for these purposes become unavailable during the planning and construction phases.

In addition to the quayside repair facilities at the Mossgas jetty, there is a region just inside the mouth of the Bay where deep water activities can be accommodated with the permission of the Harbour Master. Applications will be entertained for the use of the area for heavy lift barges as well as the float-on and float-off of rigs.

The area is, however, exposed to the oceanic swells entering the bay. There will be extended periods in summer and occasional quiescent periods in winter when the swell is the ambient of 1 to 2 m.

Interim plans to accommodate rig and associated offshore vessel repairs in the port are due to be put in place during the planning, construction and commissioning of new infrastructure in the port ahead of the 2018 completion date of a dedicated rig repair facility.

Fig 3.2: (Below) A jack-up rig being serviced off the Mossgas quay from the Offshore Fabrication Yard



SALDANHA BAY OFFSHORE FABRICATION YARD

FABRICATION FACILITY		
YARD	Yard area	220,000 m ²
	Yard load bearing capacity	450 Kpa
	Width of load-out quay	35 m
	Draft at quay	-8 m
MOORING	Bollard	Bollards: 2x50T on quayside and 2x120T freestanding, offset either side of load-out quay.
FABRICATION AREA	Size	52,293 m ²
	Facilities	Workshops Paint and blast facilities Plate rolling facilities Warehousing Offices Ablutions Lockers and change rooms
RIG AND SHIP REPAIR AREA	Size	60,271 m ²
	Facilities	Workshops Rigging stores Paint and blast facilities Lay-up areas Offices Ablutions Lockers and change rooms
LOGISTICS SUPPORT AREA	Size	95,582 m ²
	Facilities	Offices Ablutions Lockers and change rooms
MEDICAL FACILITY	Size	1,170 m ²
	Facilities	Clinic Offices Ablutions
VESSEL SUITABILITY	A range of oil and gas related vessels including rigs, drillships, supply vessels, tugs, anchor handlers, pipe layers, seismic survey vessels and dive support vessels. Certain operational restrictions may apply.	
CONTACT	FerroMarine Africa	+27 (0)21 880 2070

The FerroMarine Africa (FMA) site is a dedicated Oil & Gas fabrication, logistics and marine repair facility located in the Port of Saldanha Bay.

This facility offers quay side access, wet repair facilities, workshops, lay up area and more.

Please contact FerroMarine Africa for information.



- | | |
|----------------------------|-----------------------------|
| (1) Quay | (11) NDT |
| (2) Retention Ponds | (12) Change Rooms & Medical |
| (3) Assembly Area | (13) Offices |
| (4) Rolling Building | (14) Hazardous Store |
| (5) Welding Line | (15) Gas Store |
| (6) Change Rooms & Medical | (16) Blast & Paint |
| (7) Rigging Workshop | (17) Cutting & Profiling |
| (8) High Bay Workshop | (18) Security |
| (9) Offices | (19) Staff Parking |
| (10) Store | (20) Accommodation |

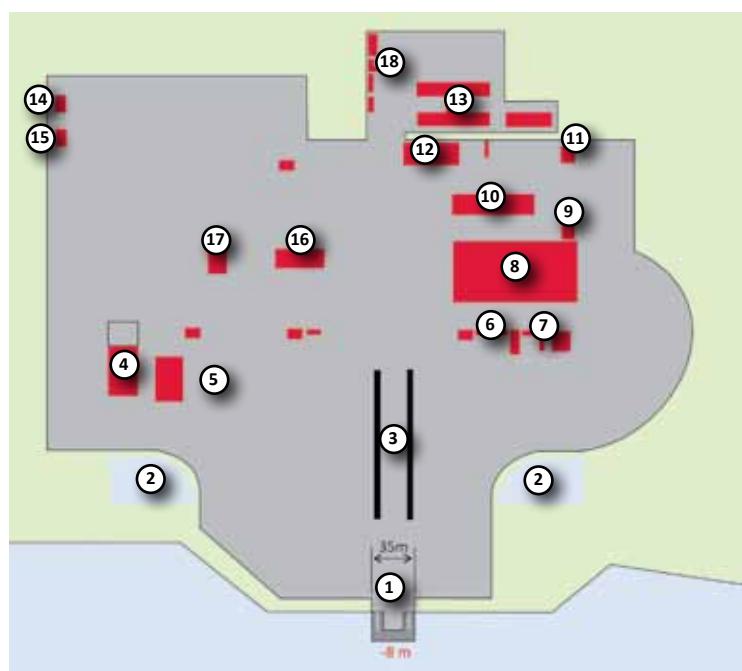


Fig 3.3 A schematic overview of the Saldanha Bay Offshore Fabrication Yard.

SALDANHA BAY IDZ

The Saldanha Bay Industrial Development Zone is South Africa's first dedicated development in the Oil & Gas Services and Marine Repair sector to support Upstream Exploration & Production (E&P) developments in the West and East African regions, and potentially the South African market in the near future.

The Saldanha Bay IDZ (SBIDZ) was designated by Minister Dr Rob Davies on 31 October 2013 as South Africa's first sector-specific Industrial Development Zone (IDZ), and the SBIDZ Licensing Company (SBIDZC) was granted the operator's license to develop the Oil & Gas Services and Marine Repair Cluster.

As the official operator, the SBIDZC is mandated and funded through government to:

- ▲ Manage, market and promote the Saldanha Bay IDZ within the focus of an Oil & Gas Services and Marine Repair Cluster;
- ▲ Provide for internal infrastructure to enable investors to set up their operations;
- ▲ Provide suitable land for development; and
- ▲ Assist investors in the Ease of Doing Business

The SBIDZC will focus resources to understand the industry as well as its challenges, and will develop solutions to remove barriers and address issues.

The core sector-focus of the Oil & Gas Services and Marine Repair Sector and interest from investors is focused around the following five areas:

- ▲ Repairs and maintenance
- ▲ Ancillary services
- ▲ Exploration and production support
- ▲ Logistics
- ▲ Marine/subsea engineering and fabrication

What Does the IDZ Programme Offer Investors?

Incorporating a Customs Control Area (CCA) or Freeport: The Special Economic Zones (SEZ) Legislation allows for the SBIDZ to develop and implement an Ease of Doing Business model for Investors that includes relevant public and private sector role players, including the development of a Customs Control Area (CCA) or Freeport.

The CCA means no VAT or duties will be due on goods landed in the zone, with a focus on operational handling efficiencies and turnaround time. There will be no time limitations on goods brought into the zone. The concept of the CCA acting as a Freeport is relatively new to South African legislation and is intended to attract oil and gas services companies who want to utilise South Africa's existing economic base to service the West and East African markets.

Land Availability, Tenure and Infrastructure: As the first IDZ in South Africa to be granted land owned by TNPA the SBIDZ is able to offer a contiguous development across back-of-port land, Transnet land and the terminals in the Port of Saldanha Bay. This means that investors do not need to follow a tender process for land-to-lease, and there is a seamless transfer and movement of goods in the Zone. The SBIDZ consists of approximately 330ha of green-field land surrounding one of the deepest ports in southern Africa.

The land within the Zone is available to investors on a lease agreement of up to 25 years with the

A Memorandum of Understanding signed between the Saldanha Bay IDZ and the Transnet National Ports Authority (TNPA) in September 2014 furthers the objectives of the initiative to develop an Oil & Gas and Marine Repair Industry, within and adjacent to the Port of Saldanha, and in so doing, offer a comprehensive value proposition to the Offshore Oil & Gas Industry with a view to cater for the seamless delivery of services to the Industry



**CONTACTS:**

Telephone:

+27 84 512 7752

Email:

laura@sbidz.co.za

Saldanha Bay24 Main Road
Saldanha Bay
7395

+27 22 714 0206

Cape TownReserve Bank Building,
60 St Georges Mall
Cape Town
CBD

8000

+27 21 487 8619

option to renew for a further 25 years. A project leasing facility is being developed for short-term investor requirements. Leasing rates have been subsidised due to government-to-government lease agreements and are dependent on length of lease as well as location in terms of proximity to quayside.

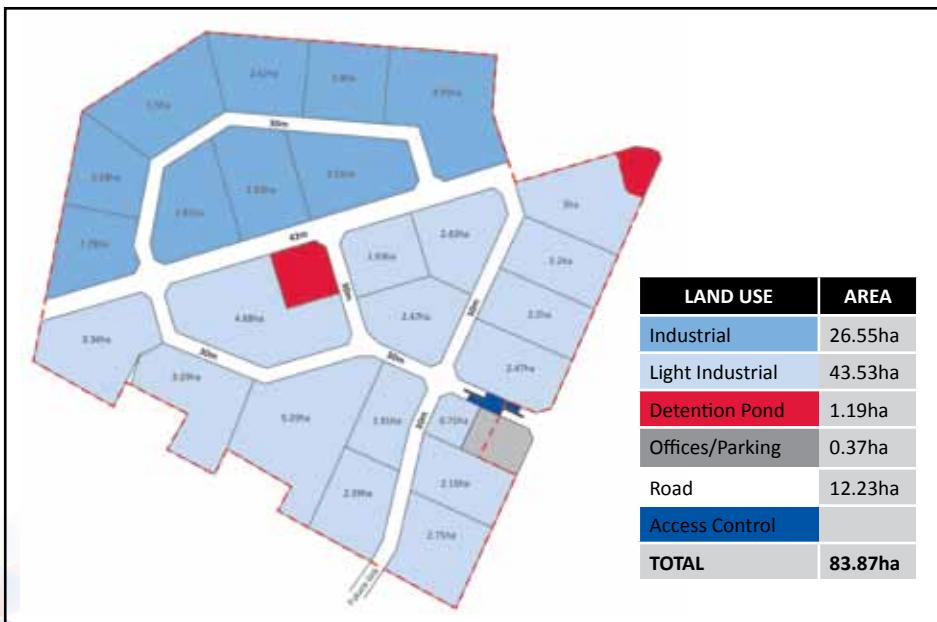
The leasing rates are inclusive of roads and logistics infrastructure, security, basic services and foundations or hard lay-down surfaces. Topside infrastructure eg warehouses, assembly plants, manufacturing centres can be considered in the following ways:

- ▲ Investor pays for the infrastructure (leasing rate remains at the subsidised rate)
- ▲ SBIDZ Licencing Company (the operator) erects the infrastructure – the cost of the infrastructure is added onto the leasing rate on a no-profit basis
- ▲ Third-party infrastructure provider who charges a rate for their services

The IDZ Business Forum

The IDZ Business Forum was established in December 2012 to create resources and a support framework that will assist local businesses to meet the international requirements of the oil and gas industry. Active representation is presently made up of six local business chambers and/or organisations, including the Cape Chamber of Commerce (West Coast Chapter), Saldanha Bay BBBEE Forum, Saldanha Bay Black Business Women's Association, Saldanha Bay IDZ Licencing Company, Saldanha Bay Tourism Organisation, Weskus Sakekamer, West Coast Social Economic Development Forum, West Coast Small Business Development Centre and West Coast Women In Construction.

The Forum is currently engaged in a UNDP and the DTI Supplier Development Programme with the goal of identifying companies that require assistance in meeting regulatory and accreditation standards required in the oil and gas services cluster.



These community platforms are available to all investors to engage with the communities and provide ready access to both suppliers and a workforce in support of project developments.



FUTURE PLANS

Recognising the significance of the upstream exploration and production sector in Africa, future investment at the port of Saldanha Bay is focusing on the development of infrastructure that supports the port's ability to leverage its deep natural draft and position along the West Coast.

The future marine-based infrastructure in the Port of Saldanha Bay includes the following infrastructure developments which are expected to be commissioned by January 2018 and are based on provisional plans as at April 2015:

FUTURE MARINE INFRASTRUCTURE DEVELOPMENT	
Berth 205	A deep-water dedicated oil rig repair facility at a new berth 205, a 380 m long berth with water depth of -21 m.
Jetty at the Mossgas Quay	Lengthening of the Mossgas Quay by constructing a jetty structure of 500 m and a depth of -8.5 m. This will enable repairs and maintenance to rigs and supply vessels not requiring deep water, but will have 12 m pockets to accommodate floating docks to enable dry repairs.
Offshore oil and gas supply base	Development and extension of the General Maintenance Quay – this facility will be operated as an offshore oil and gas supply base with a berth length of 280 m and a depth of -8.5m. The supply base will amongst others, be a service hub to off-shore rigs to supply food, materials and collecting waste.



Fig 3.4 An artistic impression of proposed developments at Berth 205



Fig 3.5: (Above) A short term artistic impression of the jetty to be built off the Mossgas quay.

Fig 3.6 (Left) A very long term artistic impression of the Offshore Oil and Gas Supply Base.

4

CAPE TOWN



CAPE TOWN 4

The Port of Cape Town is a full service, general cargo port, operating 24 hours a day, seven days a week. It is well equipped for ship repair and ideally suited to serve the offshore oil industries on both the west and east coasts of Africa. The facilities include a 200 tonnes SWL floating crane, two graving docks, a syncrolift as well as onshore and quayside areas dedicated to this activity.



FACILITIES

Drydocks

Syncrolift

Quay space

Slipway



Cape Town has a Mediterranean climate and experiences dry, warm summers and cold, wet winters.

RAINFALL: The average annual rainfall for Cape Town is 475 mm.

TEMPERATURE: Summer lasts from December to March with average highs of about 25°C and lows of about 15°C. Beginning in May, winter delivers an average high of about 19°C with lows under 7°C.

WIND: During the warmer months of October to March, the prevailing winds are south-east. The wind can reach the lower end of hurricane force. During the winter months of April to September, north and north-west winds backing to south-west are frequent. Westerly gales are not uncommon, particularly during winter, and can lead to heavy range action within the harbour basins and at the berths.

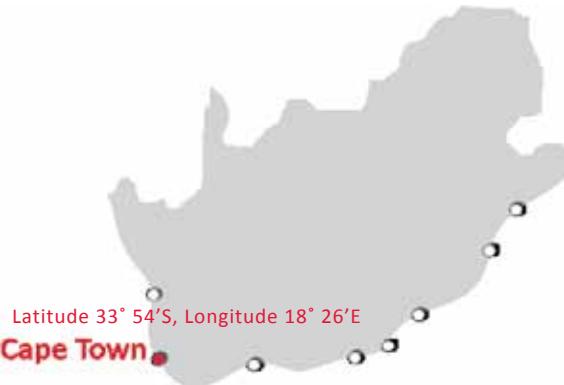


CONTACTS:

Port Manager:
+27 21 449 2612

Harbour Master:
+27 21 449 5762

Port Control:
+27 21 449 2805



Latitude 33° 54'S, Longitude 18° 26'E

Cape Town



Cape Town International Airport is situated about 20 km from the port and is linked to many international destinations as well as to all domestic airports.



LOCAL TIME
GMT/UTC + 2 hours

WORKING HOURS

TNPA Administrative offices:
08:00-16:00 (Monday to Friday)

TNPA Marine Services:
24-hour service, 7 days a week, except Christmas Day.

Terminals:
24-hours, 7 days a week.
(Note: Closures over public holidays vary per terminal)



Bunkering: Bunkers are available via pipeline and barge. Average bunker pumping rate achieved is approximately 120 to 200 mt per hour, dependant on the amount of vessels taking bunkers from the same fuel line and ullaging constraints from the tank farm.

Pumping rates achieved are also based on the vessel's consumption and the temperature of the fuel.

A bunker barge is able to supply bunkers to any berth. This barge only supplies bunkers from Chevron and can supply either marine fuel oil or gas oil or a blend, blended in the delivery system. Diesel fuel is not available.

