Global Iron Ore Load Ports



INFORMATION HANDBOOK

Version (1) -2008



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WSS MINERALS TEAM - FEATURES

Wilhelmsen Ships Service has recognised the need for specialised commodity teams, focused on specific cargoes and trades.

Our Minerals Team concentrates on provision of ship agency for customer operations in the Coal, Iron Ore, Sugar, Fertilisers, Cement, Steel, Alumina and Forest Products and other Dry Bulk cargoes.

The Features of our Consolidated Dry Bulk Agency Service Include:

- Services across all Dry Bulk trades
- Efficient streamlined communications
- Comprehensive database of Dry Bulk terminal information and cost estimates
- Simplified funding and standardised reporting
- Detailed market intelligence on demand
- Coordination of cargo inspection services and surveys as required
- Documentation for shippers, receivers & vessel operators
- Customised services including export documentation, laycan calculations and transhipment





WSS MINERALS TEAM LOCATIONS



- Africa & Middle East
- China
- India
- Indonesia
- Netherlands
- North America

- Oceania
- Russia
- Singapore
- South America
- Thailand
- UK



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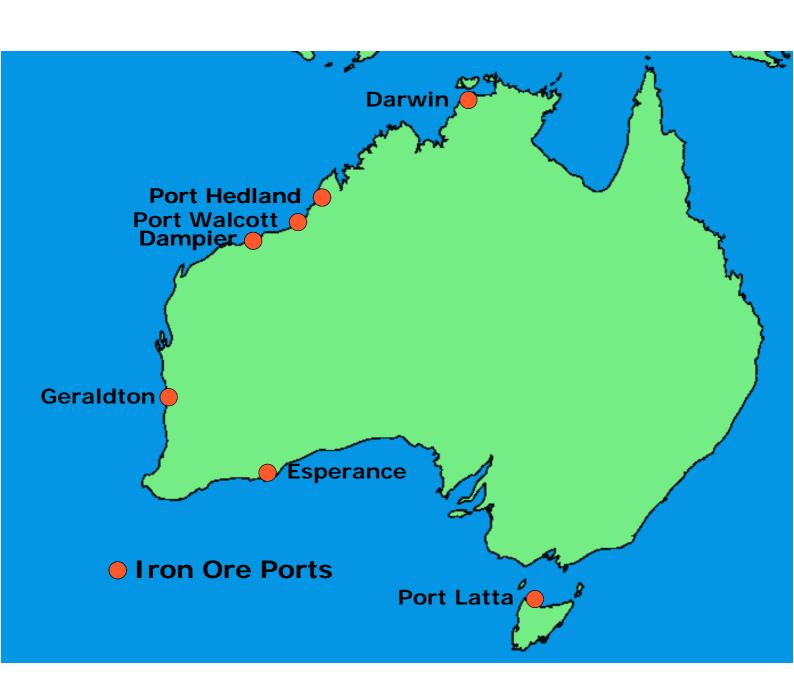
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AUSTRALIA - IRON ORE PORTS





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DAMPIER - PORT INFORMATION

PORT DETAILS

One of the major port facilities servicing West Australia's

Pilbara region, the port of Dampier hosts five berths at Parker

BRIEF PORT DESCRIPTION: Point and one berth at East Intercourse Island for the export of

iron ore. Iron ore facilities are owned and operated by Rio Tinto

through its Hamersley Iron and Pilbara Iron subsidiaries.

TERMINAL: Parker Point

NUMBER OF BERTHS: 5

PORT INFORMATION

POSITION: LAT 20° 39' S, LONG 116 ° 43' E

LOCATION: West Coast of Australia - 1400km NE of Perth

SHIPPER(S): Rio Tinto (Hamersley Iron, Pilbara Iron)

TIDE RANGE: 3.2M - 5.3M

MAX. SHIP DIMENSIONS

LOA: 269 M / 455 M / 330M

DRAFT: 14.4 M / 15.4 M / 15.1 M

AIR DRAFT (at Datum): 23 M / 26.3 M / 26.2 M

BERTH LENGTH: 267 M / 455 M / 330 M

DEPTH ALONSIDE: 17.2 M / 18.8 M / 18.1 M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: Two

LOAD RATE: 9,500 TPH / 7,500 TPH

TRAVEL: 180M / 300M **OUTREACH:** 23.8 M / 33M





DAMPIER - PORT INFORMATION

PORT DETAILS

One of the major port facilities servicing West Australia's

Pilbara region, the port of Dampier hosts five berths at Parker

BRIEF PORT DESCRIPTION: Point and one berth at East Intercourse Island for the export of

iron ore. Iron ore facilities are owned and operated by Rio Tinto

through its Hamersley Iron and Pilbara Iron subsidiaries.

