The Damen Modular Barge (DMB) is the fundamental building block for your modular pontoon or vessel. The container-sized floating units, coupled by the class approved Damen Link, are transportable to remote areas and can be used at lakes, inland waterways and coastal waters. Consequently, many applications are possible.

- Raked fore-and-aft ship modules
- Wheelhouses
- Accommodation units
- Holding tanks
- Ramps
- Crane
- Winches
- Spud casings
- Moon pool
- Fendering
- Bollards
- Bulwarks
- Timber work
- Railing
- etc.

If a vessel is required at a land locked water area the Damen Modular Barge system gives the solution. The modular pieces can be brought to any place in the world and can be assembled to a professional marine vessel with the standard Damen quality. All pieces can be transported by truck, boat, plane and train as container sized modules. The DMB range consists of a series of twenty and forty foot container size modules and a number of options...

Please contact us at modularconstructions@damen.com to discuss the solutions that suit you best.

THE FUNDAMENTAL BUILDING BLOCK

Damen Modular Barge System

- Modular Multi Cat 1205
- Modular Multi Cat 1805
- Modular Pusher 1908
- Modular Jack Up 2420
- Modular Pontoon 1212

The Damen Link is a specially designed unique coupling system to join each loose delivered Damen Modular Barge together. Each Damen Link consists of two hooks, a connection rod, a washer, a nut and a securing plate.
FOR YOUR MODULAR VESSEL OR PLATFORM

- 100% fixed coupling (no clearance)
- Modules are according to the ISO container dimensions (certified as normal container, handling and stackable), transport costs are relatively low
- All module sides are flush
- High deck capacity
- Epoxy paint system at outside and inside (no sharp edges)
- Simple mounting system from the outside (no divers, nobody inside the modules), no heavy weights
- Each Damen Modular Barge is 100% water tight
- Damen Link system is adjustable and class approved
- Coupling and dismantling can be done in water on site
- The DMB can be CSC approved

THE DAMEN MODULAR BARGES

Damen offers a wide range of floating drydocks. Internal length and beam are adjustable. Please contact us at drydocks@damen.com to discuss the solutions that suit you best.
**GENERAL**

<table>
<thead>
<tr>
<th>Basic functions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yard number</td>
<td>523025</td>
</tr>
<tr>
<td>Description</td>
<td>The Damen Modular Ferry is a roll on roll off (RoRo) ferry for inland water service series, built in steel to standard design. The Vessel is specially designed to safely transport passengers and vehicles. The entire hull of the Vessel consists of container sized units. These container sized units are called Damen Modular Barges and can be coupled together in the water with a specially designed coupling system, called the Damen Link. Because of this modular system, the entire Vessel can be transported by ship, truck or train to her final place of destination and assembled locally.</td>
</tr>
</tbody>
</table>

**DIMENSIONS**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Length o.a.</td>
<td>30.00 m</td>
</tr>
<tr>
<td>Length pontoon</td>
<td>20.00 m</td>
</tr>
<tr>
<td>Beam o.a.</td>
<td>9.75 m</td>
</tr>
<tr>
<td>Depth at sides</td>
<td>1.30 m</td>
</tr>
<tr>
<td>Draught (empty)</td>
<td>0.72 m</td>
</tr>
</tbody>
</table>

**CAPACITIES**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel</td>
<td>2 x 200 l</td>
</tr>
<tr>
<td>Cargo capacity</td>
<td>50 t</td>
</tr>
<tr>
<td>Cardeck</td>
<td>40 lane meters (2 lanes)</td>
</tr>
<tr>
<td>Passengers</td>
<td>100 pax</td>
</tr>
</tbody>
</table>

**PERFORMANCES (approx.)**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed</td>
<td>9 kn</td>
</tr>
</tbody>
</table>

**PROPULSION AND STEERING SYSTEM**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Main engine</td>
<td>2x diesel driven deck mountable propulsion units.</td>
</tr>
<tr>
<td>Total power</td>
<td>295 bkW (400 bhp)</td>
</tr>
</tbody>
</table>

**PRIMARY SHIP SYSTEMS**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bilge / deckwash / fill pump</td>
<td>1x</td>
</tr>
</tbody>
</table>

**ELECTRICAL SYSTEM**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Network</td>
<td>24 V</td>
</tr>
</tbody>
</table>

**DECK LAY-OUT**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchor</td>
<td>2x</td>
</tr>
<tr>
<td>Bollard (double)</td>
<td>4x</td>
</tr>
<tr>
<td>Ramp (l x w)</td>
<td>5.0 x 4.8 m</td>
</tr>
</tbody>
</table>

**LIFE SAVING EQUIPMENT**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Life buoy</td>
<td>5x</td>
</tr>
<tr>
<td>Life jacket</td>
<td>110x</td>
</tr>
<tr>
<td>Floating apparatus</td>
<td>(12 pax)</td>
</tr>
<tr>
<td>Fire extinguisher</td>
<td>5x</td>
</tr>
<tr>
<td>First-aid kit</td>
<td>1x</td>
</tr>
</tbody>
</table>

**SUPERSTRUCTURE**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation</td>
<td>Timber lined seats for 50 passengers with sun awning on main deck.</td>
</tr>
<tr>
<td>Technical space</td>
<td></td>
</tr>
<tr>
<td>Storage locker</td>
<td></td>
</tr>
<tr>
<td>Wheelhouse</td>
<td>The efficient layout offers an unobstructed view in all directions at bridge deck.</td>
</tr>
</tbody>
</table>

**NAUTICAL AND COMMUNICATION EQUIPMENT**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Navigation lights</td>
<td>All necessary navigations lights are installed.</td>
</tr>
<tr>
<td>Search light</td>
<td>1x</td>
</tr>
<tr>
<td>Horn</td>
<td>1x</td>
</tr>
<tr>
<td>GPS (handheld)</td>
<td>2x</td>
</tr>
<tr>
<td>Echosounder</td>
<td>2x</td>
</tr>
<tr>
<td>Public address system</td>
<td>1x</td>
</tr>
<tr>
<td>VHF</td>
<td>1x</td>
</tr>
<tr>
<td>VHF handheld</td>
<td>3x</td>
</tr>
</tbody>
</table>
The Damen Modular Ferry is a roll on roll off (RoRo) ferry for inland water service series, built in steel to standard design. The Vessel is specially designed to safely transport passengers and vehicles.