The bunker barge will only supply bunkers if the vessel is clear of obstacles that pose a threat during the bunker operation.

The vessel being supplied with bunkers must have a minimum LOA of 70 mtrs for barge supply.

ENTERING THE PORT

Advising ETA: The port authorities require notification of ETA 72 hours before arrival and when ten miles to the westward of the Breakwater Light, using "Cape Town Port Control" through VHF radio.

Off Port Limits Service: The rendezvous position for Off Port Limits Service is between 5 – 12 miles west of Greenpoint Lighthouse. This area is free of port dues. The twin-engined helicopter and launch services are available 24 hours a day.

Entrance Channel: -15 m LAT

Duncan Dock: -12m LAT

Ben Schoeman Dock: -13 m LAT

Anchorage: The area to the north-east and east of the pilot boarding station (Fairway buoy), in depths of 20 - 25 m, is demarcated for anchorage.

During the winter months (April to September) north and north-west winds are frequent and, as there is no safe anchorage in the bay, it should only be used by vessels prepared to proceed to sea at short notice in the event of bad weather.

Tug Assistance: Tug assistance is compulsory. Tugs will meet incoming vessels approximately 0.25 miles from the harbour entrance.

All tugs are fitted for fire-fighting and salvage. Smaller, conventional, twin-screw tugs, and three diesel launches assist with running lines and the movements of smaller craft.

Work outside normal hours can be undertaken by special arrangement with the Port Captain and at overtime rates.

HARBOUR FLEET

55 ton bollard pull Voith Schneider tug	2
40 ton bollard pull Voith Schneider tug	2
12 ton bollard pull tug/workboat	2
5 ton bollard pull workboat/launch	3

Ballast Requirements: Vessels should be sufficiently ballasted to navigate safely within the harbour.

CAPE TOWN REPAIR SECTOR

The port of Cape Town has extensive ship repair facilities, including two graving docks, a syncrolift as well as general and privately run repair quays. All leading firms in the Cape Town cluster are certified as compliant with ISO 9001, ISO 14001 and OHSAS 18001 or can obtain certification as needed. They are able to comply with all recognised international standards applicable to the work they perform and submit willingly to industry-related audits to establish compliance.

Aside from repair work, the local industry has the ability to fabricate many of the sub-units required in this industry. Many of these are currently fabricated locally and the industry is keen to become involved in a wider range of projects.

Over the last decade the port and port users have increasingly geared up to service the offshore oil and gas sectors. The major limitation on the capacity of the industry is dictated by the facilities available and by the water depth. Investment in facilities and training have focused on broadening the capacity and capabilities of the marine engineering sector to meet the stringent requirements of the industry.



LIFTING CAPACITY:

200 tons at 10 m

170 tons at 13 m

150 tons at 16.5 m

140 tons at 19 m

125 tons at 24 m

60 tons at 26 m

Fig 3.1: The *Inkunzi* floating crane is available in the port of Cape Town.

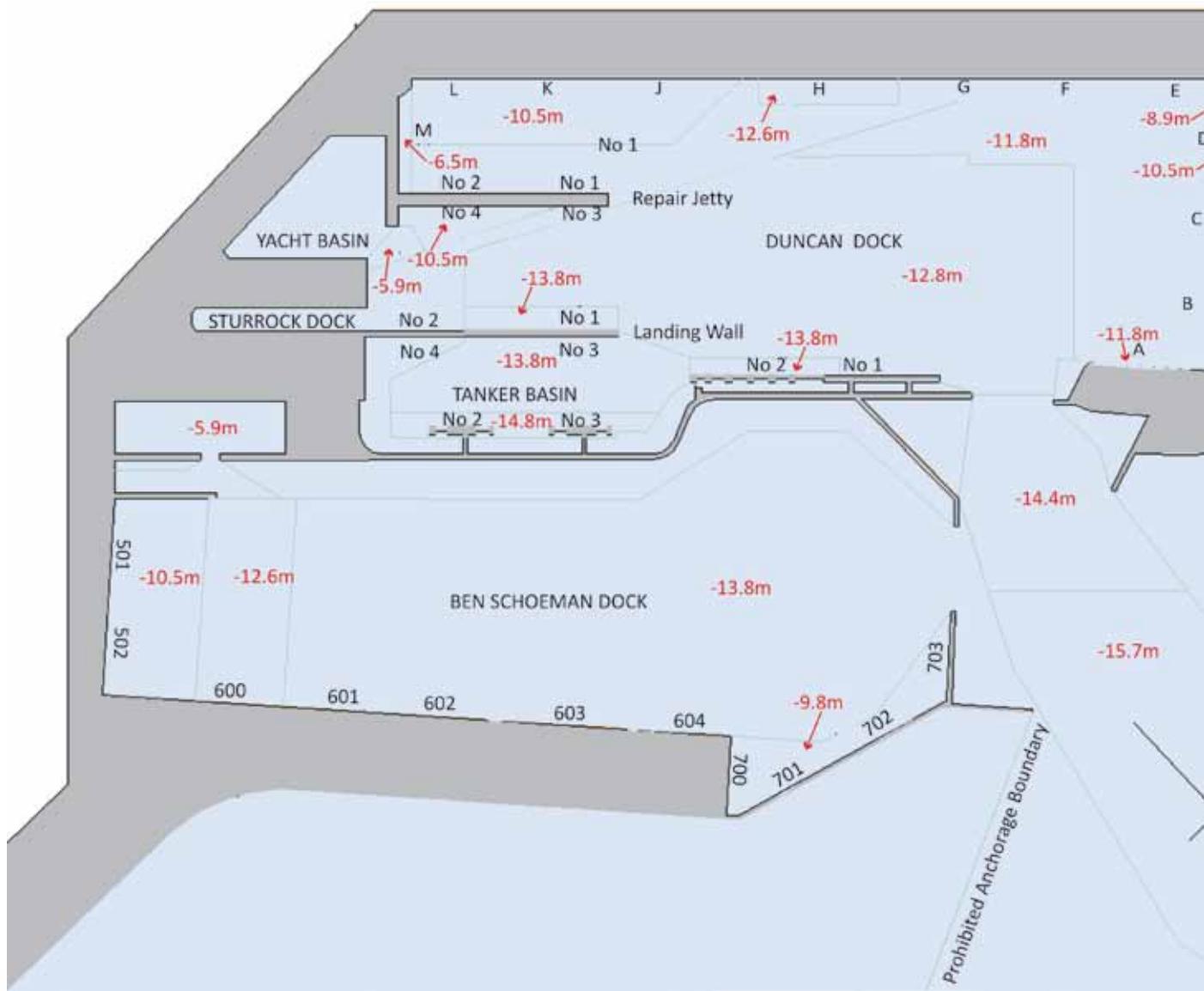
LAYOUT OF THE PORT OF CAPE TOWN



Fig 4.2: (Above) An aerial view of the port of Cape Town showing all the ship repair related facilities available to port users.

Fig 4.3: (Left) Port layout showing depths alongside.

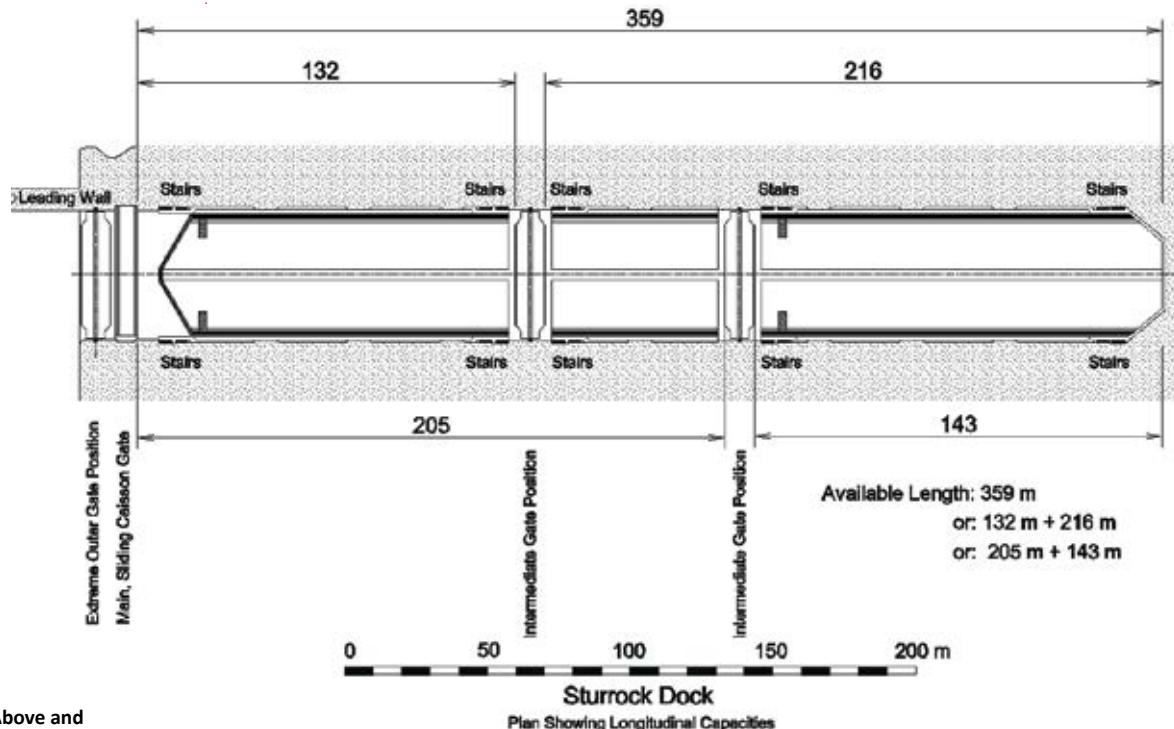
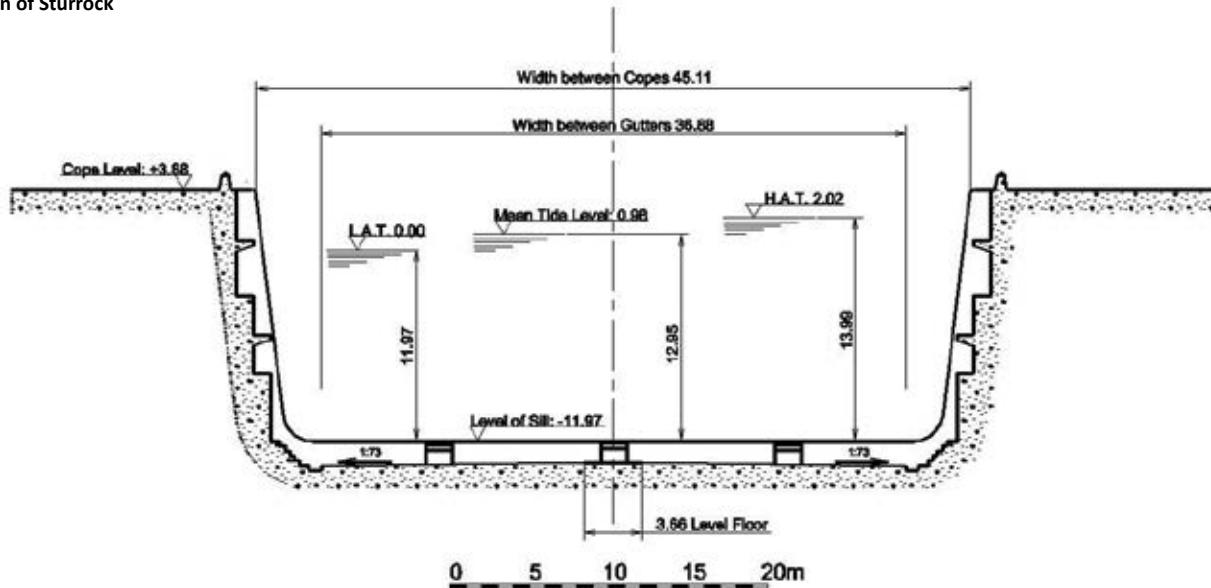


Fig 4.4: (Above and below) Schematic representation of Sturrock Drydock



STURROCK DRYDOCK

Designed for battleships and aircraft carriers, today its aspect ratio of breadth to length can be limiting. The dock does have two alternative positions for an intermediate caisson. Operated this way, it becomes a double dock, each of much smaller capacity, but with a much wider aspect ratio.

The design of the dock in its cross-section is transitional between the old style trapezoidal shape formed by a series of step altars and the modern style of clean vertical sides. The former was meant for wooden sailing ships with bar keels and round bilges and the use of side shores for lateral support; the latter for flat bottomed ships that take their lateral support from keel blocks under the intercostal girders.

Since the dock was built to military specifications, the design is to exceptional strength with multiple redundancies built in.

STURROCK DRYDOCK:		
LENGTH	Maximum inside sliding caisson	359 m
	1st Alternate with intermediate caisson	132 m + 216 m
	2nd Alternate with intermediate caisson	205 m + 143 m
WIDTH AT SILL	At cope level	45 m
	At gutter level	37 m
	Draft over Sill	-12 m below LAT
KEEL BLOCKS	Keel blocks are normally set to the height of the Sill.	
PUMPING CAPACITY	Dewatering - 4 hours Flooding - 2 hours	
ELECTRICITY	Electricity is only available as 380 V, 3 ph, 50 Hz, 200 A per connection. There are five supply points on each side of the dock. Each supply point box has 2 x 200 A breakers each feeding a set of four terminals consisting of 10 mm stainless steel nuts and bolts. 440 V, 60 Hz is available via generator.	
FRESH WATER	Fresh, municipal water is available at a metered charge from a ring main around the dock. The ring main also supplies the fire hydrants.	Connection is by flanged coupling.
SEA WATER	Sea water is supplied by ring main.	Connection is by flanged coupling.
SEWERAGE	There are no facilities for receiving ship borne sewage. If necessary, the owners must make their own arrangements to have sewage removed by tanker.	
SLOP TANKS	There are no facilities for receiving slops. If it is necessary to discharge these, the owners must make their own arrangements to have slops removed by tanker.	
VESSEL SUITABILITY	A range of oil and gas related vessels including drillships, supply vessels, tugs, anchor handlers, pipe layers, seismic survey vessels and dive support vessels.	
CONTACT	Transnet National Ports Authority	State

RECENT PROJECTS:

- ▶ Enscos DS1 (2012)
- ▶ Seven Polaris (2012)
- ▶ STG Jascon 28 (2012)
- ▶ PGS Ramform Valiant (2012)
- ▶ Triumph Drilling T110 (2014)
- ▶ Stim Star (2014)

LANDING WALL

The Landing Wall lies at the eastern end of the Duncan Dock at the entrance to the Sturrock Dock. It lies parallel to the Multi-Purpose Quay. Its primary function is to provide a leading jetty to the entrance to the Sturrock dock along its south side. To this end the face of the wall lies flush to the north side of the graving dock.

The south face of the wall must be kept clear during docking and undocking operations. Hence this side can only be used for berthing on a very short term basis.

No hot work is permitted on the Landing Wall due to the proximity to the bunkering terminal.