TERMINAL: East Intercourse Island

NUMBER OF BERTHS: 1

PORT INFORMATION

POSITION: LAT 20° 39' S, LONG 116 ° 43' E

LOCATION: West Coast of Australia - 1400km NE of Perth

SHIPPER(S): Rio Tinto (Hamersley Iron, Pilbara Iron)

TIDE RANGE: 2.7M - 4.5M

MAX. SHIP DIMENSIONS

LOA: 340M DRAFT: 15.5M

DRAFT: 15.5M
AIR DRAFT (at Datum): 24M
BERTH LENGTH: 341M

DEPTH ALONSIDE: 19.5M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: One

LOAD RATE: 9,500 TPH / 7,500 TPH

TRAVEL: 230 M OUTREACH: 25 M





DARWIN - PORT INFORMATION

PORT DETAILS

Darwin is a port of growing significance for iron ore shipments

with export operations in this port recently commenced. The

port's East Arm berth facilitates iron ore loading for export from

mines located further inland.

TERMINAL: East Arm Wharf

NUMBER OF BERTHS: 1

BRIEF PORT DESCRIPTION:

PORT INFORMATION

POSITION: LAT: 12° 28' S, LONG: 130 ° 50' E

LOCATION: Capital City of Australia's Northern Territory (North Coast of

Australia).

SHIPPER(S): Territory Iron Ltd

TIDE RANGE: 5 M - 6.9 M

MAX. SHIP DIMENSIONS

LOA: N/A **DRAFT**: 12 M

AIR DRAFT (at Datum): 21.7 M

BERTH LENGTH: 600 M

DEPTH ALONSIDE: 13 M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: 1

LOAD RATE: 2,000 TPH

TRAVEL: 164 M

OUTREACH: 32 M





ESPERANCE - PORT INFORMATION

PORT DETAILS

Located on West Australia's southern coast, Esperance is a predominately bulk export port. Berth No. 3 at Esperance is

BRIEF PORT DESCRIPTION: used to load iron ore and iron ore storage is also available on

site.

TERMINAL: Berth 3

NUMBER OF BERTHS: 1

PORT INFORMATION

POSITION: LAT: 32° 52' S, LONG: 121 ° 54' E

LOCATION: South West coast Australia, 720km South East of Perth

SHIPPER(S): Portman Iron Ore Ltd

TIDE RANGE: 0.8 M - 1.2 M

MAX. SHIP DIMENSIONS

LOA: 290

DRAFT: 17.8 M

AIR DRAFT (at Datum): 21.7 M

BERTH LENGTH: 230 M

DEPTH ALONSIDE: 23 M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: 1

LOAD RATE: 4,000 TPH

TRAVEL: 201.3 M

OUTREACH: 31.7 M





GERALDTON - PORT INFORMATION

PORT DETAILS

Geraldton currently ships 4.7mt per annum of iron ore exports.

BRIEF PORT DESCRIPTION: These exports are currently shipped through berth no. 4 which

is an ideal loading facility for iron ore and other bulk

commodities.

TERMINAL: Berth 4

NUMBER OF BERTHS: 1

PORT INFORMATION

POSITION: LAT 28° 45' S, LONG 144 ° 45' E

LOCATION: West Coast of Australia - 424km North of Perth

SHIPPER(S): Murchison Metals Ltd, Midwest Corporation Ltd, Gindalbie

Metals Ltd, Precious Metals Australia Ltd

TIDE RANGE: 0.6 M - 1.1 M

MAX. SHIP DIMENSIONS

 LOA:
 225 M

 DRAFT:
 12.8 M

 AIR DRAFT (at Datum):
 15.09 M

 BERTH LENGTH:
 281 M

 DEPTH ALONSIDE:
 13.1 M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: One

LOAD RATE: 9,500 TPH / 7,500 TPH

TRAVEL: 180M / 300M **OUTREACH:** 23.8 M / 33M





PORT HEDLAND - PORT INFORMATION

PORT DETAILS

Port Hedland is a large volume, bulk mineral export port located

on Australia's north west coast in the resource rich Pilbara

region.

BRIEF PORT DESCRIPTION: Iron Ore is overwhelmingly the main cargo handled at the port,

with shipper BHP Billiton providing four bulk berths for Iron Ore

exports, accommodating large bulk ships.

TERMINAL: Nelson Point - A & B

NUMBER OF BERTHS: 2

PORT INFORMATION

POSITION: Lat 21°10′ S, Long 118°33′ E.

LOCATION: West Coast of Australia, 1700km north of Perth

SHIPPER(S): BHPB

TIDE RANGE: 0.57m - 2.59m

MAX. SHIP DIMENSIONS

LOA: 340M

DRAFT: 19M

AIR DRAFT (at Datum): 24.5M - 27.5M

MAX BEAM: 55M
BERTH LENGTH: 340M
DEPTH ALONSIDE: 19M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: 3

LOAD RATE: 5,000 TPH (Average)

TRAVEL: Yes







PORT HEDLAND - PORT INFORMATION

PORT DETAILS

Port Hedland is a large volume, bulk mineral export port located

on Australia's north west coast in the resource rich Pilbara

region.