The entire hull of the Vessel consists of container sized units. These container sized units are called Damen Modular Barges and can be coupled together in the water with a specially designed coupling system, called the Damen Link. Because of this modular system, the entire Vessel can be transported by ship, truck or train to her final place of destination and assembled locally.

### DIMENSIONS
- Length o.a. 32.00 m
- Length pontoon 24.00 m
- Beam o.a. 12.50 m
- Depth at sides 1.80 m
- Draught (empty) 0.68 m

### CAPACITIES
- Fuel 4x 150 l
- Cargo capacity 90 t
- Cardeck 48 lane meters (2 lanes)
- Passengers 210 pax (180 adults and 30 children)
- Max. deck load 6.80 t/m²

### PERFORMANCES (approx.)
- Speed 9 kn

### PROPULSION AND STEERING SYSTEM
- Main engine 4x diesel driven deck mountable propulsion units.
- Total power 357 kW (480 bhp) at 2100 rpm

### PRIMARY SHIP SYSTEMS
- Bilge / deckwash / fift pump 2x

### ELECTRICAL SYSTEM
- Network 12 V

### DECK LAY-OUT
- Anchor 180 kg Pool (High Holding Power)
- Bollard (single) 4x
- Ramp (l x w) 3.75 x 5.0 m

### LIFE SAVING EQUIPMENT
- Life buoy 6x
- Life jacket 210x (180 adult and 30 children)
- Floating apparatus (5 pax) 4x
- Fire extinguisher 8x
- First-aid kit 2x
- First aid lifting stretcher 2x

### SUPERSTRUCTURE
- Accommodation Timber lined seats for 30 passengers with sun awning on main deck
- Storage locker 1x

### NAUTICAL AND COMMUNICATION EQUIPMENT
- Horn 4x
- Radar system 1x
- GPS 2x
- Magnetic compass 1x
- Echo sounder 2x
- Binoculars 2x
 DAMEN MODULAR FERRY 2412
"YN 523009-10"
The Damen Modular Ferry is a roll on roll off (RoRo) ferry for inland water service series, built in steel to standard design. The Vessel is specifically designed to safely transport passengers and vehicles.

The entire hull of the Vessel consists of container sized units. These container sized units are called Damen Modular Barges and can be coupled together in the water with a specially designed coupling system, called the Damen Link. Because of this modular system, the entire Vessel can be transported by ship, truck or train to her final place of destination and assembled locally.

**DIMENSIONS**
- Length o.a.: 42.40 m
- Length pontoon: 30.40 m
- Beam o.a.: 17.30 m
- Beam pontoon: 12.20 m
- Depth at sides: 1.80 m
- Draught at payload 60 ton: 0.90 m

**CAPACITIES**
- Fuel: 20.8 m³
- Sewage: 10.0 m³
- Outside water: 2.5 m³
- Potable water: 1.0 m³
- Cardock: 80 lane meters (3 lanes)
- Passenger seats: 200

**PERFORMANCES (approx.)**
- Speed: 8.9 kn

**ELECTRICAL SYSTEM**
- Network: 24/230/400 V
- Main generator set: 1x 17 kVA

**HYDRAULIC SYSTEM**
- Electrical driven hydraulic power pack: 1x

**DECK LAY-OUT**
- Anchor: 2x
- Bollard (double): 4x
- Ramps (1 x w): 6.0 x 4.0 m

**LIFE SAVING EQUIPMENT**
- Life buoy: 8x
- Life jacket: 300x (250 adults and 50 children)
- Floating apparatus (12 pax): 17x
- Fire extinguisher: 8x
- First-aid kit: 2x
- First aid lifting stretcher: 1x
- Rescue boat (6 pax): 1x

**SUPERSTRUCTURE**
- Accommodation: Timber lined seats for 200 passengers with sun awning on first deck and shelter on main deck.
- Technical space: 4x
- Toilet: The efficient layout offers an unobstructed view in all directions at bridge deck.

**NAUTICAL AND COMMUNICATION EQUIPMENT**
- Navigation lights: All necessary navigations lights are installed.
- Search light: 2x
- Horn: 1x
- Radar: 2x
- GPS: 1x
- Echosounder: 1x
- Public address system: 1x
- VHF: 1x
- Barometer: 1x
- Binoculars: 1x
DAMEN MODULAR FERRY 3012
"ALBERT NILE-1"
The Damen Modular Ferry is a roll on roll off (RoRo) ferry for inland water service series, built in steel to standard design. The Vessel is specially designed to safely transport passengers and vehicles.

The entire hull of the Vessel consists of container sized units. These container sized units are called Damen Modular Barges and can be coupled together in the water with a specially designed coupling system, called the Damen Link. Because of this modular system, the entire Vessel can be transported by ship, truck or train to her final place of destination and assembled locally.

**DIMENSIONS**
- Length o.a.: 46.39 m
- Length pontoon: 36.39 m
- Beam o.a.: 15.00 m
- Beam pontoon: 9.80 m
- Depth at sides: 1.80 m
- Draught (empty): 0.50 m

**CAPACITIES**
- Fuel: 4x 150 l
- Cargo capacity: 120 t
- Cardeck: 72 lane meters (2 lanes)
- Passengers: 150 pax (120 adults and 30 children)
- Max. deck load: 6.80 t/m²
- Max. axle load: 10 t
- Max. wheel load: 2.5 t

**PERFORMANCES (approx.)**
- Speed: 7.4 kn

**PRIMARY SHIP SYSTEMS**
- Bilge / deckwash / fill pump: 1x

**ELECTRICAL SYSTEM**
- Network: 12 V

**DECK LAY-OUT**
- Anchor: 180 kg Pool (High Holding Power)
- Bollard (double): 4x
- Ramp (l x w): 5.0 x 5.0 m

**LIFE SAVING EQUIPMENT**
- Life buoy: 6x
- Life jacket: 150x (120 adults and 30 children)
- Floating apparatus (8 pax): 4x
- Fire extinguisher: 3x
- First-aid kit: 1x

**SUPERSTRUCTURE**
- Wheelhouse: The efficient layout offers an unobstructed view in all directions at bridge deck

**NAUTICAL AND COMMUNICATION EQUIPMENT**
- Navigation lights: All necessary navigations lights are installed.
- VHF: 1x
- Horn: 2x
- Binoculars: 1x
DAMEN MODULAR FERRY 3610
"LADY OFON"
The Damen Modular Ferry is a single ended roll on roll off (RoRo) ferry for inland water service series, built in steel to standard design. The Vessel is specially designed to safely transport passengers and vehicles. The entire hull of the Vessel consists of container sized units. These container sized units are called Damen Modular Barges and can be coupled together in the water with a specially designed coupling system, called the Damen Link. Because of this modular system, the entire Vessel can be transported by ship, truck or train to her final place of destination and assembled locally.