LANDING WALL	
LENGTH	553 m
WIDTH	18 m
DRAFT	-12.6 m LAT (240m) -13.8 m LAT
COPE	+ 3.88 m LAT

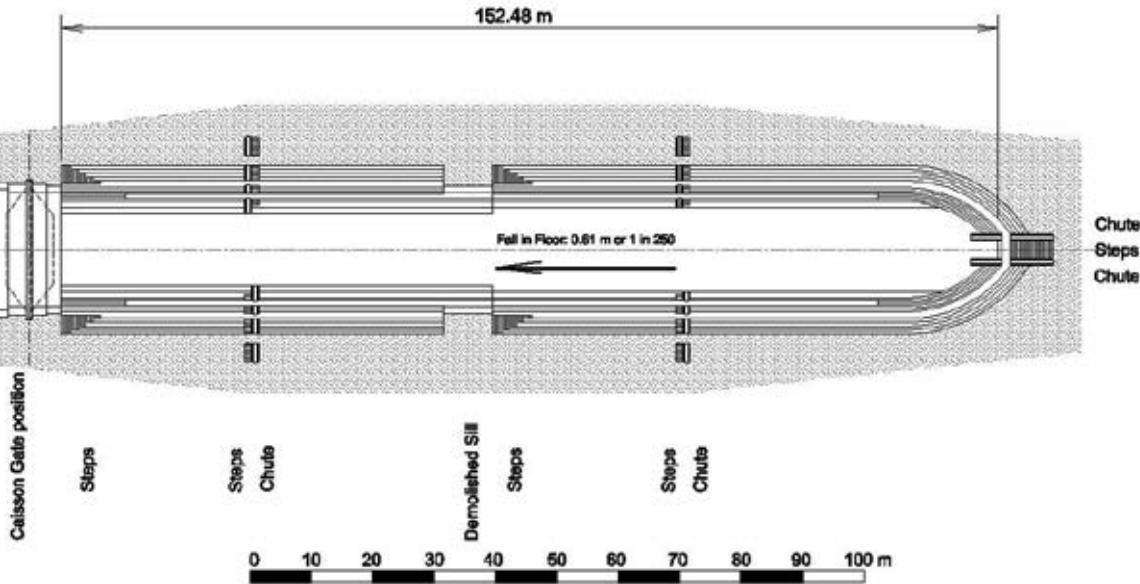
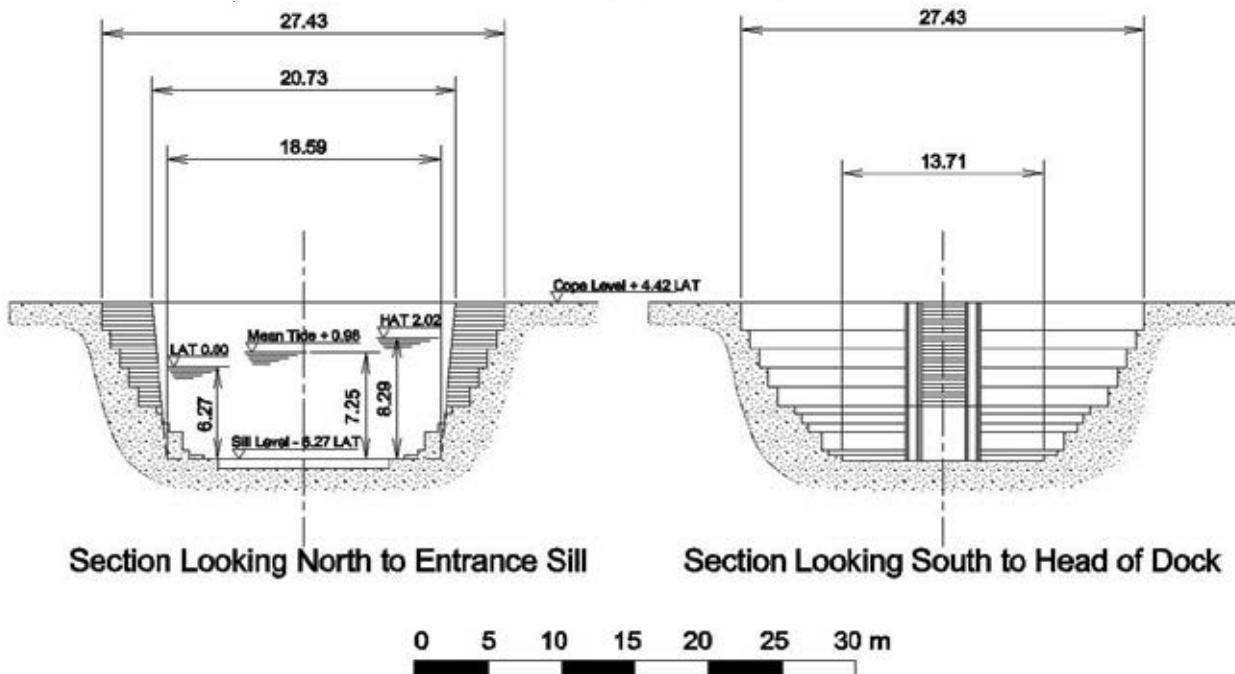


Fig 4.6: (Above and below)
Schematic representation
of Robinson Drydock

Robinson Dock
Plan Showing Longitudinal Capacity



ROBINSON DOCK

Built in 1880, the Robinson Dock is situated in the Victoria & Albert Waterfront precinct in the Albert Basin. It is very solidly built and faced in dressed stone masonry.

It was originally built with an intermediate position for an intermediate caisson, but the Sill has since been demolished and the facility is no longer available.

The dock is commonly used for multiple dockings of two or more smaller vessels at the same time.

The cross section of the dock reflects its original design for wooden sailing ships with bar keels and rounded bilges. The section is trapezoidal in shape with the sides formed by step altars to receive side shores for the lateral support of vessels.

These shores have, however, been replaced by a system of sliding bilge blocks.

ROBINSON DRYDOCK:		
LENGTH	Maximum inside caisson	153 m
WIDTH AT SILL	At cope level	27 m
	At gutter level	14 m
KEEL BLOCKS	Keel blocks are normally set to the height of the Sill.	
PUMPING CAPACITY	Dewatering - 4 hours Flooding - 2 hours	
ELECTRICITY	Electricity is only available as 380 V, 3 ph, 50 Hz. There are four supply boxes per side of the dock. Each has one 63 A EMCO plug and one 125 A EMCO Plug. 440 V, 60 Hz is available via generator.	
FRESH WATER	Fresh, municipal water is available at a metered charge from a ring main around the dock. The ring main also supplies the fire hydrants.	Connection is by flanged coupling.
SEA WATER	Sea water is available from a pump in the caisson. Users must supply their own hose.	
SEWERAGE	There are no facilities for receiving ship borne sewage. If necessary, the owners must make their own arrangements to have sewage removed by tanker. There are ablution blocks around the dock.	
SLOP TANKS	There are no facilities for receiving slops. If it is necessary to discharge these, the owners must make their own arrangements to have slops removed by tanker.	
VESSEL SUITABILITY	Within the restrictions of the dock.	
CONTACT	Transnet National Ports Authority	State

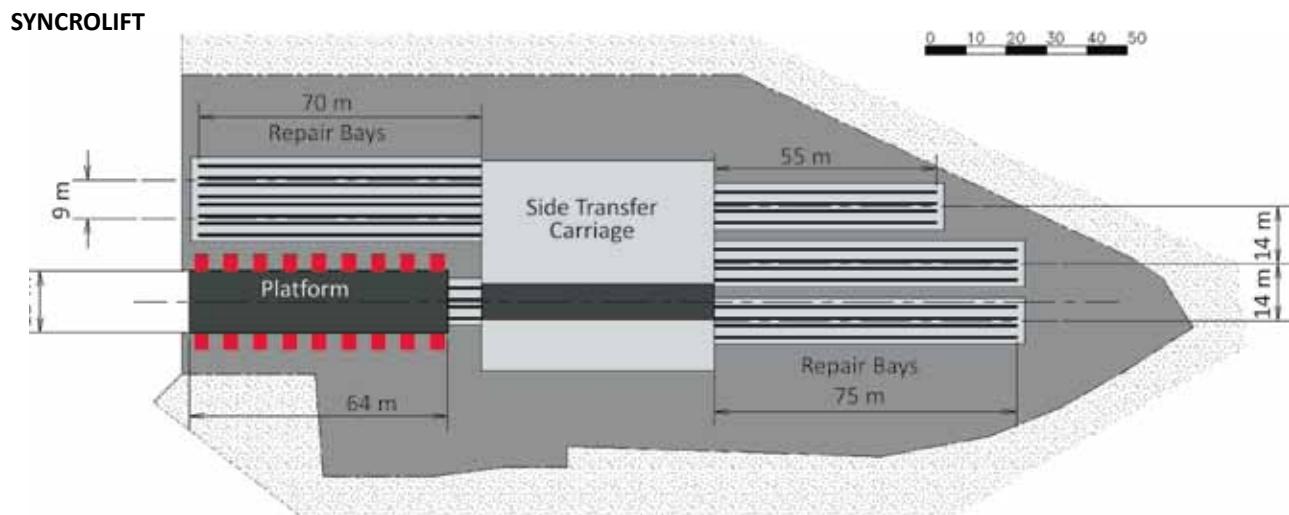
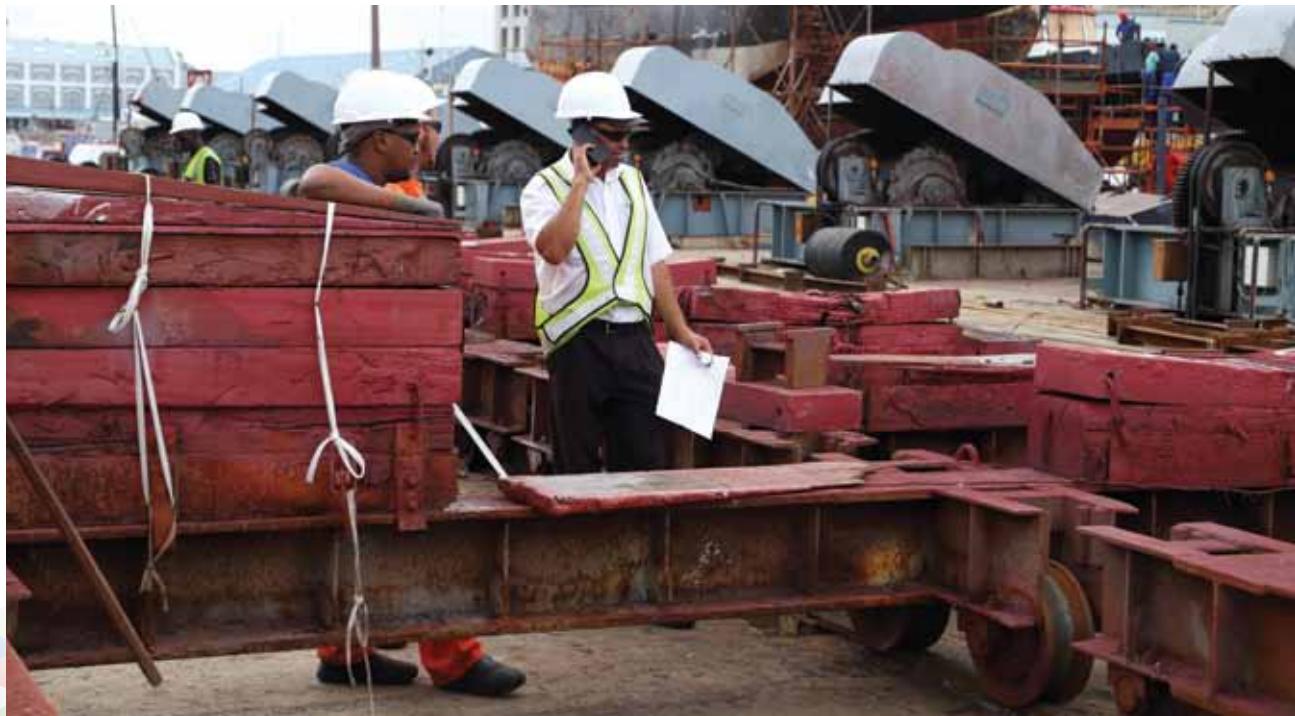


Fig 4.7: (Above) A schematic representation of the syncrolift.

Fig 4.8: (Below) The Syncrolift in the port of Cape Town



SYNCROLIFT

The Syncrolift is situated in the Victoria & Albert Waterfront Precinct at the far end of the Albert Basin and is used predominantly by the fishing industry.

This facility conforms to the original Pearson patents and the classic late 1960's, early 1970's Syncrolift design. Nine pairs of synchronous electric motor driven steel wire rope winches along the support jetties raise the platform. The platform consists of main transverse steel beams spanning between pairs of winches and intermediate steel grillages.

The level deck of the platform lends itself to transfer of vessels off the platform into a repair yard.

Inevitably vessels are never docked on the platform itself, always on the transfer bogies. These in turn are fitted with keel blocks and sliding bilge blocks, and run on crane-type wheels on rails. The repair yard has a side transfer carriage running on transverse rails at a lower level running at 90° to the axis of the platform and giving access to a series of parallel repair bays.

SYNCROLIFT		
OPERATING RESTRICTIONS	Net lifting capacity	1,778 tons
	Maximum distributed load	44 tons/m
	Length of platform	64 m
	Clear width between structures	15.34 m
VESSEL RESTRICTIONS	Maximum length of vessel	61 m
	Maximum beam of vessel	15 m
REPAIR BAYS	Two x 75 m Two x 70 m One x 55m	
OPERATING RESTRICTIONS	The syncrolift is in close proximity to a hotel and there are strict regulations in place to limit noise, odour, blasting and spray painting.	
ELECTRICITY	Electricity is only available as 380 V, 3 ph, 50 Hz. There are five supply boxes, three at the 75 m bays and two at the 70 m bays. Each has one 63 A EMCO plug and one 125 A EMCO Plug. 440 V, 60 Hz is available via generator.	
FRESH WATER	Fresh, municipal water is available at a metered charge from a ring main around the dock. The ring main also supplies the fire hydrants.	Connection is by flanged coupling.
SEA WATER	Not available.	
SEWERAGE	There are no facilities for receiving ship borne sewage. If necessary, the owners must make their own arrangements to have sewage removed by tanker. There are ablution blocks around the dock.	
SLOP TANKS	There are no facilities for receiving slops. If it is necessary to discharge these, the owners must make their own arrangements to have slops removed by tanker.	
VESSEL SUITABILITY	For vessels up to 1,806 tons Maximum length of vessel 61 m Maximum width of vessel 15 m	
CONTACT	Transnet National Ports Authority	State