BRIEF PORT DESCRIPTION: Iron Ore is overwhelmingly the main cargo handled at the port,

with shipper BHP Billiton providing four bulk berths for Iron Ore

exports, accommodating large bulk ships.

TERMINAL: Finucane Island Terminals

NUMBER OF BERTHS: 2

PORT INFORMATION

POSITION: Lat 20°19' S, Long 118°34' E.

LOCATION: West Coast of Australia, 1700km north of Perth

SHIPPER(S): BHPB

TIDE RANGE: 1.4m - 3.4m

MAX. SHIP DIMENSIONS

LOA: 325M - 340M

DRAFT: 19.5M

AIR DRAFT (at Datum): N/A

MAX BEAM: 55M / 56M **BERTH LENGTH:** 403M / 430M

DEPTH ALONSIDE: 19M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: 2

LOAD RATE: 6,000 TPH (Average)

TRAVEL: 278M OUTREACH: 27.5M





PORT HEDLAND - PORT INOFRMATION

PORT DETAILS

Port Hedland is a large volume, bulk mineral export port located

on Australia's north west coast in the resource rich Pilbara

region.

BRIEF PORT DESCRIPTION: Iron Ore is overwhelmingly the main cargo handled at the port,

with shipper BHP Billiton providing four bulk berths for Iron Ore exports, accommodating large bulk ships. Fortescue Metals Group also has a facility for exporting iron ore at this port.

TERMINAL: Anderson Point Terminal

NUMBER OF BERTHS: 2

PORT INFORMATION

POSITION: LAT 20°19' S, LONG 118°34' E.

LOCATION: West Coast of Australia, 1700km north of Perth

SHIPPER(S): FMG

TIDE RANGE: 1.4m - 3.4m

MAX. SHIP DIMENSIONS

LOA: On Application

DRAFT: 18.7 M
AIR DRAFT (at Datum): 26.8 M

AIR DRAFT (at Datum): 26.8 M MAX BEAM: 60 M

BERTH LENGTH: 756 M (Both Berths)

DEPTH ALONSIDE: 19.7 M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: 2

LOAD RATE: 6,500 TPH (Average)

TRAVEL: 175 M OUTREACH: 32.3 M







PORT LATTA - PORT INFORMATION

PORT DETAILS

Tasmania's Port Latta is an ore jetty located over 1.8km from

BRIEF PORT DESCRIPTION: the shore. This port is in a remote part of the Australian Island

of Tasmania and its sole function is the export of palletised iron

ore.

TERMINAL: Port Latta Iron Ore Jetty

NUMBER OF BERTHS: One

PORT INFORMATION

POSITION: LAT: 40° 50′ S, LONG: 145° 23′ E

LOCATION: Located 5 nuatical miles ESE of Stanley in North West

Tasmania

SHIPPER(S): BHPB

TIDE RANGE: 0.6 M - 2.5 M

MAX. SHIP DIMENSIONS

LOA: 245 M

DRAFT: 15.25 M

AIR DRAFT (at Datum): N/A

DEPTH ALONSIDE: 16.75 M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: Two (only one active at a time)

LOAD RATE: 3,000 TPH

TRAVEL: Radial
OUTREACH: 24.82 M







PORT WALCOTT - PORT INFORMATION

PORT DETAILS

Port Walcott hosts one of Australia's longest, deepest and

BRIEF PORT DESCRIPTION: highest wharves, which is used to ship iron ore. Rio Tinto is the

local shipper and the port facilities are operated by their

subsidiary Pilbara iron.

TERMINAL: Port Walcott - Berth 1 & 2

NUMBER OF BERTHS: 2

PORT INFORMATION

POSITION: LAT 20° 39' S, Longitude 116 ° 43' E

LOCATION: West Coast of Australia - 1400km NE of Perth

SHIPPER(S): Rio Tinto (Hamersley Iron, Pilbara Iron)

TIDE RANGE: 1.4M - 3.4M

MAX. SHIP DIMENSIONS

LOA: N/a

DRAFT: 15.6 M

AIR DRAFT (at Datum): 20 M

BERTH LENGTH: 400 M +

DEPTH ALONSIDE: 19.1 M / 19.4 M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: Two (Slewing Conveyor Type)