**DIMENSIONS**
- Length o.a.: 42.00 m
- Length pontoon: 36.39 m
- Beam o.a.: 12.30 m
- Depth at sides: 1.80 m
- Draught (empty): 0.50 m

**CAPACITIES**
- Fuel: 2x 450 l
- Cargo capacity: 200 t
- Cardeck: 105 lane meters (3 lanes)
- Passengers: 150 pax
- Max. deck load: 6.80 t/m²

**PERFORMANCES (approx.)**
- Speed: 7.5 kn

**ELECTRICAL SYSTEM**
- Network: 24 V

**DECK LAY-OUT**
- Anchor: 180 kg Pool (High Holding Power)
- Bollard (single): 4x
- Ramp (l x w): 6.0 x 7.0 m

**LIFE SAVING EQUIPMENT**
- Life buoy: 6x
- Life jacket: 150x
- Floating apparatus (8 pax): 20x
- Fire extinguisher: 8x
- First-aid kit: 2x
- First aid lifting stretcher: 2x

**SUPERSTRUCTURE**
- Accommodation: Timber lined seats for 150 passengers with sun awning on first deck and shelter on main deck
- Toilet: 4x
- Wheelhouse: The efficient layout offers an unobstructed view in all directions at bridge deck

**NAUTICAL AND COMMUNICATION EQUIPMENT**
- Navigation lights: All necessary navigations lights are installed.
- Horn: 2x
- Echo sounder: 1x
- Radar: 1x
- Binoculars: 1x

**PROPULSION AND STEERING SYSTEM**
- Main engine: 2x diesel driven deck mountable propulsion units.
- Total power: 442 kW (600 bhp) at 1800 rpm

**PRIMARY SHIP SYSTEMS**
- Bilge / deckwash / fifi pump: 2x
The Damen Modular Ferry is a roll on roll off (RoRo) ferry for inland water service series, built in steel to standard design. The Vessel is specially designed to safely transport passengers and vehicles. The entire hull of the Vessel consists of container sized units. These container sized units are called Damen Modular Barges and can be coupled together in the water with a specially designed coupling system, called the Damen Link. Because of this modular system, the entire Vessel can be transported by ship, truck or train to her final place of destination and assembled locally.

**DIMENSIONS**
- Length o.a.: 46.16 m
- Length pontoon: 36.39 m
- Beam o.a.: 9.80 m
- Depth at sides: 1.80 m
- Draught (empty): 0.60 m

**CAPACITIES**
- Fuel: 4x 150 l
- Cargo capacity: 96.8 t
- Cardeck: 72 lane meters (2 lanes)
- Passengers: 150 pax (120 adults and 30 children)
- Max. deck load: 6.80 t/m²

**PERFORMANCES (approx.)**
- Speed: 7.5 kn

**PROPELLION AND STEERING SYSTEM**
- Main engine: 4x diesel driven deck mountable propulsion units.
- Total power: 360 kW (480 bhp) at 2100 rpm

**PRIMARY SHIP SYSTEMS**
- Bilge / deckwash / fill pump: 2x

**ELECTRICAL SYSTEM**
- Network: 12 V

**DECK LAY-OUT**
- Anchor: 180 kg Pool (High Holding Power)
- Bollard (single): 4x
- Ramp (l x w): 5.0 x 4.8 m

**LIFE SAVING EQUIPMENT**
- Life buoy: 6x
- Life jacket: 150x (120 adults and 30 children)
- Floating apparatus (8 pax): 20x
- Fire extinguisher: 8x
- First-aid kit: 2x
- First aid lifting stretcher: 2x

**SUPERSTRUCTURE**
- Accommodation: Timber lined seats for 80 passengers with sun awning on main deck
- Storage locker: 4x

**NAUTICAL AND COMMUNICATION EQUIPMENT**
- Navigation lights: All necessary navigations lights are installed.
- Horn: 4x
- Echo sounder: 2x
- Binoculars: 2x
The Damen Modular Jetty is a modern jetty to which Damen vessels can berth safely, built in steel to standard design. The entire hull of the Jetty consists of container sized units. These container sized units are called Damen Modular Barges and can be coupled together in the water with a specially designed coupling system, called the Damen Link. Because of this modular system, the entire jetty can be transported by ship, truck or train to her final place of destination and assembled locally.

**DECK LAY-OUT**
- Spud bracket: 2x
- Bollard (single): 16x

**OPTIONALS**
- Fendering
- Air supply
- Water supply
- Gangway
- Deck lighting
- Fuel bunkering
- Railing
- Life saving equipment

**DIMENSIONS**
- Length o.a.: 49.00 m
- Beam o.a.: 2.44 m
- Depth at sides: 1.80 m
- Draught: 0.40 m
- Max. deck load: 6.80 t/m²

**ELECTRICAL SYSTEM**
- Power distribution socket box: 4x
DAMEN MODULAR JETTY 4802
MJe 4802
The Damen Modular Jetty is a modern jetty to which Damen vessels can berthed safely, built in steel to standard design.

The jetty consists of two floating pontoons which are kept in position with spuds.