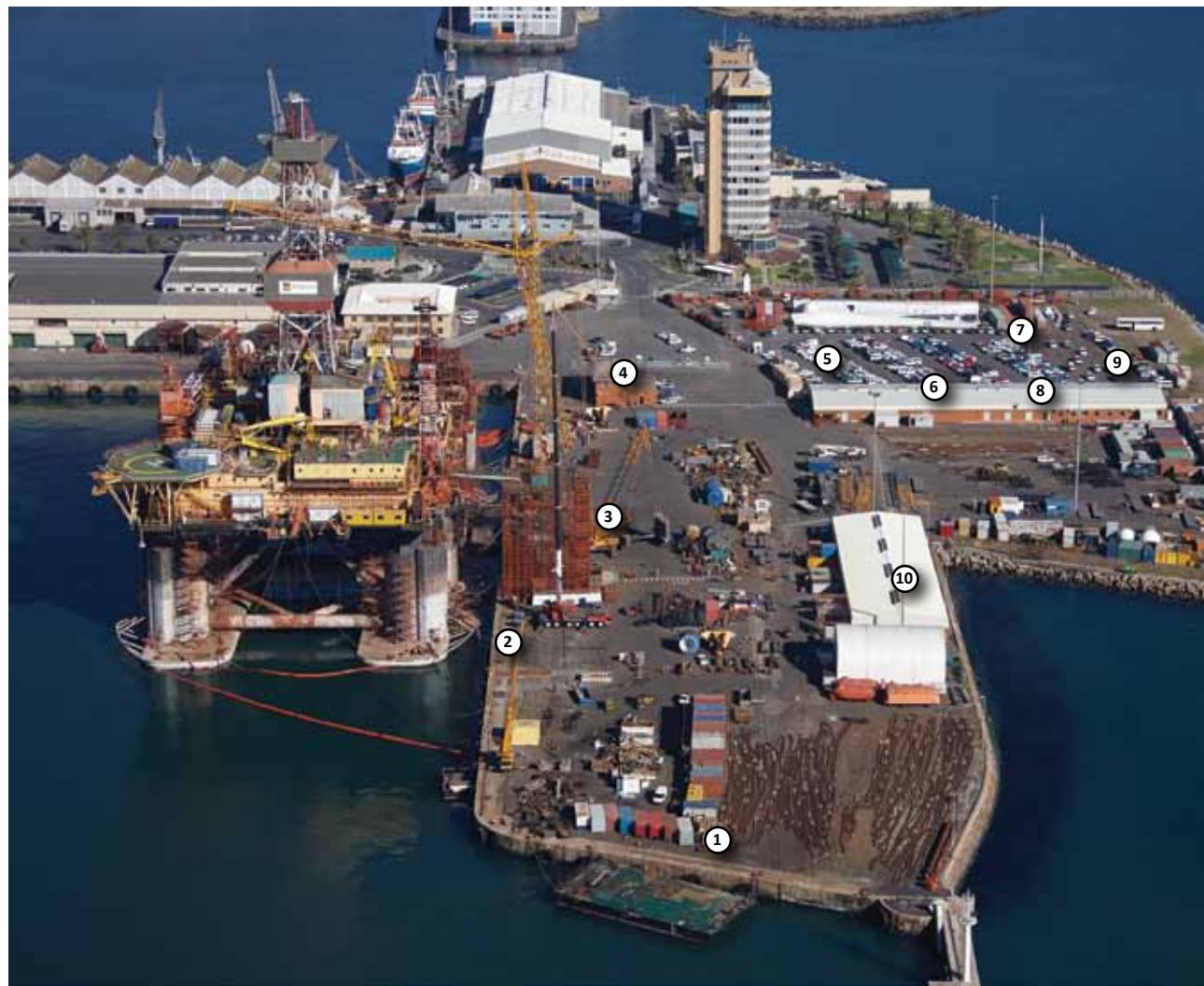


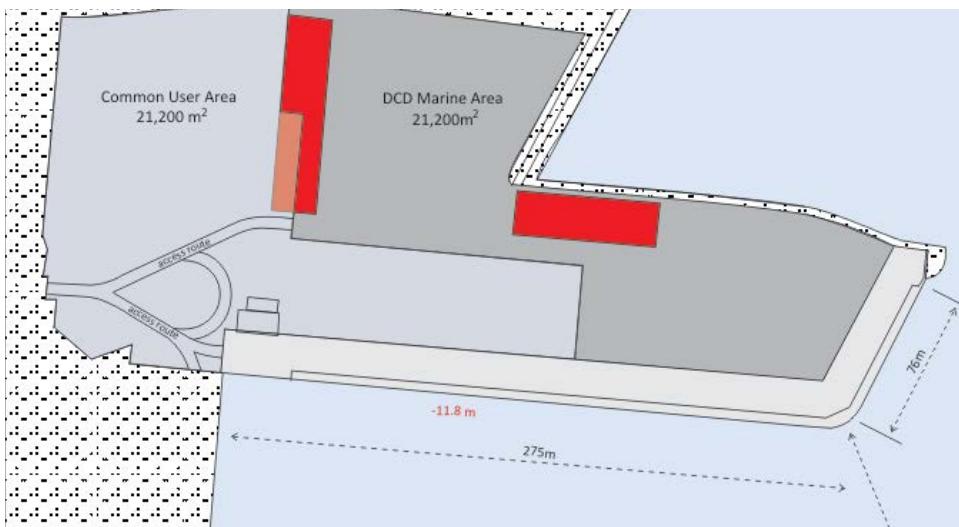
Fig 4.9: A-Berth facilities.

- | | |
|-----------------------------------|---------------------|
| (1) 76 m Quay | (6) Canteen |
| (2) 275 m Quay | (7) Parking |
| (3) 350 ton Crawler Crane | (8) Dining Room |
| (4) Client Offices | (9) Project Offices |
| (5) Ablution, lockers & PPE Rooms | (10) Workshops |

A-BERTH: OIL AND GAS SERVICE HUB

A BERTH				
QUAY LENGTH	QUAY SPACE	DRAFT	COPE	BOLLARD
275 + 76 m	4,950 m ² + 1,368 m ²	-12 m LAT	+4.7 m LAT	21 x 80 ton bollards along face of A Berth quay
FACILITIES & SERVICES				
CRANES	350 ton crawler crane with main boom of 100 m and 74 m luffing jib. Mobile cranes of up to 1,000 t available.			
LAY DOWN AREA	42,700 m ²			
WORKSHOPS	1,200 m ²			
OFFICES, CANTEEN AND ABLUTION	2,000 m ²			
ELECTRICITY	380 V, 50 Hz, 200A (on quayside) or 440 V, 60 Hz (via generator).			
FRESH WATER	High Pressure Booster Pump available to boost main water pressure to 12.5 Bar			
SEWERAGE	Direct coupling to Municipality.			
SLOP TANKS	Mobile tanks can be provided.			
VESSEL SUITABILITY	A range of oil and gas related vessels including semi-submersibles, FPSO's, drillships, supply vessels, tugs, anchor handlers, pipe layers, seismic survey vessels, heavy lift barges and dive support vessels. Certain operational restrictions may apply.			
CONTACT	FerroMarine Cape +27 (0)21 880 2070, bookings@ferromarinecape.co.za			

A BERTH: OIL AND GAS SERVICE HUB



FerroMarine Cape (FMC) is the lease holder of 47 180 m² adjoining the A-Berth quay.

This facility is an oil and gas service hub that facilitates rig repair as well as other oil and gas related work. Bookings are controlled by FMC to ensure that oil and gas related repair work receives priority. A Booking Tool has been developed to provide a transparent and fair booking system for TNPA A-Berth quayside and associated FMC Tenant areas.

Booking Requirements

- ▶ Rig/Project name
- ▶ Quayside booking dates
- ▶ Scope of work
- ▶ Projected minimum turnover

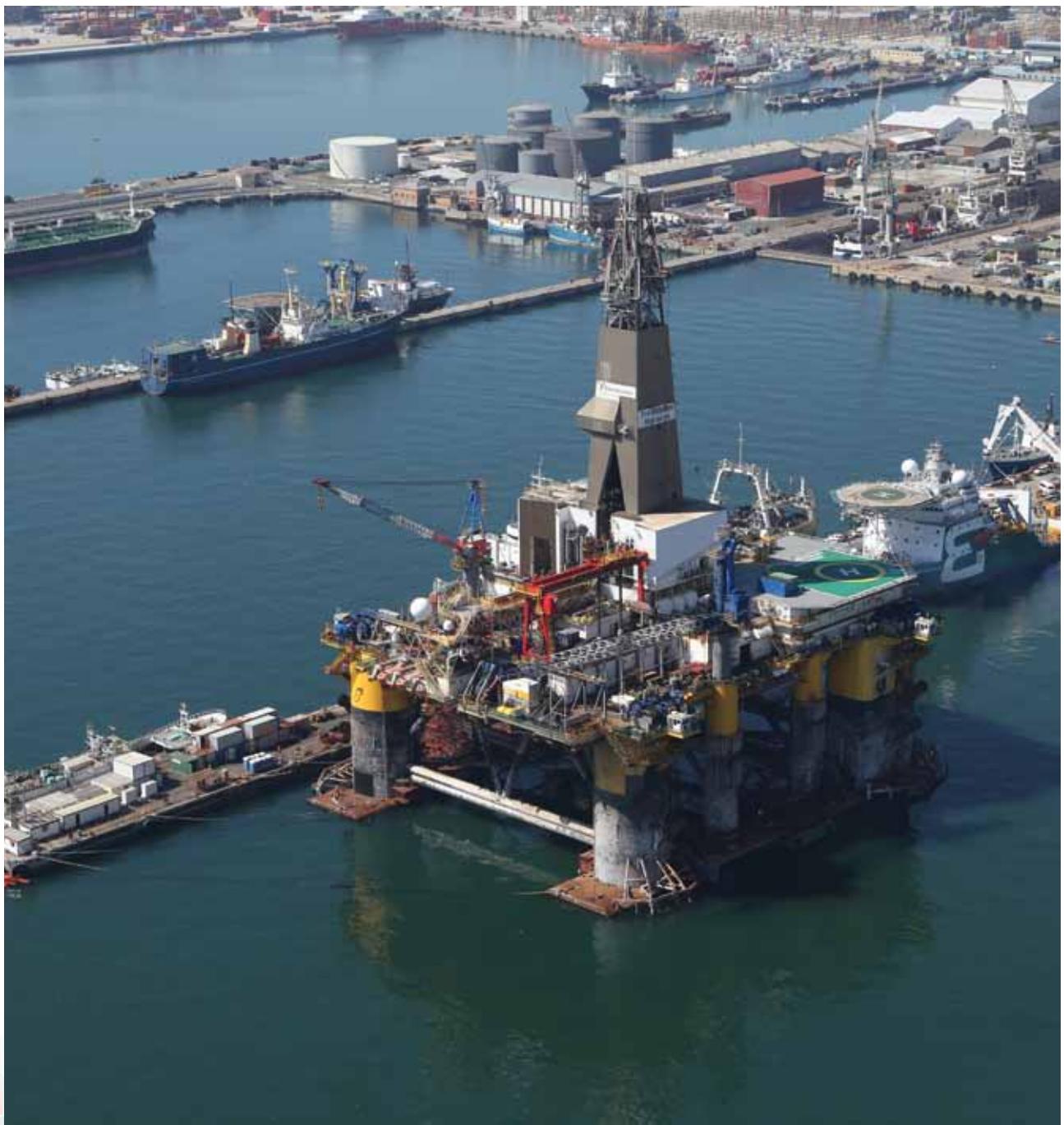
This site includes office space, meeting rooms, workshops, client offices, medical facilities, ablutions and locker rooms for 600 personnel and a canteen seating 300 workers per shift.

For use of common user area, please contact FerroMarine Cape.

RECENT PROJECTS:

- ▶ Pride South Seas (2011)
- ▶ Deep Sea Metro 11 (2012)
- ▶ Scarabeo 3 (2012)
- ▶ Stim Star (2012)
- ▶ Iremis Da Vinci (2013)
- ▶ Hua Hai Long (2013)
- ▶ Scarabeo 7 (2013-2014)
- ▶ DSV Vinnice (2014)
- ▶ Endurance (2015)

Fig 4.10: (Left) A schematic overview of the layout at A Berth.



REPAIR QUAY

The Repair Quay lies at the eastern end of the Duncan Dock. It leads off M-Berth at right angles to M-Berth and parallel to the Multi-Purpose Quay. It provides for berthing on both sides. It is able to accommodate a range of vessels from the offshore oil and gas sector including rigs, drillships, supply vessels, tugs, anchor handlers, pipe layers, seismic survey vessels and dive support vessels.

REPAIR QUAY				
QUAY LENGTH	WIDTH	DRAFT	COPE	BOLLARD
458 m	19 m	-11.8 m LAT *	+ 3.88 m LAT	50 tons
FACILITIES & SERVICES				
QUAY CRANES	4 ton crane			
LAY DOWN AREA	8,700 m ²			
WORKSHOPS	Not available.			
OFFICES	Not available.			
ELECTRICITY	380 V, 3ph, 50 Hz, 200A - on a metered basis / 440 V, 60 Hz is available via generator.			
FRESH WATER	Available on request.			
SEWERAGE	Not available.			
SLOP TANKS	Not available.			
VESSEL SUITABILITY	A range of oil and gas related vessels including rigs, drillships, supply vessels, tugs, anchor handlers, pipe layers, seismic survey vessels and dive support vessels. Certain operational restrictions may apply.			
CONTACT	Transnet National Ports Authority		State	

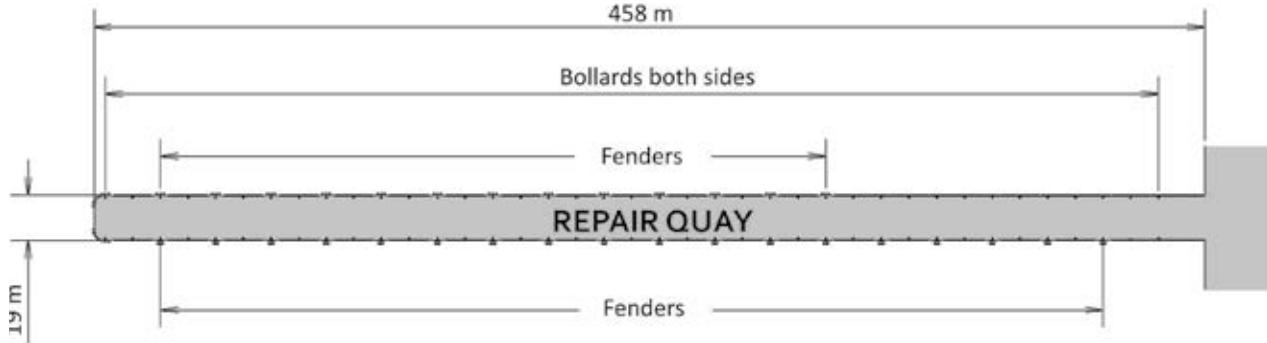
RECENT PROJECTS:

- ▶ Blackford Dolphin (2010)
- ▶ Noble Clyde Boudreax (2012)
- ▶ Noble Bully II (2012)
- ▶ Enso E5001 (2014)

Fig 4.11: (Opposite page)
A recent rig project being completed at the Repair Quay.

Fig 4.12: (Below) A schematic overview of the Repair Quay.