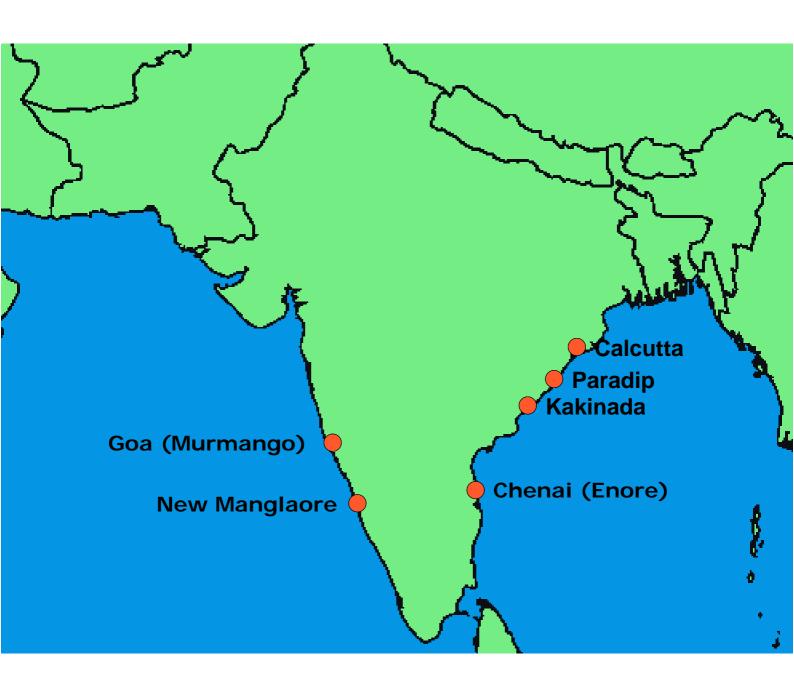
LOAD RATE: 8000 TPH

TRAVEL: 312 M / 243 M **OUTREACH:** 30.5 M / 27.3 M





INDIA IRON ORE PORTS





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- PORT INOFRMATION

PORT DETAILS

The large Indian city of Calcutta in India is home of the Haldia

BRIEF PORT DESCRIPTION: dock complex where a variety of bulk cargoes including iron ore

are handled.

TERMINAL: Berth #: 3

NUMBER OF BERTHS: One

PORT INFORMATION

POSITION: LAT: 22° 32' N, LONG: 88° 18' E

LOCATION: North East India, near the Bangladesh border

SHIPPER(S): Various

TIDE RANGE: 0.5 M - 3 M

MAX. SHIP DIMENSIONS

LOA: 240 M

DRAFT: 15 M

AIR DRAFT (at Datum): 15 M

BERTH LENGTH: 194 M

DEPTH ALONSIDE: 16 M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: Two

LOAD RATE: 1500 TPH





CHENAI - PORT INOFRMATION

PORT DETAILS

Chennai on India's East coast is the country's deepest draft

BRIEF PORT DESCRIPTION: port where Iron Ore is loaded, making it an attractive

destination for large capesize vessels loading this cargo from

India.

TERMINAL: Iron Ore Berth

NUMBER OF BERTHS: One

PORT INFORMATION

POSITION: LAT: 13° 06' N, LONG: 80° 18' E

LOCATION: South East India

SHIPPER(S): Multiple

TIDE RANGE: 0.5M - 1.5 M

MAX. SHIP DIMENSIONS

LOA: 274 M

DRAFT: 16.7 M

AIR DRAFT (at Datum): 16 M

BERTH LENGTH: 290 M

DEPTH ALONSIDE: 17.2 M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: One

LOAD RATE: 25,00 TPD

TRAVEL: Fixed





CHENAI (ENNORE) - PORT INOFRMATION

PORT DETAILS

Ennore is situated on the coromandal coast about 24km north

of Chennai Port along the coast line, in the State of Tamil Nadu,

India, . It is the 12th Major Port in India and the first

Corporatised Major Port in India. Ennore Port was originally **BRIEF PORT DESCRIPTION:**

conceived as a satellite port to the Chennai Port. Excellent Road Connectivity to NH4, NH 5 & NH 45 - linked to Chennai -

Kolkata, BG main connectivty to Chennai Airport. The first

Corporatised Port in the Country

TERMINAL: Inner Basin

NUMBER OF BERTHS: One

PORT INFORMATION

LAT: 13° 15' N, LONG: 80° 20' E POSITION:

LOCATION: Near Chennai Port

SHIPPER(S): Various

TIDE RANGE: 1 M - 1.2 M

MAX. SHIP DIMENSIONS

LOA: 280 M

DRAFT: 13.5 M

AIR DRAFT (at Datum): N/A **BERTH LENGTH:** N/A

DEPTH ALONSIDE: 15 M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: **Barge Loading**

8.000 TPD LOAD RATE:







GOA (MURMUGAO) - PORT INOFRMATION

PORT DETAILS

The port of Marmugao located near Goa in India is the nation's

BRIEF PORT DESCRIPTION: premier iron ore export port. The port has well established

facilities and a wide range of services are available.