### DIMENSIONS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length o.a.</td>
<td>60.00 m</td>
</tr>
<tr>
<td>Beam o.a.</td>
<td>5.00 m</td>
</tr>
<tr>
<td>Depth at sides</td>
<td>1.80 m</td>
</tr>
<tr>
<td>Draught</td>
<td>0.40 m</td>
</tr>
<tr>
<td>Max. deck load</td>
<td>2 t/m²</td>
</tr>
</tbody>
</table>

### ELECTRICAL SYSTEM

- Deck lighting: 4x

### DECK LAY-OUT

- Spud: 3x
- Spud dimension: Ø 1200 mm x 30 m
- Spud bracket: 3x
- Bollard (double): 12x

### GANGWAY

- Length: 12.00 m
- Width (between railing): 1.50 m
- Max. load: 1000 kg

### LIVE SAVING EQUIPMENT

- Life buoy: 4x

### FEATURES

- D-fender: 48x
- Power supply: 4x
- Air and water supply: 4x
DAMEN MODULAR JETTY 6005
"YN 523026"

Side view

Top view

Aft view
### GENERAL

<table>
<thead>
<tr>
<th>Details</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yard number</td>
<td>523031</td>
</tr>
<tr>
<td>Basic functions</td>
<td>The Damen Modular Jetty is a modern jetty to which Damen vessels can berthed safely, built in steel to standard design.</td>
</tr>
<tr>
<td>Description</td>
<td>The entire hull of the Jetty consists of container sized units. These container sized units are called Damen Modular Barges and can be coupled together in the water with a specially designed coupling system, called the Damen Link. Because of this modular system, the entire Jetty can be transported by ship, truck or train to her final place of destination and assembled locally. The jetty is kept in position with spuds.</td>
</tr>
</tbody>
</table>

### DIMENSIONS

<table>
<thead>
<tr>
<th>Details</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length o.a.</td>
<td>82.30 m</td>
</tr>
<tr>
<td>Length pontoon</td>
<td>78.30 m</td>
</tr>
<tr>
<td>Beam o.a.</td>
<td>5.80 m</td>
</tr>
<tr>
<td>Beam pontoon</td>
<td>4.90 m</td>
</tr>
<tr>
<td>Depth at sides</td>
<td>1.80 m</td>
</tr>
<tr>
<td>Draught</td>
<td>0.40 m</td>
</tr>
<tr>
<td>Max. deck load</td>
<td>6.8 t/m²</td>
</tr>
</tbody>
</table>

### ELECTRICAL SYSTEM

<table>
<thead>
<tr>
<th>Details</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light pole</td>
<td>3x</td>
</tr>
<tr>
<td>Distribution board</td>
<td>3x</td>
</tr>
</tbody>
</table>

### DECK LAY-OUT

<table>
<thead>
<tr>
<th>Details</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spud</td>
<td>4x</td>
</tr>
<tr>
<td>Spud dimension</td>
<td>Ø 1200 mm x 30 m</td>
</tr>
<tr>
<td>Spud bracket</td>
<td>3x</td>
</tr>
<tr>
<td>Bollard (double)</td>
<td>12x</td>
</tr>
</tbody>
</table>

### GANGWAY

<table>
<thead>
<tr>
<th>Details</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>12.65 m</td>
</tr>
<tr>
<td>Width (between railing)</td>
<td>1.50 m</td>
</tr>
<tr>
<td>Max. load</td>
<td>500 kg/m²</td>
</tr>
</tbody>
</table>

### LIVE SAVING EQUIPMENT

<table>
<thead>
<tr>
<th>Details</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life buoy</td>
<td>3x</td>
</tr>
<tr>
<td>First-aid kit</td>
<td>2x</td>
</tr>
<tr>
<td>Fire extinguisher</td>
<td>3x</td>
</tr>
</tbody>
</table>

### ACCOMMODATION

<table>
<thead>
<tr>
<th>Details</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sleeping container 20ft</td>
<td>1x</td>
</tr>
<tr>
<td>Office container 20ft</td>
<td>1x</td>
</tr>
<tr>
<td>Workshop container 20ft</td>
<td>1x</td>
</tr>
</tbody>
</table>

### FEATURES

- Tyre fendering
**GENERAL**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yard number</td>
<td>523027</td>
</tr>
<tr>
<td>Basic functions</td>
<td>The Damen Jetty is a modern jetty to which Damen vessels can berth safely, built in steel to standard design.</td>
</tr>
<tr>
<td>Description</td>
<td>The jetty is used for embarking and disembarking passengers of water taxi’s and for bunkering fuel oil of the water taxi.</td>
</tr>
<tr>
<td>Classification</td>
<td>ILT (Inspectie Leefomgeving Transport)</td>
</tr>
</tbody>
</table>

**DIMENSIONS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length o.a.</td>
<td>20.00 m</td>
</tr>
<tr>
<td>Beam o.a.</td>
<td>5.00 m</td>
</tr>
<tr>
<td>Depth at sides</td>
<td>2.00 m</td>
</tr>
<tr>
<td>Draught</td>
<td>0.80 m</td>
</tr>
</tbody>
</table>

**CAPACITIES**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel</td>
<td>2x 7.5 m³</td>
</tr>
<tr>
<td>Lubrication oil</td>
<td>1x 1.5 m³</td>
</tr>
<tr>
<td>Dirty oil</td>
<td>1x 1.5 m³</td>
</tr>
<tr>
<td>Ballast</td>
<td>2x</td>
</tr>
<tr>
<td>Max. deck load</td>
<td>500 kg/m²</td>
</tr>
</tbody>
</table>

**DECK LAY-OUT**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spud</td>
<td>2x</td>
</tr>
<tr>
<td>Spud dimension</td>
<td>Ø 1000 mm x 27 m</td>
</tr>
<tr>
<td>Spud bracket</td>
<td>2x</td>
</tr>
<tr>
<td>Bollard (double)</td>
<td>12x</td>
</tr>
</tbody>
</table>

**GANGWAY 1**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>13.50 m</td>
</tr>
<tr>
<td>Width</td>
<td>5.00 m</td>
</tr>
<tr>
<td>Max. load</td>
<td>500 kg/m²</td>
</tr>
</tbody>
</table>