REPAIR QUAY



RECENT PROJECTS:

- Enesco DS2 (2013) ▾
- Grand Banks (2013) ▾
- Triumph Drilling T110 (2014) ▾

REPAIR QUAY 502

DORMAC REPAIR QUAY		
QUAY LENGTH	WIDTH	DRAFT
183 m	30 m	-10.7 m LAT
FACILITIES & SERVICES		
QUAY CRANES	Need to be hired in	
LAY DOWN AREA	5,000 m ²	
WORKSHOPS	Dormac Marine Cape Town has access to supporting workshop facilities within the harbour with overhead cranes, secure yard as well as blast and paint shed.	
OFFICES	Mobile offices are available.	
ELECTRICITY	350V, 50Hz / 440 V, 60 Hz is available via generator.	
FRESH WATER	Available on request.	
SEWERAGE	None available.	
SLOP TANKS	None available.	
VESSEL SUITABILITY	A range of oil and gas related vessels including drillships, supply vessels, tugs, anchor handlers, pipe layers, seismic survey vessels and dive support vessels.	
CONTACT	Dormac Marine Cape Town	Private

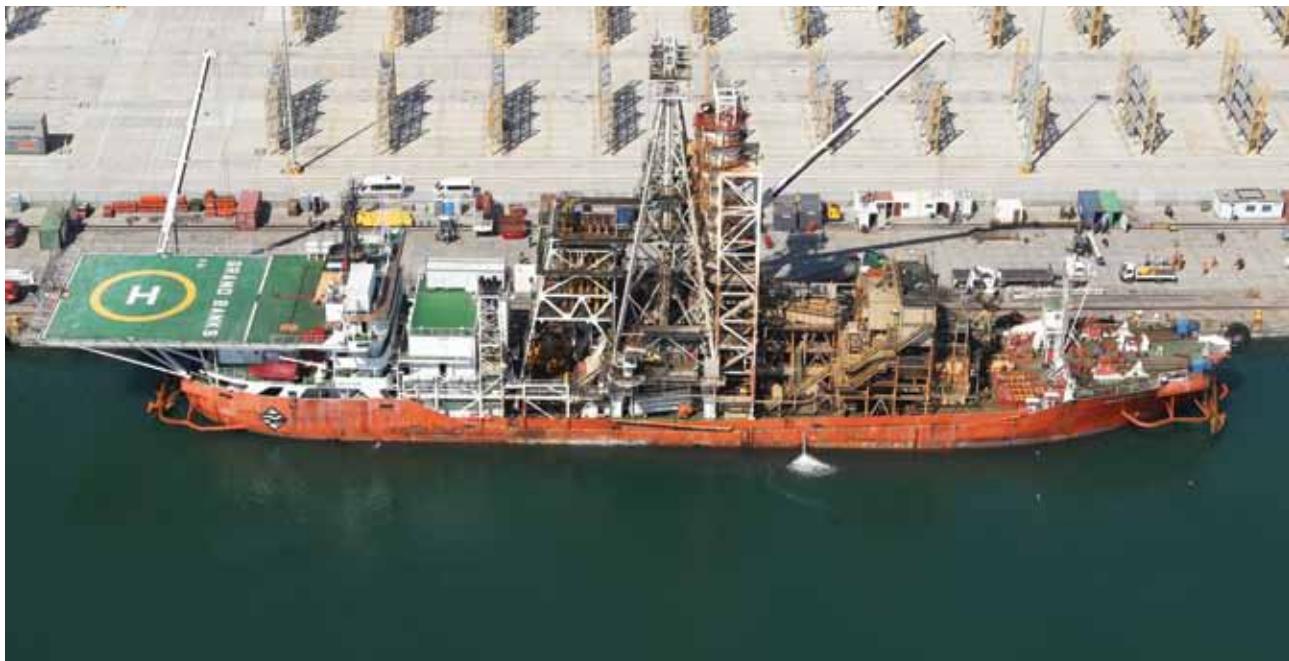
MULTI-PURPOSE QUAY

The Multi-Purpose Quay extends along the entire south side of the Duncan Dock from berth E to berth L and is available for repair projects and inspections when space is available for the duration required. L-Berth with a depth restricted to -10.5 m LAT is the area most likely to be available for ship repair.

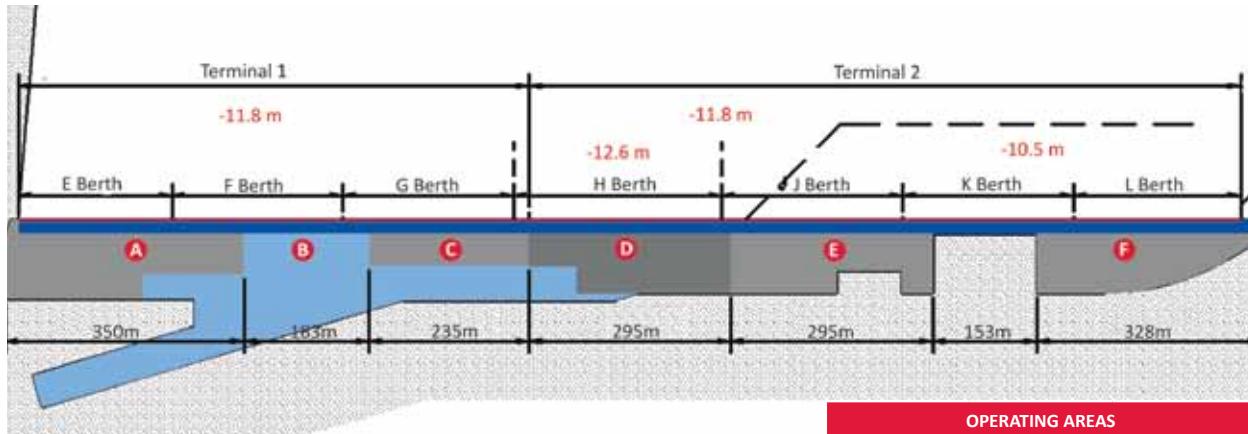
Fig 4.13 (Opposite page top) A vessel is accommodated at the Multi-Purpose Quay.

Fig 4.14: (Opposite page bottom) Schematic overview of the Multi-Purpose Quay showing operating areas, water depths and berth positions. L-Berth with a depth restricted to -10.5 m LAT is the area most likely to be available for ship repair.

MULTI-PURPOSE QUAY FACILITIES (total quay length - 1790 m)					
BERTHS	QUAY LENGTH	QUAY SPACE	MOORING AREA	DRAFT	COPE
E-Berth	226 m	20m wide for length of Multi-Purpose Quay	1 m wide for full length of Multi-Purpose Quay	-11.80 m LAT	+4.49 m LAT
F-Berth	250 m			-11.80 m LAT	
G-Berth	250 m			-11.80 m LAT	
H-Berth	319 m			-12.60 m LAT	
J-Berth	250 m			-10.50 m LAT	
K-Berth	250 m			-10.50 m LAT	
L-Berth	246 m			-10.50 m LAT	



MULTI PURPOSE QUAY



5
8
9

MOSSEL BAY

MOSSEL BAY 5

Situated half way between Cape Town and Port Elizabeth, Mossel Bay is the home of PetroSA and other oil industries projects.

Mossel Bay is the only South African port that operates two offshore mooring points within the port limits. Marine engineering firms are available for all classes and types of onboard repairs. A slipway of 250 tons capacity is available.



FACILITIES

Slipway



RAINFALL: Mossel Bay normally receives about 333 mm of rain per year, with rainfall occurring throughout the year. It receives the lowest rainfall (21 mm) in July and the highest (36 mm) in October.

TEMPERATURES: The average midday temperatures for Mossel Bay range from 18.4°C in July to 26°C in January. The region is the coldest during July when the mercury drops to 7.6°C on average during the night.

WINDS: Prevailing winds are south-west (predominant throughout the year), north-west (winter) and south-east (summer), but wind directions and velocities are subject to rapid change without warning. Average wind force is between 10-25 knots. Heaviest seas and swells are predominant southeasterly and accompany the south-easterly winds.

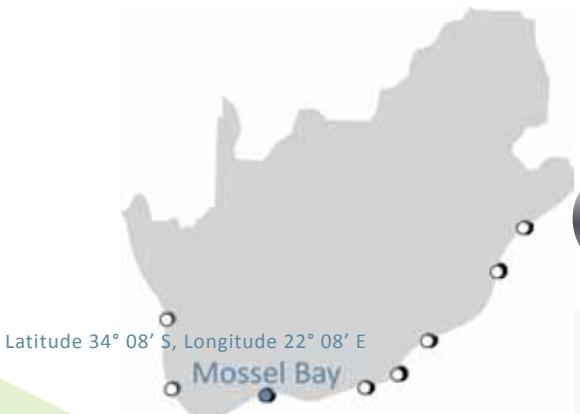


CONTACTS:

Port Manager:
☎ +27 44 604 6201

Harbour Master:
☎ +27 44 604 6287

Port Control:
☎ +27 44 604 6271



George airport, 50 km away, acts as a domestic airport and offers flights to all the major airports within South Africa.



Bunkering: No heavy fuel oil, only diesel oil for fishing vessels and supply vessels.



LOCAL TIME
GMT/UTC + 2 hours

WORKING HOURS:
TNPA Administrative offices:
08:00-16:00 (Monday to Friday)

Terminals:
24-hours: Monday to Friday
07:00-15:00 : Saturdays
08:00-16:00: Sundays
(18:00-22:00 on request)

ENTERING THE PORT

Advising ETA: Vessels must advise their ETA To VTS/Port Control, 72 hours prior to arrival at the Fairway Buoy.



Draft: -7.5m

Pilotage: Vessels requiring pilotage services must provide four hours of advance notice to VTS/Port Control on channel 12. Pilotage is enforced from two nautical miles.

Ballast Requirements: Vessels should be sufficiently ballasted to navigate safely.

HARBOUR FLEET

19 ton bollard pull tug	1
-------------------------	---

SHIP REPAIR IN MOSSEL BAY

With numerous rigs operating off the coast of Mossel Bay and the likely increase in oil industry activity in the area, the port of Mossel Bay aims to be of service to the sector. The harbour can accommodate vessels up to 130 m in length with a draft of -6.5 m.

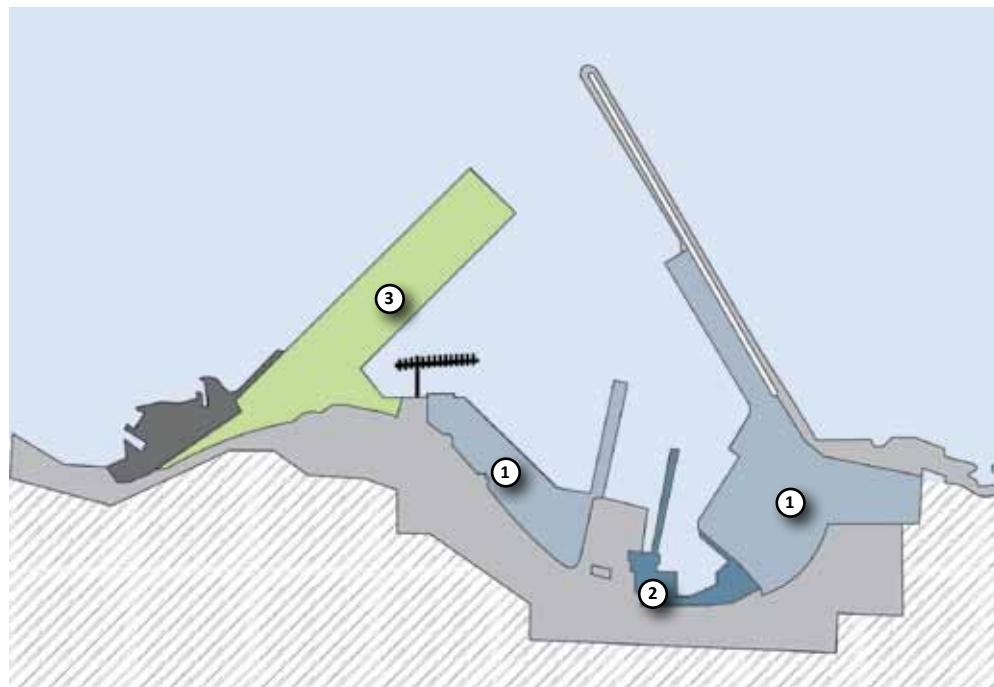
Diving service: A private diving service to inspect craft for any damage, salvage, cleaning and any other related maintenance and repair required is available in the port. Services include:

- ▲ Hull inspections and cleaning
- ▲ All general repairs
- ▲ Underwater welding and cutting
- ▲ Underwater photography
- ▲ Construction work

Slipway: A 220 ton slipway is available for repairs in the harbour. Vessels are accommodated on a first-come, first-served basis and berthing is subject to weather conditions.

Currently there are no plans to expand the ship repair facilities of this port, but the slipway is due to be upgraded under Operation Phakisa.

LAYOUT OF THE PORT OF MOSSEL BAY



- (1) Fishing
- (2) Ship Repair
- (3) Breakbulk/Multi-Purpose

Fig 5.1: A schematic overview of the Port of Mossel Bay.

Fig 5.2: (Below) The port of Mossel Bay.



**CONTACTS:**

Telephone:

+27 44 601 2911

PETROSA LOGISTICS BASE

PetroSA provides comprehensive and integrated logistics services to both PetroSA's internal and external customers. The Logistics Base is situated close to the coastline near the Voorbaai industrial area in Mossel Bay. The base serves as the main link with PetroSA offshore installations, the FA Platform, ORCA and drilling rigs working off the South African coast.

Working very closely with Transnet National Ports Authority, the Logistics Base also operates a satellite office located within the Mossel Bay harbour. The office ensures that all required materials reach their destination offshore.

The following services are provided:

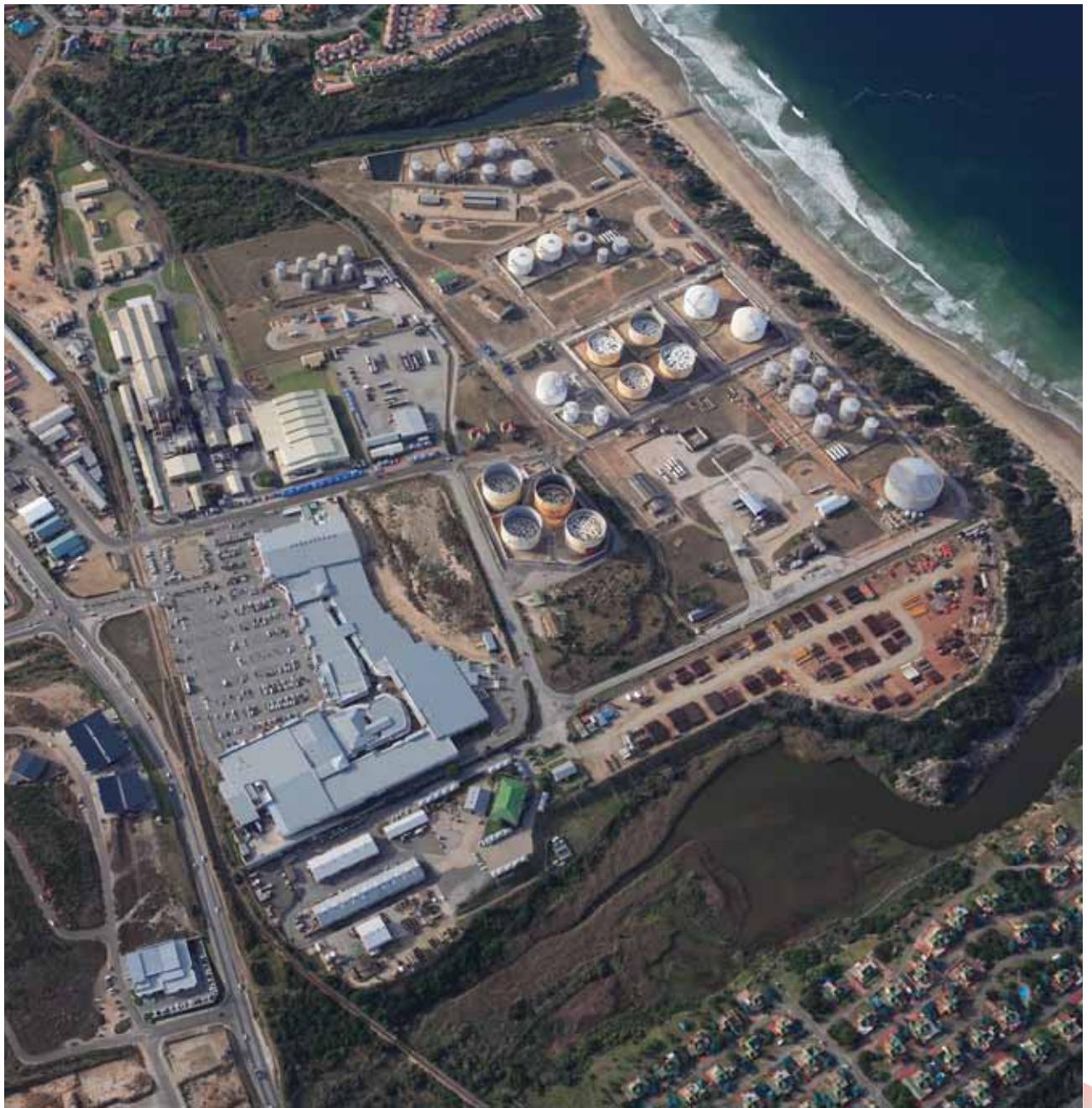
- ▲ Logistics Operations: marine aviation, fleet services, technical services – dealing with logistics and asset integrity.
- ▲ Cargo Transport: transportation of goods between quaysides, yards and warehouses as well as suppliers and customers.
- ▲ Aviation operations at the George Heliport: crew changes to offshore installations.
- ▲ Vessel discharge and loading service.
- ▲ Backload dispatch and storage.
- ▲ Waste handling.
- ▲ Waterside Operations: port liaison, chartering and vessel scheduling service SPM/CBM.