TERMINAL: Berth No. 9

NUMBER OF BERTHS: One

PORT INFORMATION

POSITION: LAT: 15° 24' N, LONG: 73° 48' E

LOCATION: Central West coast of India

SHIPPER(S): Multiple

TIDE RANGE: 1 M - 2.3 M

MAX. SHIP DIMENSIONS

LOA: 335 M

DRAFT: 13 M

AIR DRAFT (at Datum): 19.5 M

BERTH LENGTH: 335 M

DEPTH ALONSIDE: 13.7 M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: Two

LOAD RATE: 4,000 TPH

TRAVEL: Yes

OUTREACH: 21.5 M





GOA (MV ORISSA) - PORT INOFRMATION

PORT DETAILS

The port of Marmugao located near Goa in India is the nation's

premier iron ore export port. The port has well established

facilities and a wide range of services are available. MV Orissa

is an offshore transhipment facility.

TERMINAL: MV Orissa

NUMBER OF BERTHS: One

BRIEF PORT DESCRIPTION:

PORT INFORMATION

POSITION: LAT: 15° 24' N, LONG: 73° 48' E

LOCATION: Central West coast of India

SHIPPER(S): Multiple

TIDE RANGE: 1 M - 2.3 M

MAX. SHIP DIMENSIONS

LOA: 335 M

DRAFT: 13 M

AIR DRAFT (at Datum): N/A

BERTH LENGTH: 335 M

DEPTH ALONSIDE: 18M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: Two

LOAD RATE: 25,000 TPD

TRAVEL: Fixed





KAKINADA -PORT INOFRMATION

PORT DETAILS

Kakinada is a rapidly developing port city due to its 'Special

Economic Zone' Status. The port hosts a deep-water iron ore

BRIEF PORT DESCRIPTION: loading facilty. The presence of a small island 'Hope Island'

provides shelter for vessels moored here, making this port a

natural harbour.

TERMINAL: Kakinada Deep Water Port

NUMBER OF BERTHS: 2

PORT INFORMATION

POSITION: LAT: 17' 16" N. LON: 82' 48" E.

LOCATION: Kakinada Deep Water Port is located on East Coast of India. Its

in East Godavari district of Andhra Pradesh.

SHIPPER(S): Various

TIDE RANGE: 0.5 M

MAX. SHIP DIMENSIONS

LOA: 190 M

DRAFT: 11 M

AIR DRAFT (at Datum): N/A

MAX BEAM: 32.4 M

BERTH LENGTH: 210 M

DEPTH ALONSIDE: 10.5 M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS:

LOAD RATE: 20000 Tons Per Day.

TRAVEL: Yes - Middle Berth to South Berth

OUTREACH: 30 M





NEW MANGALORE - PORT INFORMATION

PORT DETAILS

Abutting the Arabian sea, Nestled between the Netravathi &

Gurpur rivers lays the Quaint town of Mangalore. Railway links

BRIEF PORT DESCRIPTION: spread into Maharastra, Kerala, Tamilnadu besides the

hinterland. 3 highways connected to the Port (i.e.) NH 17, NH

48 & NH 13.

TERMINAL: Berth #: 6 & 7

NUMBER OF BERTHS: Two

PORT INFORMATION

POSITION: LAT: 12° 55' N, LONG: 74° 48' E

LOCATION: 170 N. Miles south of Murmagoa & 191 N. Miles north of Cochin

Port

SHIPPER(S): Various

TIDE RANGE: 1 M - 1.5 M

MAX. SHIP DIMENSIONS

LOA: 190 M

DRAFT: 9.5 M

AIR DRAFT (at Datum): N/A

BERTH LENGTH: 198 M

DEPTH ALONSIDE: 10 M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: By Ship's Gear

LOAD RATE: 1500 Tons Per Shift





NEW MANGALORE - PORT INFORMATION

PORT DETAILS

Abutting the Arabian sea, Nestled between the Netravathi &

BRIEF PORT DESCRIPTION: Gurpur rivers is the town of Mangalore. Railway links spread into Maharastra, Kerala, Tamilnadu besides the hinterland. 3

highways connected to the Port (i.e.) NH 17, NH 48 & NH 13.

TERMINAL: B # 14

NUMBER OF BERTHS: 2

PORT INFORMATION

POSITION: LAT 12* 55' LONG 74* 48'

LOCATION: 170 N. Miles south of Murmagoa & 191 N. Miles north of Cochin

Port

SHIPPER(S): Various

TIDE RANGE: 1 to 1.5 Mtrs

MAX. SHIP DIMENSIONS

LOA: 225 Mtrs

DRAFT: 12.50 Mtrs

AIR DRAFT (at Datum): No Restrictions

MAX BEAM: No Restrictions

BERTH LENGTH: 350 Mtrs

DEPTH ALONSIDE: 13.50 Mtrs with 1 mtr tide

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: By Mobile cranes (Capacity 75 Mts)

LOAD RATE: 2,000 to 2,500 Mts per shift/per gang





PARADIP- PORT INOFRMATION

PORT DETAILS

Paradip has a good proximity to a range of natural resources,

BRIEF PORT DESCRIPTION: leading to its development as a bulk export centre. This port's

natural features mean that is safe and sheltered all year round.