**GANGWAY 2**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>7.20 m</td>
</tr>
<tr>
<td>Width</td>
<td>5.00 m</td>
</tr>
<tr>
<td>Max. load</td>
<td>500 kg/m²</td>
</tr>
</tbody>
</table>

**LIVE SAVING EQUIPMENT**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life buoy</td>
<td>4x</td>
</tr>
<tr>
<td>Fire extinguisher</td>
<td>2x</td>
</tr>
</tbody>
</table>

**FEATURES**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fender + bollard</td>
<td>12x</td>
</tr>
<tr>
<td>Fuel supply pistol</td>
<td>1x</td>
</tr>
<tr>
<td>Lubrication oil pistol</td>
<td>1x</td>
</tr>
<tr>
<td>Automatic ramp</td>
<td>1x</td>
</tr>
<tr>
<td>Lightpost</td>
<td>2x</td>
</tr>
<tr>
<td>Catch device</td>
<td>1x</td>
</tr>
<tr>
<td>Store</td>
<td>1x</td>
</tr>
</tbody>
</table>
GENERAL
Yard number 523102
Basic functions General purpose workboat, anchor handling, dredging support, towing and survey
Description The hull of the Damen Modular Multi Cat consists of ISO container sized modules, which are easily transportable at low costs. All the deck equipment is removable and can be transported in separate containers.

DIMENSIONS
- Length o.a. 12.75 m
- Beam o.a. 5.30 m
- Depth at sides 1.94 m
- Draught (empty) 1.30 m

CAPACITIES
- Fuel 10.0 m³
- Water 1.0 m³
- Max. deck load 6.80 t/m²

PERFORMANCES (approx.)
- Bollard pull ahead 4.8 t (m)
- Max. Speed 7.1 kn

PROPULSION SYSTEM
- Main engine
- Total power 306 kW (416 bhp) at 1900 rpm
- Propeller 2x bronze fixed pitch propellers, 770 mm diameter, make Promarin
- Nozzles 2x type 37, 785 mm Van de Giessen
- Engine / gearbox controls Kobelt, cable type
- Steering gear 2x powered hydraulic 45°, rudder indicator

AUXILIARY EQUIPMENT
- Bilge pump SIHI VW20 24 m³/hr at 10 m.w.g.
- Battery set 2x 24 V 200 Ah each

DECK LAY-OUT
- Anchor 40 kg Pool (High Holding Power)
- Chain 10 m short link, 13 mm U2 (Class)
- Deck crane Hydraulic marine crane HLMR 8-2S 1.1 t at 7.52 m
- Deck winch DMT, pull 7.5 t at 5 m/min
- Towing bitt Single pole on aft deck
- Partly covered with wood

LIFE SAVING EQUIPMENT
- Life buoy 2x
- Life jacket 6x
- Fire extinguisher 3x
- First aid kit 1x

SUPERSTRUCTURE
Wheelhouse with dashboard The efficient layout offers an unobstructed view in all directions

NAUTICAL AND COMMUNICATION EQUIPMENT
- Compass Hand held
- VHF Sailor RT 6248
- Search light 1x
- Horn 1x

FEATURES
- Tyre fenders
- Removable railing
- Container fittings
- Supply tanks
- Nozzles
DAMEN MODULAR MULTI CAT 1205
"YN 523102"
**GENERAL**
Yard number 523035-36-37
Basic functions General purpose workboat, anchor handling, dredging support, towing and pushing, survey vessel.
Description The hull of the Damen Modular Multi Cat 1805 consists of 4 ISO container sized modules, which are easily transportable at low costs. All the deck equipment is removable and can be transported in separate containers.

**DIMENSIONS**
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length o.a.</td>
<td>23.77 m</td>
</tr>
<tr>
<td>Length pontoon</td>
<td>18.30 m</td>
</tr>
<tr>
<td>Beam o.a.</td>
<td>5.30 m</td>
</tr>
<tr>
<td>Depth at sides</td>
<td>1.80 m</td>
</tr>
<tr>
<td>Draught</td>
<td>0.80 m</td>
</tr>
</tbody>
</table>

**CAPACITIES**
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel</td>
<td>2 x 4 m³</td>
</tr>
<tr>
<td>Max. deck load</td>
<td>6.80 t/m²</td>
</tr>
<tr>
<td>Cargo deck area (approx.)</td>
<td>50 m²</td>
</tr>
</tbody>
</table>

**PERFORMANCES (approx.)**
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Speed</td>
<td>9.5 kn</td>
</tr>
</tbody>
</table>

**PROPULSION SYSTEM**
Main engine 2x deck mounted hydraulic propulsion system
Total power 400 kW (544 bhp)

**ELECTRICAL SYSTEM**
Network 24 V

**DECK LAY-OUT**
Bollard 4x

**LIFE SAVING EQUIPMENT**
Life buoy 1x
Life jacket 5x
Fire extinguisher 3x

**SUPERSTRUCTURE**
Wheelhouse (in height adjustable) The efficient layout offers an unobstructed view in all directions

**NAUTICAL AND COMMUNICATION EQUIPMENT**
VHF 1x
Search light 1x
Magnetic compass 1x
Binoculars 1x

**FEATURES**
Tyre fenders 12x
Removable railing
Ramp with handwinch 2.5 x 4.0 m
Anchor 1x
The Damen Modular Multi Cat 2210 is a multipurpose vessel for coastal, sheltered/inland water services, built in steel derived from standard design modules. These modules are called Damen Modular Barges and can be coupled together with a class approved coupling system, the Damen Link. Because of this modular system, the entire Vessel can be transported by ship, truck or train to her final place of destination and assembled locally.