Fig 5.3: (Below) The entrance to the PetroSA Yard.

Fig 5.4: (Opposite) The PetroSA Yard can be seen in the forefront of the photo.

PetroSA is the National Oil Company of South Africa. Established in 2002 following the merger of Soekor E&P (Pty) Ltd and Mossgas (Pty) Ltd, PetroSA operates a Gas-to-Liquid (GTL) refinery in Mossel Bay and holds a portfolio of assets that spans the petroleum value chain.





6

NGQURA

NGQURA 6

The Port of Ngqura is South Africa's newest port. It is capable of handling container, dry and liquid bulk vessels and is able to accommodate rig repairs and surveys. The port has been identified as a potential service provider to the offshore oil and gas sector and has already welcomed a number of rigs for servicing. Bordered by the country's largest IDZ, the Coega Industrial Development Zone, the area is being developed for economic upliftment.



FACILITIES

Quay space

IDZ



The Eastern Cape Province generally enjoys a subtropical climate with regular rainfall in summer months. Wind is a factor in the port and vessels should be prepared to proceed to sea at short notice at the approach of bad weather.

RAINFALL: The region receives a low average annual rainfall with only about 453 mm falling a year.

TEMPERATURES: The average midday temperatures for this region range from 19.3°C in July to 25.2°C in February. The region is the coldest during July when the mercury drops to 8°C on average during the night.



CONTACTS:

Port Manager:

+27 41 507 8495

Harbour Master:

+27 41 507 8440/3

Port Control:

+27 41 507 8444



Port Elizabeth International Airport is served by major world airlines with scheduled flights to all parts of the globe, either direct or via Johannesburg. The Port of Ngqura is only 22 kms away from the airport.



Bunkers: The bunkering services are currently enabled via road tankers.



LOCAL TIME
GMT/UTC + 2 hours

WORKING HOURS:
TNPA Administrative offices:
08:00-16:00 (Monday to Friday)

Terminals:
24-hours: Monday to Friday
07:00-15:00 : Saturdays
08:00-16:00: Sundays
(18:00-22:00 on request)

ENTERING THE PORT

Advising ETA: Vessels must advise their ETA To VTS/Port Control, 72 hours prior to arrival at the Fairway Buoy.

Anchorages: Full anchorage is supplied. Vessels should be prepared, however, to proceed to sea at short notice at the approach of bad weather.

Approaches: The entrance channel features a width of 300 m and depth of 18.0 m. The width at pier heads increases to 500 m. There is an exclusion zone of 500 m around the St Croix islands group.



Width overall: 300 m

Width at piers head: 500 m

Draft: -18 m

Berths: There are seven berths ranging up to 325 m length, with a capability of docking approximately a 340 m vessel.

Pilotage: Vessels requiring pilotage services must provide four hours of advance notice to VTS/Port Control on channel 12.

HARBOUR FLEET

70 ton bollard pull Voith Schneider tugs	3
--	---

Ballast requirements: Vessels should be sufficiently ballasted to navigate safely. Vessels need to apply for a discharge permit and submit a "ballast water management plan" before entering the port. Only fresh open sea water can be discharged - the Harbour Master will not permit the discharge of ballast water from other ports.

LAYOUT OF THE PORT OF NGQURA



① Container Stacking Area

② Berth D100

③ Berth D101

④ Berth D102

⑤ Berth D103

⑥ Finger Quay

⑦ Berth C100 (Harbour craft)

⑧ Berth C101

⑨ Berth B100

⑩ Container Admin area

Fig 6.1: An aerial view of the port of Ngqura showing layout of port facilities.



RIG REPAIR AT NGQURA

RECENT PROJECTS:

- Deepsea Stavanger (2011) ▶
- Deepwater Millennium (2011) ▶
- PetroSA Orca (2013) ▶
- Borlette Dolphin (2013) ▶
- Enscos 5006 (2014) ▶
- Transocean KG1 Drillship (2014) ▶

The arrival of the self-propelled rig, the *Deepsea Stavanger* in the port of Ngqura in 2011 set an important precedent for the ship repair industry as well as for the Eastern Cape – and sparked a new opportunity for the region.

The port offers an important alternative to ship repair companies seeking to accommodate vessels that require a deeper draft. The 18 metre depth and availability of quayside space at the port means that it has been identified for its potential to host rigs and the larger vessels associated with the offshore oil and gas sectors.

Mobilising in the port

Main contractors hailing from the traditional marine engineering centres of Cape Town and Durban are generally supported by local smaller engineering firms.

Much of the equipment as well as infrastructure (including workshops) required for rig projects, however, is not available in the port and has to be mobilised from other centres. Repair companies have traditionally brought in temporary infrastructure as well as labour.

ENVIRONMENTAL POLICY

An environmental policy is available from the port and a seabed survey will be performed before and after any vessel stay for the purpose of maintenance or repair.

Debris removal will be for the client's cost and it is recommended that floating booms be positioned around rigs or vessels undergoing maintenance and repair in the port.

Environmental constraints

The port is defined as a Green Harbour. Strict environmental and safety standards apply in the port and companies working here need to comply with air quality management, solid and liquid waste management, emergency preparedness and response, marine mammal management and monitoring.

It is anticipated that the port will become a more important host for the offshore oil and gas sector in the future as it develops.

FINGER QUAY				
BERTHS	QUAY LENGTH	WIDTH	DRAFT	BOLLARD
Berth C101	300 m	100 m	-16 m LAT	150 ton
Berth B100	300 m	100 m	-18 m LAT	150 ton
AVAILABLE SERVICES				
QUAY CRANES	Mobile cranes are hired for duration of projects.			
WORKSHOPS	Structures are erected for duration of projects.			
OFFICES	Structures are erected for duration of projects.			
ELECTRICITY	600 KVA, 380 V, 50 Hz available on quayside / 440 V, 60 Hz is available via generator.			
FRESH WATER	Available			
SEWERAGE	Available			
SLOP TANKS	None			
VESSEL SUITABILITY	Rigs, FPSOs, drillships, supply vessels, tugs, anchor handlers, pipe layers, seismic survey vessels and dive support vessels.			
CONTACT	Transnet National Ports Authority			State



COEGA IDZ

SECTORS

Coega is focused on the following investment sectors:

- Automotive
- Agro-processing
- Chemicals
- General Manufacturing
- Business Process Outsourcing
- Energy

CLUSTERS:

- Commercial cluster
- Logistics cluster
- Automotive cluster
- General Industries cluster
- Training & Academic cluster
- Metallurgical cluster
- Ferrous Metals cluster
- Chemicals cluster
- Port cluster
- Materials Handling cluster
- Mariculture & Aquaculture cluster
- Petrochemical cluster
- Advanced Manufacturing clusters (2)
- Energy cluster



CONTACTS:

Telephone:

+27 41 403 0400

Physical Address

Coega IDZ Business Centre
Corner Alcyon Road & Zibuko Street
Zone 1
Coega IDZ
Port Elizabeth
6100

Managed by the Coega Development Corporation (CDC), the Coega Industrial Development Zone measures 11,500 ha and is structured into 14 clusters or zones. The IDZ is directly linked to the port of Ngqura and together they act as catalysts for investment and local development.

The Coega IDZ has world-class and purpose-built infrastructure to suit every investor's needs. It was established on the plug-and-play model to eliminate long construction periods and connectivity challenges. Throughout the IDZ there are purpose built service points to which investors can easily connect, giving tenants prepared land that is linked to roads, electricity, sewerage, water supplies and telecommunications. The CDC aims to offer total solutions for construction, spatial development and SMME development. This approach enables investors to conveniently establish their plants without worrying about major services' installation.

The Coega IDZ is demarcated into 14 zones and is specifically designed along the cluster model linking related industries and their supply chains in close proximity to one another to maximise efficiency and minimise turnaround times.

The Coega IDZ, while offering global competitiveness through world-class infrastructure, tax incentives, rebates and a duty-free zone; is purpose-built for manufacturing including beneficiation of export goods, investment and local socio-economic growth, skills development and job creation.

Laydown area

The Coega Development Corporation (CDC) is investing R9 million in the establishment of a new laydown area, serving as a temporary storage site for abnormal cargo. The laydown area, located on the boundary between the Port of Ngqura and the IDZ, will stretch across 12 hectares of land in Zone 1.

The laydown area will be developed in two phases to be completed in 2016. Phase one will see the development of a multi-user facility for abnormal and out-of-gauge cargo storage, while phase two will see the area declared a customs controlled area (CCA). Users of the laydown area will be able to benefit from the duty and VAT incentives available within a customs controlled area.

Zone 2 of the Coega IDZ was designated a CCA in May 2014.

Benefits of investing in the Coega IDZ:

Coega Industrial Development Zone's One Stop Investor Service Centre provides assistance with:

- Identifying the right location in the Coega Industrial Development Zone for investment in order to optimise logistics and minimise impact on the environment.
- The environmental impact assessment.
- Access to more than 100 environmental impact studies that have already been completed.
- Drawing up a business plan.
- Obtaining finance.
- Identifying incentives and assistance in qualifying for them.
- Fast-tracking applications through the administrative process.
- Technical support for construction.
- Recruitment and training of construction teams.
- Recruitment and training of workers for factory, warehouse or other facilities.
- Support for the relocation of key personnel, including work permits, finding accommodation

and settling in.

- ▶ Shared services such as the information technology infrastructure, cleaning and maintenance (facilities management services).
- ▶ Purpose-built infrastructure to meet your needs.



7

DURBAN



DURBAN 7

The Port of Durban is South Africa's premier multi-cargo port and is counted among the busiest ports in Africa. Strategically positioned, the port offers itself as a potential service point for the offshore sector with a number of ship repair yards and facilities. Durban regularly attracts repair, maintenance and survey work from the offshore sector.



FACILITIES

Drydocks

Floating docks

Quay space

Slipway



Durban enjoys a sub-tropical climate with warm winters and temperatures and hot humid summers.

RAINFALL: The town has an average annual rainfall of 760 mm with most of this occurring during the summer months.

TEMPERATURES: Temperatures ranging from 15°C to 26°C during winter. Summer temperatures range between 22°C and 35°C with periods of heavy rainfall.



CONTACTS:

Port Manager:

☎ +27 31 361 8821

Harbour Master:

☎ +27 31 361 8496

Port Control:

☎ +27 31 361 8567



Durban's King Shaka Airport is the closest international airport and is approximately 33 km from Durban. Traveling time is about half an hour.



LOCAL TIME
GMT/UTC + 2 hours

WORKING HOURS
The Port of Durban is open 24 hours, 365 days a year, although cargo working may be restricted on official public holidays.



Bunkering: Bunker points are available only at the chemical and coal berths. Bunkers can only be supplied in port, alongside a suitable berth via one of the four bunker barges.



DAY: Maximum draft: 14.5 m

NIGHT: Maximum draft: 11.6 m

Approaches: The entrance channel is dredged to a depth of -12.8 m; the principal interior channels and basins to a depth of -12.2 m.

Off port limits service: The rendezvous position for Off Port Limits is 4 NM east of Cape Natal. This area is free of port dues and the launch service is available 24 hours per day. Helicopter service is restricted to daylight hours.

Pilotage: Pilotage is compulsory. The rendezvous point is three nautical miles NE of the port entrance on the leading lights. Pilot transfer is by helicopter, unless otherwise advised. Durban has two fast pilot boats equipped with radar and VHF telephone.

Tug assistance: Tug attendance is compulsory.

HARBOUR FLEET

34 – 41 ton bollard pull Schottel type tugs	5
49 and 64 ton bollard pull Voith Schneider tugs	4

Ballast requirements: Vessels should be sufficiently ballasted to navigate safely within the harbour. Only clean, locally loaded ballast water, may be discharged within the port.

LAYOUT OF THE PORT OF DURBAN



- | | |
|--------------------------------------|------------------------|
| (1) Car Terminal | (6) Fishing Wharf |
| (2) T Jetty | (7) Container Terminal |
| (3) Small Craft Harbour | (8) Naval Base |
| (4) Prince Edward Graving Dock | (9) Salisbury Island |
| (5) Ship Repair Facilities (Bayhead) | (10) Island View |

Fig 7.1: An aerial perspective of the Port of Durban showing the main facilities.

DURBAN SHIP REPAIR FACILITIES

The port of Durban has extensive ship repair facilities, including one graving dock, a number of floating docks as well as general and privately run repair quays. Most of the facilities are concentrated around the Bayhead area of the port. Durban has many experienced and equipped repair companies who are able to perform all necessary aspects of ship repair. Traditionally handling repair and maintenance work for the shipping lines, the focus has shifted towards the offshore oil and gas industry in recent times.

Fig 7.2: The *Invulo* floating crane owned by Elgin Brown & Hamer.

FLOATING CRANES			
CRANE	LIFTING CAPACITY	CONTACT	OWNERSHIP
Indlova	200 tonnes at 10 m 125 tonnes from 24 m	TNPA	State
Invulo	60 tonnes at 6.1 m 40.6 tonnes at 16.2 m	Elgin Brown & Hamer	Private

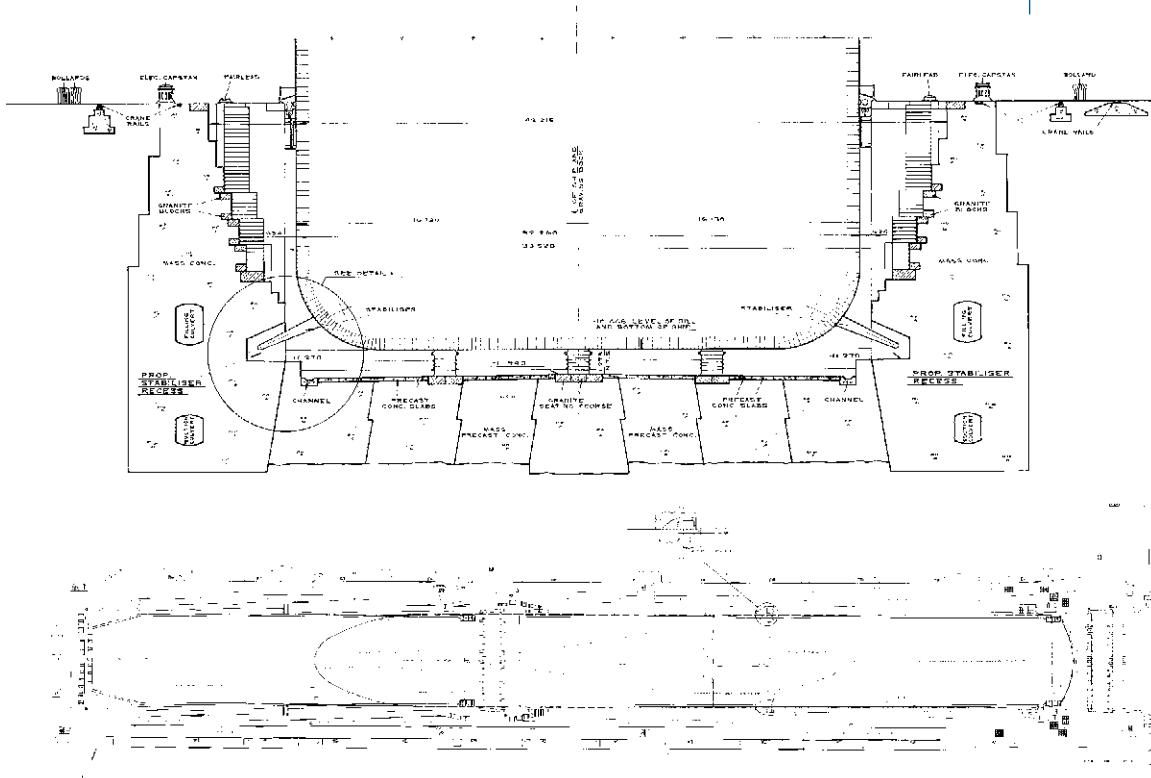


PRINCE EDWARD GRAVING DOCK

Situated at the end of the Maydon Wharf and built of reinforced concrete, the Prince Edward Graving Dock was officially opened in 1925 by King Edward VIII when he was Prince of Wales.