TERMINAL: Iron Ore Berth

NUMBER OF BERTHS: One

PORT INFORMATION

POSITION: LAT: 20° 16' N, LONG: 86° 41' E

LOCATION: North East India

SHIPPER(S): Multiple

TIDE RANGE: 1.5 M - 2.9 M

MAX. SHIP DIMENSIONS

LOA: 260 M

DRAFT: 13 M

AIR DRAFT (at Datum): 14.3 M

BERTH LENGTH: 300 M

DEPTH ALONSIDE: 14 M

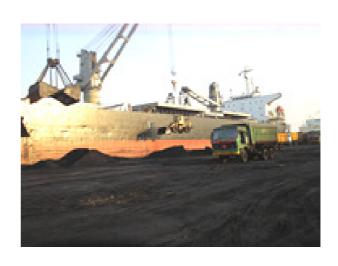
LOADING FACILITIES:

NUMBER OF SHIPLOADERS: One

LOAD RATE: 1,000 TPH

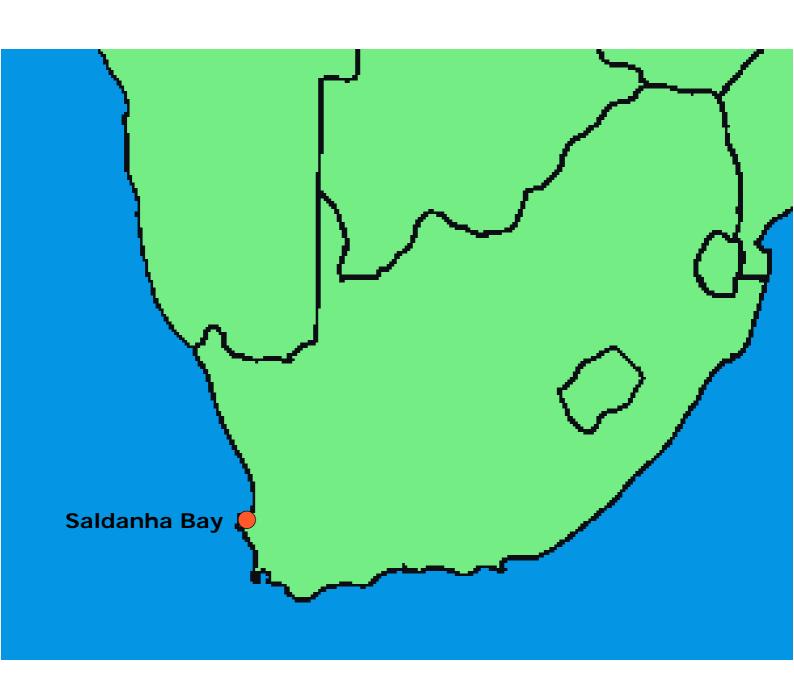
TRAVEL: Fixed OUTREACH: 14 M







SOUTH AFRICA - IRON ORE PORTS





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SALDANHA BAY - PORT INFORMATION

PORT DETAILS

The port was originally constructed during the early 1970's to

facilitate the export of iron ore, bulk crude oil whereafter

BRIEF PORT DESCRIPTION:

breakbulk terminals were subsequently added to the facilities in the port.Port facilities consist of a 990 m long jetty with two iron ore berths and one crude oil berth joined to the north shore of

the harbour by a 3100 m causeway.

TERMINAL: Bulk Terminal - Iron Ore

NUMBER OF BERTHS: 2 (OBS - Ore Berth Saldanha / OBL - Ore Berth Langebaan)

PORT INFORMATION

POSITION: Latitude 33 ° 02' S, Longitude 17 ° 58' E Salinity = 1 025

LOCATION: South Africa - approx. 60 nautical miles northwest of Cape

Town

SHIPPER(S): Kumba Iron Ore

TIDE RANGE: 1.5 m

MAX. SHIP DIMENSIONS

LOA: N/a

DRAFT: 21.25 m

AIR DRAFT (at Datum): 20 m MAX BEAM: 58 m

BERTH LENGTH: 630 m

DEPTH ALONSIDE: 23m below CD

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: Two (currently only utilizing 1 ship loader at a time)

LOAD RATE: 5'000 mt - 8'000 mt per hour

TRAVEL: Entire Length Of Berth

OUTREACH: OBS 38.8 Max / OBL 42.8 Max







SOUTH AMERICA - IRON ORE PORTS





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FSTS BOCA GRANDE - PORT INFORMATION

PORT DETAILS

In operation since 1989, the FSTS (Floating Storage and

Transfer Station) Boca Grande is the world's largest self

BRIEF PORT DESCRIPTION: unloading, self loading transfer station. This facility is a 227,000

DWT floating terminal which is supplied by two 84,000 DWT

shuttle vessels.