**Classification**
- Bureau Veritas/St. Vincent flag
- Class I • Hull • Mach, Special Service / Workboat / Caspian Sea / Coastal area outside Caspian Sea / AUT-UMS

**DIMENSIONS**
- Length o.a.: 22.50 m
- Length pontoon: 20.70 m
- Beam o.a.: 10.10 m
- Depth at sides: 1.80 m
- Draught (empty): 0.85 m
- Draught (shallow operation): 1.00 m

**CAPACITIES**
- Fuel: 8.70 m³
- Fresh water: 1.00 m³
- Sewage: 2.00 m³
- Max. deck load: 6.80 t/m²
- Cargo deck area (approx.): 46 m²
- Max. cargo capacity: 20 t

**PERFORMANCES (approx.)**
- Speed (deep water): 7 kn
- Speed (shallow operation): 3 kn
- Bollard pull (deep water): 6 t
- Bollard pull (shallow operation): 3 t

**PROPULSION AND STEERING SYSTEM**
- Propulsion type: 2 x diesel driven deck mounted hydraulically driven rudder propeller
- Main Engine: 2x Volvo Penta D7CTA – 265hp
- Total power: 390kW
- Steering capability: 2x 65° fore and aft

**PRIMARY SHIP SYSTEMS**
- Deckwash / fifi pump: 2x (1 fixed/1 portable)

**ELECTRICAL SYSTEM**
- Network: 24 V / 230 V / 400 V
- Main generator set: 1 x 32 kVA

**DECK LAY-OUT**
- Heila Deck crane: 1x HLRM 65-3S
- Hydraulic main winch: 1 x 30 t
- Anchor: 2x 180 kg
- Anchor winch: 1x
- Bollard (double): 4x

**LIFE SAVING EQUIPMENT**
- Life buoy: 2x
- Life jacket: 4x
- Fire extinguisher: 7x
- First-aid kit: 1x
- Life rafts (6 pax): 2x

**SUPERSTRUCTURE**
- Accommodation as per mlc2006: 2 pax
- Toilet: 1x
- Shower: 1x
- Wheelhouse: Efficient layout, unobstructed view in all directions, good overview vessel.
- Fan coil air-conditioning unit with heating unit inside: 4x

**NAUTICAL AND COMMUNICATION EQUIPMENT**
- Navigation lights: All necessary navigations lights are installed.
- GMDSS A2 unit: 1x
- Search light: 1x
- Horn: 1x
- Radar: 1x
- GPS: 1x
- Compass: 1x
- Echosounder: 1x
- Barometer: 1x
- Thermometer: 1x
The Damen Modular Pipe Lay Vessel is a fully modular vessel for inland waterways, built in steel to standard design. On the stern of the barge one module is modified with a slope on deck for use as stinger in the configuration. The Barge is suitable to place a pipe-lay installation which will be designed and placed by the customer.

The entire hull of the Vessel consists of container sized units. These container sized units are called Damen Modular Barges and can be coupled together in the water with a specially designed coupling system, called the Damen Link. Because of this modular system, the entire Vessel can be transported by ship, truck or train to her final place of destination and assembled locally.

**DIMENSIONS**

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length o.a.</td>
<td>73.15 m</td>
</tr>
<tr>
<td>Length pontoon</td>
<td>60.96 m</td>
</tr>
<tr>
<td>Beam o.a.</td>
<td>12.60 m</td>
</tr>
<tr>
<td>Beam pontoon</td>
<td>9.80 m</td>
</tr>
<tr>
<td>Depth at sides</td>
<td>2.40 m</td>
</tr>
<tr>
<td>Draught (empty)</td>
<td>0.75 m</td>
</tr>
</tbody>
</table>

**CAPACITIES**

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel</td>
<td>2x 30 m³</td>
</tr>
<tr>
<td>Fresh water</td>
<td>10 m³</td>
</tr>
<tr>
<td>Sewage tank</td>
<td>10 m³</td>
</tr>
<tr>
<td>Max. deck load</td>
<td>6.80 t/m²</td>
</tr>
</tbody>
</table>

**PERFORMANCES (approx.)**

<table>
<thead>
<tr>
<th>Performance</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed</td>
<td>6 kn</td>
</tr>
</tbody>
</table>

**ELECTRICAL SYSTEM**

- Network: 24/230/400 V
- Main generator set: 2x 88 kVA

**DECK LAY-OUT**

- Anchor: 400 kg Pool (High Holding Power)
- Anchor winch: 1x
- Deck crane: HMR 100/12-2S 8 t at 12 m
- Bollard (double): 8x, Ø 600 mm x 16 m
- Spud (tiltable): 4x
- Spud bracket: 4x
- Cargo handling: 8x 10 t hydraulic lifting table

**LIFE SAVING EQUIPMENT**

- Life buoy: 6x
- Internal fifi: 1x
- Fire extinguisher: 10x
- First-aid kit: 2x

**SUPERSTRUCTURE**

- Sun awning: Work deck is protected against sun and rain
- Main deck: 2x office/pantry container, 1x sanitary container, 1x store container
- Wheelhouse: The efficient layout offers an unobstructed view in all directions from bridge deck

**NAUTICAL AND COMMUNICATION EQUIPMENT**

- Navigation lights: All necessary navigations lights are installed
- Search light: 1x
- Horn: 1x
- GPS: 1x
- VHF: 1x

**GENERAL**

- Yard number: 523034
- Basic functions: The Damen Modular Pipe Lay Vessel is a fully modular vessel for inland waterways, built in steel to standard design.
- Description: The Damen Modular Pipe Lay Vessel is a fully modular vessel for inland waterways, built in steel to standard design.
The Damen Modular Pusher is a vessel for pushboat operations for inland water service series, built in steel to standard design. The entire hull of the Vessel consists of container sized units. These container sized units are called Damen Modular Barges and can be coupled together in the water with a specially designed coupling system, called the Damen Link. Because of this modular system, the entire Vessel can be transported by ship, truck or train to her final place of destination and assembled locally.