PRINCE EDWARD GRAVING DOCK		
LENGTH	Maximum inside sliding caisson	350.52 m
	1st Alternate with intermediate caisson	206.9 m
	2nd Alternate with intermediate caisson	138.68 m
	Length on keel blocks	327.66 m
WIDTH AT SILL	At cope level	42.21 m
	At gutter level	33.2 m
	Draft over Sill	14 m below LAT
PUMPING CAPACITY	Dewatering - 4 hours Flooding - less than one hour	
CONTACT	Transnet National Ports Authority	State

Fig 7.3: The Prince Edward Graving Dock in the Port of Durban.



DURBAN FLOATING DOCKS

SAS DOCK		
LENGTH	Overall	50 m
	Length on keel blocks	50 m
WIDTH	Overall	36 m
	At Entrance	30 m
LIFTING CAPACITY	5,000 tons	
DEADWEIGHT CAPACITY	20,000 tons	
AVAILABLE CRANAGE	Two x 12 ton cranes	
ELECTRICITY	110V Single Phase , 220V 3Phase , 220 Single Phase, 380 Single Phase 380V 3Phase	
FRESH WATER	Available via the yard.	
SEA WATER	Available via the yard.	
SEWERAGE	Available via the yard.	
SLOP TANKS	Available via the yard.	
VESSEL SUITABILITY	64 m long x 29 m wide .	
CONTACT	Southern African Shipyards	Private

Fig 7.4: The SAS Floating Dock is privately owned and operated.



ELDOCK		
LENGTH	Overall	155 m
WIDTH	Overall	23.5 m
LIFTING CAPACITY	8,500 tons	
DEADWEIGHT CAPACITY	20,000 tons	
AVAILABLE CRANAGE	Two x 5 ton cranes	
VESSEL SUITABILITY	Maximum draft of 6.3 m	
CONTACT	Elgin Brown & Hamer	Private

Fig 7.5: Commissioned by Elgin Brown and Hamer in 1999, Eldock was the first privately owned floating dock to enter the ship repair scene in South Africa.



DURBAN REPAIR QUAYS

There are a number of privately and state-owned quayside facilities available for ship and rig repairs in the Port of Durban. Transnet National Ports Authority operates three repair quays at Bayhead. These are available on a multi-user principal. They include Repair Quay 24, Dept Repair Jetty and the Ship Repair Jetty.

TNPA QUAYSIDE FACILITIES FOR SHIP REPAIR		
QUAY	LENGTH	DRAFT
Repair Quay 24	155 m	-6.1 m LAT
Dept Repair Jetty	300 m	-6.1 m LAT
Ship Repair Jetty	413 m	-8.5 m LAT

PRIVATELY RUN QUAYSIDE FACILITIES

DORMAC REPAIR QUAY (SLIPWAY GATE)		
QUAY LENGTH	QUAY SPACE	DRAFT
195 m	1,900 m ²	-8 m LAT

FACILITIES & SERVICES		
QUAY CRANES	A 50/10 luffing Jib crane is available for the length of the quay.	50 ton capacity at 30 m 15 ton capacity at 50 m
LAY DOWN AREA	16,000 m ²	
WORKSHOPS	The facility Includes a well equipped Machine Shop with CNC milling and lathe capability, 15 m bed lathes, horizontal and vertical boring machines, a large furnace and 50 ton craneage capacity. A Fabrication Shop with 5 ton and 7.5 ton craneage capacity capable of handling stainless steel, aluminium, mild steel and HT steels. A substantial Pipe Shop producing, Yorcalbro, CuNiFe, Galvanised, stainless steel and mild steel pipes up to and including Sched 120.	
ELECTRICITY	Shore power is available: 380 V, 50 Hz at 600 A is available. 440 V Gensets are available on request.	
FRESH WATER	Fresh water is available.	
SEWERAGE	Available in the yard.	
SLOP TANKS	Available in the yard.	
VESSEL SUITABILITY	Maximum vessel length of 250 m.	
CONTACT	Dormac Marine and Engineering	Private



EBH REPAIR QUAYS		
QUAY LENGTH	QUAY SPACE	DRAFT
153 + 214 + 214 m	95 m	-8 m LAT
FACILITIES & SERVICES		
QUAY CRANES	1 x Liebherr quayside crane:	10 ton capacity at 30 m
		4 ton capacity at 31 m
1 x Butters quayside crane:		40 ton capacity at 30 m
		5 ton capacity at 35 m 24 m
1 x 4 ton yard Demag crane		
WORKSHOPS	Available	
	Overhead cranage	From 3 ton to 10 ton capacity
ELECTRICITY	Shore power is available.	
FRESH WATER	Fresh water is available.	
CONTACT	Elgin Brown & Hamer	Private

DORMAC SLIPWAY 2		
QUAY LENGTH	WIDTH	DRAFT
70 m	35 m	-4.5 m LAT
FACILITIES & SERVICES		
QUAY CRANES	A 50/10 luffing Jib crane is available for the length of the quay.	50 ton capacity at 30 m
		15 ton capacity at 50 m
LAY DOWN AREA	16,000 m ²	
WORKSHOPS	The facility Includes a well equipped Machine Shop with CNC milling and lathe capability, 15m bed lathes, horizontal and vertical boring machines, a large furnace and 50 ton cranage capacity. A Fabrication Shop with 5 ton and 7.5 ton cranage capacity capable of handling stainless steel, aluminium, mild steel and HT steels. A substantial Pipe Shop producing, Yorcalbro, CuNiFe, Galvanised, stainless steel and mild steel pipes up to and including Sched 120.	
ELECTRICITY	Shore power is available: 380 V, 50 Hz at 600 A is available. 440 V gensets are available on request.	
FRESH WATER	Fresh water is available.	
SEWERAGE	Available in the yard.	
SLOP TANKS	Available in the yard.	
VESSEL SUITABILITY	Maximum vessel length of 250 m.	
CONTACT	Dormac Marine and Engineering	Private

The background of the image is a collage of various industrial and port-related scenes. It includes images of large cargo ships docked at piers, complex steel structures of industrial facilities, and aerial views of sprawling port areas. The colors are predominantly industrial tones like grey, blue, red, and green.

8 RICHARDS BAY

RICHARDS BAY 8

The Port of Richards Bay was established in 1976 primarily for exporting coal. Today it is one of the world's leading bulk ports. Repairs are generally accommodated within the Small Craft Harbour at the Repair Berth. Future plans, under Operation Phakisa, will see more opportunity to develop the repair sector in this port with strategies in place to provide additional infrastructure within the port as well as capitalise on the benefits of the Industrial Development Zone.



FACILITIES

Quay space

IDZ



Richards Bay is characterised by a subtropical climate with warm wet summers and mild moist to dry winters.

RAINFALL: An average annual rainfall of 1,228 mm.

TEMPERATURES: The average annual temperature is 21.5°C, with daytime maximum peaking from January to March at 29°C, and the minimum is 21°C, dropping to daytime highs from June to August of 23°C and a minimum of 12°C.

WINDS: During the winter months (April to September) north and north-west winds backing to the south-west are frequent. Westerly gales can cause heavy range action at berths; in the summer (October to March) the prevailing wind is from the south-east, which can reach gale force at times.



CONTACTS:

Port Manager:

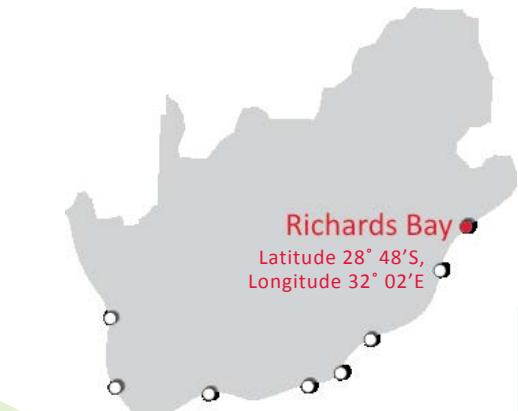
📞 +27 35 905 3203

Harbour Master:

📞 +27 35 905 3984

Port Control:

📞 +27 35 905 3444



Durban's King Shaka Airport is the closest international airport and is approximately 150 km from Richards Bay. Traveling time is about 1,5 hours along the N2.



Bunkering: Bunker points are available only at the chemical and coal berths. Bunkers can also be provided by a bunker barge at all berths.



LOCAL TIME
GMT/UTC + 2 hours

WORKING HOURS
TNPA Administrative offices:
08:00-16:00 (Monday to Friday)

TNPA Marine Services:
24-hour service, 7 days a week, except Christmas Day.

Terminals:
24-hours, 7 days a week.
(Note: Closures over public holidays vary per terminal)

ENTERING THE PORT

Advising ETA: The Port Control is manned 24 hours a day. The calling frequency is on Channel 16 VHF, with messages being passed on VHF Channel 12. Vessels should radio Port Control prior to arrival, advising ETA.

When vessels enter the VTS zone (the initial arrival point – 15 miles) they must advise Port Control of their draft freeboard and any other VTS information requested.

Port limits: Six mile limit south-east of South Breakwater.

Entrance Channel: -22 m LAT

Entrance Channel width: 300 m

Approaches: The port entrance channel has a width of 300 m, extending seawards 400 m beyond the breakwater to a depth of -22 m.

Anchorages: The outer anchorage is 3-6 miles south-east of the south breakwater. Caution should be exercised during strong SW and NE winds as vessels have been known to lose their anchors. Anchorage immediately to the north of the port entrance channel is prohibited due to the location of an offshore pipeline (SA Notices to Mariners 44/83). When determining outer anchorage position, vessels are required not to anchor within prohibited areas as listed in the local chart.

Pilotage: Pilotage is compulsory and pilots are transferred by helicopter. A pilot boat is on standby should the helicopter not be available.

Tug assistance: Tug attendance is compulsory. Tugs will meet incoming vessels approximately 0.25 miles from the harbour entrance.

All tugs are fitted for fire-fighting and salvage. Smaller, conventional, twin-screw tugs, and three diesel launches assist with running lines and the movements of smaller craft.

HARBOUR FLEET

43 - 70 ton bollard pull Voith Schneider tugs	5
---	---

Ballast requirements: Vessels should be sufficiently ballasted to navigate safely.

LAYOUT OF THE PORT OF RICHARDS BAY



RICHARDS BAY SHIP REPAIR FACILITIES

REPAIR BERTH		
QUAY LENGTH	DRAFT	COPE
300 m	-8.0 m LAT	4.3 m
ELECTRICITY	Available on request.	
FRESH WATER	Available on request.	
SEWERAGE	No services available.	
SLOP TANKS	Slop removal on request.	
VESSEL SUITABILITY	Minor repairs to small vessels.	
CONTACT	Transnet National Port Authority	State

REPAIR BERTH:

Richards Bay's only ship repair facilities are situated in the Small Craft Harbour at the Repair Berth. With a restricted draft, the berth is not conducive to servicing the type of vessels associated with the offshore oil and gas industry at this stage.





RICHARDS BAY IDZ

CONTACTS:

Telephone:
+27 35 788 0571

Email:
info@rbidz.co.za

Physical Address

150 A Pioneer Road
Captains Walk Building
Tuzi Gazi Waterfront
Richards Bay
3900

Postal Address

Private Bag X1005
Richards Bay
3900

RBIDZ Sectors of focus

- ▲ Metals beneficiation
- ▲ Agro-processing
- ▲ Renewable Energy
- ▲ Wood and pulp
- ▲ Marine industry (ship building and repairs, oil and gas)

Benefits of the incentive scheme

- ▲ A Customs Controlled Area (CCA) with dedicated South African Revenue Services (SARS) officials to provide support for customs and VAT requirements.
- ▲ World-class industrial support infrastructure.
- ▲ Links to an international port of entry.
- ▲ Duty suspension on imports for production-related raw materials, including machinery and assets used in production with the aim of exporting the finished products.
- ▲ VAT exemptions under specific conditions for supplies procured in South Africa.



Restrictions on the incentive scheme

- ▲ All activities and the manufacture of all goods in contravention of any South African Act are prohibited within an IDZ.
- ▲ No person or company shall bring into, or cause to be brought into, an IDZ a substance or goods, the possession of which is considered illegal or illicit or items prohibited by the laws of South Africa or binding international conventions to which South Africa is a signatory.
- ▲ Enterprises who wish to manufacture goods where the manufacture of such requires special permits, license or legislative consent, will acquire such special permit, license or legislative consent prior to the commencement of production and need to disclose their intention to manufacture such goods in their IDZ enterprise agreement.

FUTURE PLANS

Richards Bay is poised to develop facilities for ship repair and maintenance. Identified by Operation Phakisa as a significantly positioned port that could service the offshore oil and gas vessels operating off the east coast of Africa, Transnet National Ports Authority has committed to target dates to implement infrastructure investment in Richards Bay.

Operation Phakisa aims to:

- ▲ Quantify and unlock opportunities in oil and gas, ship or rig repair and maritime vessel-building in line with market requirements in Richards Bay.
- ▲ Allow the market to implement low-risk, flexible capacity for ship or rig repair at Richards Bay.
- ▲ Implement facilities for maritime vessel-building in Richards Bay.
- ▲ Explore the feasibility of establishing a Liquid Natural Gas cluster at Richards Bay.
- ▲ Enhance container handling capacity.
- ▲ Allocate waterfront land to the IDZ in support of maritime manufacturing.

9

USEFUL CONTACTS



Emergency Numbers

Nationwide emergency response

Dial the telephone number **10111** from anywhere in South Africa. A call centre operator will answer the incoming call, take all necessary particulars and assign the complaint to a Flying Squad patrol vehicle, or the local police station, to attend the incident.

Emergency Rescue:

From Landline	107
From Mobile	112

Ambulance

All Area	10177
ER 24	0840124
Netcare	911082 911

National Sea Rescue Institute

Saldhana Bay	022 714-1726
Cape Town	021 449-3500
Mossel Bay	044 604-6271
Port Elizabeth	041 507-1911
East London	043 700-2100
Durban	031 361-8567
Richard's Bay	035 753-1991
	035 905-3401/3444



Useful Numbers

Weather Forecast	082 162
	082 231 1640
Phone Directory	1023
Time	1026

Calls to Ships at Sea

Via Coastal Stations	0800 222 208\
Via Satellite	10900

All numbers listed above exclude the international dialling code.