TERMINAL: FSTS Boca Grande

NUMBER OF BERTHS: One

PORT INFORMATION

POSITION: LAT: 09° 56′ S, LONG: 61 ° 34′ E

LOCATION: Located in Venezuelan territorial waters, in serpent mouth

between Trinidad and the delta of the Orinoco River.

SHIPPER(S): Bulkguasare Ltd.

TIDE RANGE: 0.5M

MAX. SHIP DIMENSIONS

LOA: 279 M

DRAFT: Not Limited

AIR DRAFT (at Datum): 17 M
BERTH LENGTH: 320 M
DEPTH ALONSIDE: 30.4 M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: One

LOAD RATE: 4,500 TPH

TRAVEL: Fixed OUTREACH: 37 M







GUAIBA ISLAND - PORT INFORMATION

PORT DETAILS

Guaiba Island (Mangaratiba) hosts a terminal suitable for

BRIEF PORT DESCRIPTION: loading iron ore which is capable of accepting vessels including

large capesize ships due to its unrestricted LOA and deep draft.

TERMINAL: North & South Pier

NUMBER OF BERTHS: 2

PORT INFORMATION

POSITION: LAT: 23° 00' S, LONG: 44 ° 02' E

LOCATION: Sepetiba Bay, located South of the port of Rio de Janeiro

SHIPPER(S): Mineracoes Brasileiras Reunidas

TIDE RANGE: 1 M - 1.6 M

MAX. SHIP DIMENSIONS

LOA: N/A

DRAFT: 20.4 M

AIR DRAFT (at Datum): 19 M

BERTH LENGTH: 380 M / 300 M

DEPTH ALONSIDE: 22.5 M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: Two

LOAD RATE: 5,000 MTPH

TRAVEL: 330 M / 270 M

OUTREACH: 31 M





PONTA DA MADEIRA - PORT INFORMATION

PORT DETAILS

Ponta da Madeira is the home of one of the world's deepest

BRIEF PORT DESCRIPTION: draft terminals. The world's largest bulk carriers regularly call at

this port, often bound for Rotterdam, which is able to

accommodate vessels of an equally deep draft.

TERMINAL: Pier 1 & 2

NUMBER OF BERTHS: Two

PORT INFORMATION

POSITION: LAT: 22° 34′ S, LONG: 44 ° 23′ E

LOCATION: Located about 8 km south from the city of São Luis at São

Marcos Bay

SHIPPER(S): Cia. Vale do Rio Doce

TIDE RANGE: 5.4 M - 7 M

MAX. SHIP DIMENSIONS

LOA: 345 M / 280 M

DRAFT: 25 M

AIR DRAFT (at Datum): 22.4 M / 18 M

BERTH LENGTH: 685 M **DEPTH ALONSIDE:** 25 M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: Two

LOAD RATE: 16,000 TPH / 8,000 TPH

TRAVEL: 600 M

OUTREACH: 46.3 M / 31.5 M







PONTA UBU - PORT INFORMATION

PORT DETAILS

The iron ore loading terminal at Ponta Ubu is one of Brazil's

BRIEF PORT DESCRIPTION: largest. The port is the export facility for Samarco's iron ore

mine and pellet production plant. Ponta Ubu's advanced

shiploaders enable very efficient loading operations.

TERMINAL: Eastside & Westside Pier

NUMBER OF BERTHS: 2

PORT INFORMATION

POSITION: LAT: 22° 56' S, LONG: 43 ° 50' E

LOCATION: SE Brazil, near port of Vitoria

SHIPPER(S): Samarco Mineracao

TIDE RANGE: 1 M - 1.6 M

MAX. SHIP DIMENSIONS

LOA: 308 M / 240 M

DRAFT: 17 M / 13 M **AIR DRAFT (at Datum):** 26 M / 13.5 M

BERTH LENGTH: 385 M / 350 M

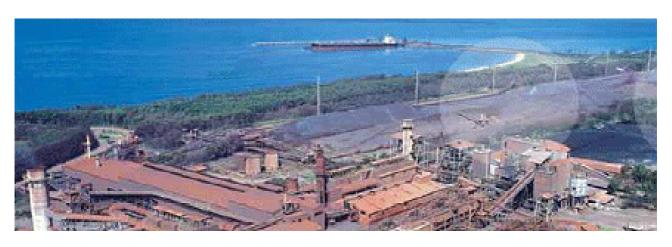
DEPTH ALONSIDE: 20 M / 16 M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: Two

LOAD RATE: 10,000 MTPH

TRAVEL: 314 M OUTREACH: 28.5 M





PUERTO ORDAZ - PORT INFORMATION

PORT DETAILS

Puerto Ordaz is the hub of a thriving local iron, steel and

BRIEF PORT DESCRIPTION: aluminium industry. The port facility in this city houses two large

iron ore export terminals.