**DIMENSIONS**
- Length o.a.: 20.00 m
- Length pontoon: 18.00 m
- Beam o.a.: 7.40 m
- Depth at sides: 1.80 m
- Draught (empty): 0.90 m

**CAPACITIES**
- Fuel: 2x 7.2 m³
- Fresh water: 4.6 m³
- Ballast water: 2x 7.4 m³
- Max. deck load: 6.80 t/m²

**PERFORMANCES (approx.)**
- Speed: 6 kn

**PROPULENTION AND STEERING SYSTEM**
- Main engine: 2x diesel driven deck mountable propulsion units.
- Total power: 446 kW (600 bhp) at 2200 rpm

**PRIMARY SHIP SYSTEMS**
- Bilge / deckwash / fill pump: 2x

**ELECTRICAL SYSTEM**
- Network: 24/230V
- Main generator set: 1 x 20 kVA

**DECK LAY-OUT**
- Anchor: 360 kg Pool (High Holding Power)
- Anchor winch: 1x
- Bollard (double): 4x
- Pushbow with single bollard: 2x
- Flat bollard: 4x
- Coupling winch: 2x

**LIFE SAVING EQUIPMENT**
- Life buoy: 2x
- Life jacket: 5x
- Fire fighting monitor: 2x
- Fire extinguisher: 4x
- First-aid kit: 1x

**SUPERSTRUCURE**
- Accommodation main deck 1x 2 crew cabin, 1x workshop, 1x pantry and mess, 1x sanitary space
- Accommodation upper deck 1x captain’s cabin, 1x 2 crew cabin
- Wheelhouse: The efficient layout offers an unobstructed view in all directions from bridge deck.

**NAUTICAL AND COMMUNICATION EQUIPMENT**
- Navigation lights: All necessary navigations lights are installed.
- Search light: 1x
- Horn: 1x
- Radar system: 1x
- GPS: 1x
- Magnetic compass (handheld): 1x
- Echosounder: 1x
- VHF: 1x
- Barometer: 1x
- Binoculars: 1x
### GENERAL

<table>
<thead>
<tr>
<th>Ref. number</th>
<th>12210</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic functions</td>
<td>The Damen Modular Pontoon is a multipurpose working pontoon, built in steel to standard design.</td>
</tr>
<tr>
<td>Description</td>
<td>The entire hull of the Pontoon consists of container sized units. These container sized units are called Damen Modular Barges and can be coupled together in the water with a specially designed coupling system, called the Damen Link. Because of this modular system, the entire pontoon can be transported by ship, truck or train to her final place of destination and assembled locally.</td>
</tr>
</tbody>
</table>

### DIMENSIONS

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Length pontoon</td>
<td>12.20 m</td>
</tr>
<tr>
<td>Beam pontoon</td>
<td>12.30 m</td>
</tr>
<tr>
<td>Depth at sides</td>
<td>1.80 m</td>
</tr>
<tr>
<td>Draught (empty)</td>
<td>0.48 m</td>
</tr>
</tbody>
</table>

### EXCAVATOR

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>O&amp;K RH16 PMS</td>
<td>1 x</td>
</tr>
</tbody>
</table>

### DECK LAY-OUT

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Spud</td>
<td>2 x</td>
</tr>
<tr>
<td>Spud dimension</td>
<td>Ø 610 mm x 15 m</td>
</tr>
<tr>
<td>Spud bracket (modular)</td>
<td>2 x</td>
</tr>
<tr>
<td>Bollard (double)</td>
<td>4 x</td>
</tr>
<tr>
<td>Dragline panel</td>
<td>10 x</td>
</tr>
<tr>
<td>Dragline dimension</td>
<td>5800 x 950/1000 x 200 mm</td>
</tr>
</tbody>
</table>

### FEATURES

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tyre fender</td>
</tr>
</tbody>
</table>
**GENERAL**

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yard number</td>
<td>523021</td>
</tr>
<tr>
<td>Basic functions</td>
<td>The Damen Modular Booster Pontoon is a pontoon with booster and accommodation, built in steel to standard design.</td>
</tr>
<tr>
<td>Description</td>
<td>The entire hull of the Pontoon consists of container sized units. These container sized units are called Damen Modular Barges and can be coupled together in the water with a specially designed coupling system, called the Damen Link. Because of this modular system, the entire Pontoon can be transported by ship, truck or train to her final place of destination and assembled locally.</td>
</tr>
<tr>
<td>Classification</td>
<td>Lloyd’s register</td>
</tr>
</tbody>
</table>

**DIMENSIONS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length o.a.</td>
<td>18.00 m</td>
</tr>
<tr>
<td>Beam o.a.</td>
<td>10.00 m</td>
</tr>
<tr>
<td>Depth at sides</td>
<td>1.80 m</td>
</tr>
<tr>
<td>Draught (empty)</td>
<td>0.80 m</td>
</tr>
</tbody>
</table>

**CAPACITIES**

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel oil</td>
<td>2x 25 m³</td>
</tr>
<tr>
<td>Fresh water</td>
<td>8.00 m³</td>
</tr>
<tr>
<td>Waste water</td>
<td>8.00 m³</td>
</tr>
<tr>
<td>Daytank main engine</td>
<td>1.00 m³</td>
</tr>
<tr>
<td>Daytank generator set</td>
<td>0.35 m³</td>
</tr>
<tr>
<td>Max. deck load</td>
<td>6.80 t/m²</td>
</tr>
</tbody>
</table>

**DREDGE INSTALLATION**

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dredge pump</td>
<td>BP 7570</td>
</tr>
<tr>
<td>Impeller diameter</td>
<td>1720 mm</td>
</tr>
<tr>
<td>Suction pipe diameter</td>
<td>750 mm</td>
</tr>
<tr>
<td>Discharge pipe</td>
<td>750 mm</td>
</tr>
<tr>
<td>Booster capacity</td>
<td>8500 m³/h</td>
</tr>
</tbody>
</table>

**ENGINE INSTALLATION**

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main engine</td>
<td>Caterpillar 3516 TA, HD radiator and water cooled</td>
</tr>
<tr>
<td>Constant power</td>
<td>1825 kW at 1600 rpm</td>
</tr>
<tr>
<td>Gearbox</td>
<td>Kreiskott</td>
</tr>
</tbody>
</table>

**ELECTRICAL SYSTEM**

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity generator set</td>
<td>35 kVA</td>
</tr>
</tbody>
</table>

**DECK LAY-OUT**

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity anchor winches</td>
<td>3 kW</td>
</tr>
<tr>
<td>Anchor</td>
<td>4x 500 kg</td>
</tr>
</tbody>
</table>

**SUPERSTRUCTURE**

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Galley container with hydropore pump</td>
<td>1x</td>
</tr>
<tr>
<td>Bedroom/bathroom container</td>
<td>1x</td>
</tr>
</tbody>
</table>
The Damen Modular Pontoon is a multipurpose working pontoon, built in steel to standard design. The entire hull of the Pontoon consists of container sized units. These container sized units are called Damen Modular Barges and can be coupled together in the water with a specially designed coupling system, called the Damen Link. Because of this modular system, the entire pontoon can be transported by ship, truck or train to her final place of destination and assembled locally.