DCD Marine Cape Town

✉ www.dcdmarine.co.za

DCD Marine provides access to privately operated quayside facilities in the Port of Cape Town.

Contact: +27 21 460 6000

Dormac Marine & Engineering

✉ www.dormac.net

Dormac Marine Cape Town and Dormac Marine Durban provide privately operated facilities in both ports.

Contact: +27 31 274 1500 (Durban)

Contact: +27 21 512 2900 (Cape Town)

Elgin Brown & Hamer

✉ www.ebh.co.za

Elgin Brown & Hamer provides access to privately operated quayside and floating dock facilities in the port of Durban.

Contact: +27 31 205 6391

Engineering Council of South Africa (ECSA)

✉ www.ecsa.co.za

The Engineering Council of South Africa (ECSA) is a statutory body established in terms of the Engineering Profession Act, 2000 (Act No. 46 of 2000). ECSA sees itself in partnership with the State and the engineering profession to promote a high level of education and training of practitioners.

Email: engineer@ecsa.co.za

FerroMarine Africa

FerroMarine Africa is the leaseholder of the Fabrication facility in Saldanha Bay.

Contact: Tel +27 21 880 2070

FerroMarine Cape

✉ www.ferromarinecrafte.co.za

FerroMarine Cape has a long-term lease on A-Berth in Cape Town.

Contact: Tel +27 21 880 2070

International Bunker Industry Association (Southern Africa)

✉ www.ibia.net

The International Bunker Industry Association (IBIA) is the voice of the suppliers and end users of marine fuel. Conceived in 1992 it has expanded steadily with a worldwide membership comprising shipowners, charterers, bunker suppliers, traders, brokers, barging companies, storage companies, surveyors, port authorities, credit reporting companies, lawyers, P&I clubs, equipment manufacturers, shipping journalists and marine consultants.

Email: tahra.sergeant@ibia.net

National Union of Metalworkers of South Africa (NUMSA)

✉ www.numsa.org.za

NUMSA is the biggest metalworkers trade union in South Africa with more than 339,567 members.

Contact: 27 21 945 3540

South African Association of Shipbuilders and Repairers

✉ www.saasr.co.za

The SAASR strives to set out procedures and regulations within the ship building and repair industry that foster good safety attitudes and practices and a healthy working environment.

Email: info@saasr.co.za

South African Association of Freight Forwarders (SAAFF)

www.saaff.org.za

SAAFF Western Cape Chapter was founded in the 1920's and went under the name of Cape Town Freight Forwarders. They have developed strong relationships with the City Council, Customs, ACSA, NRCS, shipping lines, Transnet and Cape Town Harbour Carriers Association. Their reach further extends to the Cape Chamber of Commerce and the Port Liaison Forum together with other industry Stakeholder Forums.

Email: saff@saaff.org.za

South African Association of Ship Operators and Agents (SAASOA)

www.saasoa.com

SAASOA is a non-profit Association formed with the purpose of promoting and advancing the interests of Ships Agents, Shipping Lines (Vessel Owners and Operators) and Brokers, on all matters of common interest.

Email: secretary@saasoa.com

South African Institute of Marine Engineers and Naval Architects (SAIMENA)

www.saimena.org.za

SAIMENA is the only technical society in South Africa dedicated to marine engineers and naval architects. It was founded in 1975 by the former members of the overseas branches, in Cape Town and Durban, of the Institute of Marine Engineers, London. It now has branches in Cape Town, Durban and Port Elizabeth, with a total membership of 400. Its members include seagoing engineers, ship repairers, shipbuilders, marine paint suppliers, classification societies, salvage associations, the SA Navy, naval architects as well as marine consultants.

Email: saimena.cape@webafrica.org.za

South African Maritime Safety Authority (SAMSA)

www.samsa.org.za

SAMSA was established on 1 April 1998 in terms of the South African Maritime Safety Authority Act 5 of 1998. For more details please see page 86.

South African Oil and Gas Alliance (SAOGA)

www.saoga.org.za

The South African Oil & Gas Alliance (SAOGA) is a non-profit organisation dedicated to promoting the development of South African-based industry supplying products and services to the upstream oil and gas sector. The organisation operates as a partnership between the public and private sectors and undertakes a range of industry development activities to promote the interests of a membership base of about 170 private sector companies. Members include global oilfield service companies with bases in South Africa; marine and ship repair companies that focus on the substantial opportunity in oilfield-related ship/rig repair and maintenance; logistics companies and a diversified base of engineering and service companies.

Tel: +27 21 425 8840

Southern African Shipyards

www.sa-shipyards.co.za

Southern African Shipyards provides access to privately operated quayside and floating dock facilities in the port of Durban.

Contact: +27 31 274 1800

Transnet National Ports Authority (TNPA)

www.transnetnationalportsauthority.net

Transnet National Ports Authority is one of five operating divisions of Transnet SOC Ltd. TNPA is responsible for the safe, effective and efficient economic functioning of the national port system, which it manages in a landlord capacity. It provides port infrastructure and marine services to South Africa's eight commercial seaports; and operates within a legislative and regulatory environment created by the National Ports Act 2005. In line with the provisions of the National Ports Act, the core functions of TNPA are:

- ▶ To plan, provide, maintain and improve port infrastructure;
- ▶ to provide or arrange marine-related services;
- ▶ to ensure the provision of port services, including the management of port activities and the port regulatory function at all south African ports; and
- ▶ to provide aids to navigation and assistance to the manoeuvring of vessels within port limits and along the coast.

Contact: 27 11 351 9001

GOVERNMENT WEBSITES

Government Departments

Department of Home Affairs

www.home-affairs.gov.za

Department of Labour

www.labour.gov.za

Department of Mineral Resources

www.dmr.gov.za

Department of Transport

www.transport.gov.za

South African Revenue Service

www.sars.gov.za

Local Government & Municipalities

Buffalo City Municipality (East London)

www.buffalocity.gov.za

City of Cape Town

www.capetown.gov.za

City of Durban

www.durban.gov.za

City of uMhlathuze (Richards Bay)

www.umhlathuze.gov.za

Mossel Bay Municipality

www.mosselbaymun.co.za

Nelson Mandela Bay Municipality (PE)

www.nelsonmandelabay.co.za

Saldanha Bay Municipality

www.saldanhabay.co.za

State Owned Enterprises

Airport Company of South Africa (ACSA)

www.airports.co.za

Eskom (electricity)

www.eskom.co.za

PetroSA

www.petrosa.co.za

Transnet

www.transnet.net



SAMSA OFFICES

PRETORIA (HEAD QUARTERS)

146 Lunnon Road Cnr Jan Shoba & Lunnon
Road Hillcrest 0183
Tel: +27 12 366 2600
Fax: +27 12 366 2601

CAPE TOWN (ATLANTIC OCEAN PORT)

19th Floor 2 Long Street
Cape Town 8001
Tel: +27 21 421 6170
Fax: +27 21 419 0730

DURBAN (INDIAN OCEAN PORT)

17th Floor 333 Anton Lembede Street
Durban 4001
Tel: +27 31 307 1501
Fax: +27 31 306 4983

PORT ELIZABETH (INDIAN OCEAN PORT)

1st Floor, Bay Suites Building 1A
Humewood Road, Humerial 6000
Tel: +27 41 585 0051/3
Fax: +27 41 582 1213

RICHARDS BAY (INDIAN OCEAN PORT)

Gazi Centre, Small Craft Harbour
Newark Road, Richards Bay 3900
Tel: +27 35 788 0068
Fax: +27 35 788 00

SALDANHA BAY (ATLANTIC OCEAN PORT)

Old Salcon Building, Harbour Area
Fishing Harbour, Saldanha 7395
Tel: +27 22 714 1612
Fax: +27 22 714 3635

EAST LONDON (INDIAN OCEAN PORT)

18 Marine Terrace, Quigney
East London 5211
Tel: +27 43 722 4120
Fax: +27 43 722 2264

MOSSEL BAY (INDIAN OCEAN PORT)

Plaza Aquada, Room 109, Marsh Street
Mossel Bay 6500
Tel: +27 44 690 4201
Fax: +27 44 691 1206

PORT NOLLOTH (ATLANTIC OCEAN PORT)

Old Post Office Building, Kus Road
Port Nolloth 8280
Tel: +27 27 851 7695
Fax: +27 27 851 7699

PORT OF NGQURA (INDIAN OCEAN PORT)

TNPA Admin Building, Coega
Eastern Cape 6100
Tel: (Cell)+27 79 512 1017
Fax: +27 41 582 2130

MRCC (CAPE TOWN)

Didata Building 163 H. Verwoed
3rd Floor Tygerberg Park Plattekloof
Tel: +27 21 938 3310
Fax: +27 21 938 3319



The South African Maritime Safety Authority

The South African Maritime Safety Authority (SAMSA) is a government agency Accountable to the Minister of Transport. SAMSA was established on 1 April 1998 in terms of the South African Maritime Safety Authority Act 5 of 1998.

The Act sets out three clear objectives or mandates of the authority as;

- (a) to ensure safety of life and property at sea;
- (b) to prevent and combat pollution of the marine environment by ships; and
- (c) to promote the Republic's maritime interests.

SAMSA is governed by a Board made up of the CEO and six non-executive members, including the Chair and Deputy Chair, as appointed by the Minister of Transport.

The organisation's objective is to lead and champion South Africa's maritime interests as custodians and stewards of maritime policy, vigorous promoters of the maritime sector and giving full and complete effect to our obligations for the benefit of all stakeholders.

SAMSA'S VISION

The Authority championing South Africa's global maritime ambitions.

SAMSA'S MISSION

To promote South Africa's maritime interests and development and position the country as an international Maritime Centre while ensuring maritime safety, health and environmental protection.

In line with its objectives, as stated in Section 3 of the SAMSA Act, the organisation's primary areas of responsibility include:

Participating in the development and implementation of national and international maritime safety and marine environment protection standards;

Enforcing technical and operational standards for all shipping operations in South African waters and for South African ships anywhere, to promote responsible operations in terms of seaworthiness, safety and pollution prevention;

Enforcing training standards and competency of seafarers;

Managing the national capability to respond to marine pollution incidents and other maritime emergencies;

Operating the Maritime Rescue Co-ordination Centre to coordinate maritime assistance services and to detect, and coordinate the location and rescue of people in maritime distress situations throughout the internationally agreed South African Search and Rescue Region;

Overseeing the provision of maritime distress and safety communications services to discharge South Africa's responsibilities under the Global Maritime Distress and Safety System;

Administering South Africa's voluntary ship reporting system (SAFREP) for identifying and tracking ships at sea for safety purposes and to provide a ships' database for responding to marine emergencies;

Investigating maritime casualties; and

Delivering related services including:

Public awareness and education in marine safety and pollution prevention;

Administration of South Africa's ship registration system; and

Publication of, and access to, ship safety and environmental standards.

RESPONSIBILITIES

SAMSA delivers four main outputs consistent with its mandate and responsibilities:

Safety and environment protection standards for responsible maritime transport operations;

An infrastructure for monitoring and enforcing compliance with safety and environment protection standards;

The capability to respond to marine pollution incidents and other maritime emergencies; and

The capability to detect, locate and rescue people in maritime distress situations.



10

INDEX

Accommodation	13	Off Port Limits	34
Airports	14, 22, 34, 52,	Repair Quay	46, 47
58,	66, 76	Repair Quay 502	48
Banking	12	Robinson Drydock	40, 41
Basic services	13, 14	Ship repair facilities	33, 35
Car hire	14	Sturrock Drydock	38, 39
Commercial indicators	11, 13	Syncrolift	42, 43
Communications	13	Tug assistance	34
Crime and security	12	Weather	33
Customs	12		
Economy	11	Port of Durban	64-73
Electricity	13	Advising ETA	66
Eskom	13	Airport	66
Floating Cranes	35, 68	Approaches	66
Fresh water	13	Bunkers	66
Industrial Development Zones	11, 27, 29, 62,	Ballast requirements	66
63		Contacts	66
Labour and skills	15	Floating docks	70, 71
Labour costs	15	Floating cranes	68
Language	11	Off Port Limits	66
Legal systems	11	Pilotage	66
Mossgas	54	Prince Edward Graving dock	69
National Ports Act	10	Repair quays	72, 73
Operation Phakisa	9, 10	Ship repair facilities	68
PetroSA	54-55	Tug assistance	66
		Weather	65
Port of Cape Town	32-49	Port of East London	10
A-Berth: Oil and Gas Hub	44, 45		
Advising ETA	34	Port of Mossel Bay	50-55
Airport	34	Advising ETA	52
Anchorage	34	Airport	52
Ballast requirements	34	Approaches	52
Bunkers	34	Ballast requirements	52
Contacts	33	Bunkers	52
Landing wall	39	Contacts	51
Multi-Purpose Quay	48, 49		

Port of Mossel Bay (cont)		Weather	75
PetroSA Logistics Base	54, 55		
Ship repair facilities	52	Port of Saldanha Bay	20-31
Weather	51	Advising ETA	22
Port of Ngqura	56-63	Airport	22
Advising ETA	58	Approaches	22
Airports	58	Ballast requirements	22
Anchorages	58	Bunkering	22
Approaches	58	Contacts	21
Ballast requirements	58	Future Plans	30, 31
Bunkers	58	Offshore Fabrication Yard	25, 26
Coega IDZ	62, 63	Operation Phakisa	10
Contacts	57	Saldanha Bay IDZ	27, 29
Pilotage	58	Ship repair facilities	17, 24
Ship repair facilities	60	Tug assistance	22
Weather	57	Weather	21
Port of Richards Bay	74-79	Rail	14
Advising ETA	76	Roads and freeways	14
Airports	76	Ship repair sector	17, 18
Anchorages	76	South African Maritime Safety Authority	82
Approaches	76	Special Economic Zones	11
Ballast requirements	76	Taxation	12
Bunkers	76	Time	11
Contacts	75	TNPA	81
Port Limits	76	Trade Unions	15
Pilotage	76	Training	15
Richards Bay IDZ	78, 79	Transport	14
Ship repair facilities	77	Work permits	15
Tug assistance	76		

ACKNOWLEDGEMENTS:

We would like to acknowledge a number of key organisations, companies and individuals who have assisted in the compilation of the third edition of the Port Handbook. A vote of thanks must go to the Transnet National Ports Authority (TNPA) staff and key account managers at the various South African ports who made information and graphics available. Thank you too to those at the South African Maritime Safety Authority (SAMSA) and the various Industrial Development Zones who provided additional information. The compilation of this handbook would not have been possible without the generous feedback from many industry participants who commented and added value to the information herein.

PHOTO CREDITS: Various photos and drawings were supplied by companies including Coega Development Corporation, DCD Marine Cape Town, Dormac Marine & Engineering, Elgin Brown & Hamer, FerroMarine Africa, PetroSA, SA Shipyards, Smit Amandla Marine, Steve Hrabar, and TNPA.

We must also acknowledge the original input provided by Keith Mackie on the first edition of the Port Handbook, whose drawings and initial collation of material assisted in providing the framework for subsequent editions.



*national ports
authority*



9th Floor Convention Tower,
Heerengracht, Foreshore
Cape Town 8001
South Africa

T: 21 21 425 8840
F: 27 21 421 7928

info@saoga.org.za
www.saoga.org.za

30 Wellington Road
Johannesburg, 2001
South Africa

T: 27 11 351 9001
F: 27 11 351 9023

transnet911@transnet.net
www.transnetnationalportsauthority.net