TERMINAL: Ferrominera Del Orinoco

NUMBER OF BERTHS: One

PORT INFORMATION

POSITION: LAT: 08° 21' S, LONG: 62 ° 43' E

LOCATION: Near the mouth of the Orinoco River in Venezuela

SHIPPER(S): Ferrominera Del Orinoco

TIDE RANGE: 1M

MAX. SHIP DIMENSIONS

LOA: 294.5 M

DRAFT: 11.2 M

AIR DRAFT (at Datum): 17 M

BERTH LENGTH: 585 M

DEPTH ALONSIDE: 10 M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: One

LOAD RATE: 4,000 TPH

TRAVEL: Fixed
OUTREACH: 19 M





PUERTO ORDAZ - PORT INFORMATION

PORT DETAILS

Puerto Ordaz is the hub of a thriving local iron, steel and

BRIEF PORT DESCRIPTION: aluminium industry. The port facility in this city houses two large

iron ore export terminals.

TERMINAL: Palua

NUMBER OF BERTHS: One

PORT INFORMATION

POSITION: LAT: 08° 21' S, LONG: 62 ° 41' E

LOCATION: Near the mouth of the Orinoco River in Venezuela

SHIPPER(S): TFV

TIDE RANGE: 1M

MAX. SHIP DIMENSIONS

LOA: 280 M

DRAFT: 11.2 M

AIR DRAFT (at Datum): 17 M

BERTH LENGTH: 585 M

DEPTH ALONSIDE: 10 M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: One

LOAD RATE: 4,500 TPH

TRAVEL: Fixed OUTREACH: 30 M





SEPETIBA - PORT INFORMATION

PORT DETAILS

Sepetiba is located near the large Brazilian City of Rio De

BRIEF PORT DESCRIPTION: Janeiro. The area is home to a major port and industrial

hinterland. This port is being constantly upgraded and

developed due to its excellent natural characteristics.

TERMINAL: Pier 401

NUMBER OF BERTHS: Two

PORT INFORMATION

POSITION: LAT: 22° 56' S, LONG: 43 ° 50' E

LOCATION: Sepetiba Bay, located South of the port of Rio de Janeiro

SHIPPER(S): Ferteco Mineracao

TIDE RANGE: 1 M - 1.6 M

MAX. SHIP DIMENSIONS

LOA: N/A

DRAFT: 17.3 m

AIR DRAFT (at Datum): 17 M

BERTH LENGTH: 400 M

DEPTH ALONSIDE: 19 M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: Two

LOAD RATE: 5,000 MTPH

TRAVEL: 360 M

OUTREACH: 32.5 M





TUBARO PORT INFORMATION

PORT DETAILS

Tubarao is a rapidly developing iron ore port, which has been

exporting iron ore to the world for over forty years. Recent **BRIEF PORT DESCRIPTION:**

global demand for iron ore has led to significant ongoing

investment in this facility.

TERMINAL: Pier 1 (North & South)

NUMBER OF BERTHS:

PORT INFORMATION

LAT: 22° 56' S, LONG: 43 ° 50' E **POSITION:**

LOCATION: SE Brazil, within port of Vitoria limits.

SHIPPER(S): CVRD (Vale)

TIDE RANGE: 1 M - 1.6 M

MAX. SHIP DIMENSIONS

285 M / 320 M LOA:

DRAFT: 17

AIR DRAFT (at Datum): 16.5 M **BERTH LENGTH:** 430 M 20 M

DEPTH ALONSIDE:

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: Two (May Be Used for Double Loading)

LOAD RATE: 7,000 TPH TRAVEL: 314 M

OUTREACH: 23.7 M







TUBARO - PORT INFORMATION

PORT DETAILS

Tubarao is a rapidly developing iron ore port, which has been

BRIEF PORT DESCRIPTION: exporting iron ore to the world for over forty years. Recent

global demand for iron ore has led to significant ongoing

investment in this facility.

TERMINAL: Pier 2

NUMBER OF BERTHS: 2

PORT INFORMATION

POSITION: LAT: 22° 56' S, LONG: 43 ° 50' E

LOCATION: SE Brazil, within port of Vitoria limits.

SHIPPER(S): CVRD (Vale)

TIDE RANGE: 1 M - 1.6 M

MAX. SHIP DIMENSIONS

LOA: 350 M

DRAFT: 20 M

AIR DRAFT (at Datum): 26 M

BERTH LENGTH: 430 M

DEPTH ALONSIDE: 24 M

LOADING FACILITIES:

NUMBER OF SHIPLOADERS: Two

LOAD RATE: 16,000 TPH

TRAVEL: 314 M

OUTREACH: 28.5 M