**POWER PACK**
- Diesel driven hydraulic power pack
- Total power: 242 kW (329 hp)
- Capacity: 400 l/min

**IMPACT HAMMER**
- Hydraulic impact hammer: 1x
- Ram weight: 3000 kg
- Max. impact energy: 32.32 Knm

**CRAWLER CRANE**
- Hitachi KH230-3 PD: 1x

**EXCAVATOR**
- O&K RHB.5: 1x

### Dimensions

- **Length pontoon**: 22.20 m
- **Beam pontoon**: 12.20 m
- **Depth at sides**: 1.80 m
- **Draught (empty pontoon+spuds)**: 0.40 m

### Capacities

- **Ballast tank**: 35.25 m³
- **Max. deck load**: 6.80 t/m²

### Deck Lay-Out

- **Spud**: 2x
- **Spud dimension**: Ø 610 mm x 15 m
- **Spud bracket (modular)**: 2x
- **Bollard (double)**: 8x
- **Crane mat**: 16x
- **Tyre fender**: 14x
DAMEN MODULAR PONTOON 2212 "YN 523038"
GENERAL
Yardnumber 523044
Delivery date December 2016
Basic functions The Damen Modular Pontoon (MPo) 3015 is specially designed as a stable work platform for multiple craning operations, such as: drilling, dredging, lifting and the piling of spud poles and sheet piles. The Pontoon is built in steel to standard design.
Classification Bureau Veritas
Flag Algeria
Owner Cosider

DIMENSIONS
Length overall 30.80 m
Length pontoon 30.60 m
Beam overall 15.07 m
Beam pontoon 14.80 m
Depth at sides 2.44 m
Draught (empty) 0.60 m
Draught (at a payload 430t) 1.60 m
Cargo deck area 450 m²
Maximum deck load 15 t/m²

TANK CAPACITIES
Ballast water 130 m³
Fuel oil 10.2 m³
Fresh water 10 m³

PRIMARY SHIP SYSTEMS
Deckwash / fift / bilge pump 2x (portable)

ELECTRICAL SYSTEM
Network 12 / 230 / 400 V
Main generator set 1x 100 kVA

DECK LAY-OUT
Spud (modular) 3x
Spud dimension Ø 800 mm x 18 m (2x 9 m)
Spud winch 3x (hydraulic)
Mooring winch 2x (hydraulic)
Bollard (double) 4x
Towing bracket 2x
Wooden deck 220 m²
Mast (foldable) 1x

LIFE SAVING EQUIPMENT
Life buoy 2x
Life jacket 5x
Fire extinguisher 2x
First aid kit 1x

FEATURES
Zinc anodes
HD marine paint

NAUTICAL AND COMMUNICATION EQUIPMENT
Navigation lights All necessary navigations lights are installed
Floodlight 2x
VHF handheld 2x
MODULAR PONTOON 3015
"COSIDER T.P 1"
## GENERAL

<table>
<thead>
<tr>
<th>Basic functions</th>
<th>523041</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>The Damen Modular Tidal Turbine is a pontoon for generating electricity from the tides, built in steel to standard design.</td>
</tr>
</tbody>
</table>

### Description

The entire hull of the Pontoon consists of container sized units. These container sized units are called Damen Modular Barges and can be coupled together in the water with a specially designed coupling system, called the Damen Link. Because of this modular system, the entire Pontoon can be transported by ship, truck or train to her final place of destination and assembled locally.

## DIMENSIONS

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length o.a.</td>
<td>24.43 m</td>
</tr>
<tr>
<td>Beam o.a.</td>
<td>2.44 m</td>
</tr>
<tr>
<td>Depth at sides</td>
<td>2.42 m</td>
</tr>
<tr>
<td>Draught (pontoon)</td>
<td>1.20 m</td>
</tr>
<tr>
<td>Draught (pontoon with turbine)</td>
<td>11.70 m</td>
</tr>
</tbody>
</table>

## TURBINE

<table>
<thead>
<tr>
<th>Type</th>
<th>1x Tocardo DD1000 (T2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power output</td>
<td>87 – 200 kW</td>
</tr>
<tr>
<td>Rotor diameter</td>
<td>9.0 m</td>
</tr>
<tr>
<td>Turbine principle</td>
<td>Gearless, variable speed, fixed pitch</td>
</tr>
<tr>
<td>No. of blades</td>
<td>2</td>
</tr>
<tr>
<td>Rotational speed</td>
<td>Variable, 22 – 45 rpm</td>
</tr>
<tr>
<td>Blade material</td>
<td>Composite</td>
</tr>
</tbody>
</table>

## CONVERTER

<table>
<thead>
<tr>
<th>Converter type</th>
<th>Frequency controller, AC-DC-AC, IGBT drive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed-in voltage</td>
<td>400 V</td>
</tr>
<tr>
<td>Feed-in frequency</td>
<td>50 / 60Hz</td>
</tr>
</tbody>
</table>

## DECK LAY-OUT

<table>
<thead>
<tr>
<th>Anchor</th>
<th>4x 3000 kg anchor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bollard (single)</td>
<td>10x</td>
</tr>
<tr>
<td>Mast</td>
<td>2x with ventilation caps</td>
</tr>
<tr>
<td>Railing</td>
<td>Provided where necessary</td>
</tr>
<tr>
<td>Fendering (Hakonit)</td>
<td>2x PS &amp; 2x SB</td>
</tr>
<tr>
<td>Anodes</td>
<td>Sufficient for 2 years</td>
</tr>
</tbody>
</table>

## NAVIGATION LIGHTS AND DAY SIGNALS

<table>
<thead>
<tr>
<th>Navigation lights</th>
<th>All necessary navigations lights are installed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day signals</td>
<td>All necessary day signals are installed.</td>
</tr>
</tbody>
</table>
MODULAR BARGE SYSTEM