

Discovery 55

*Full technical
specifications*



Discovery 55

Setting a Standard in the World of Monohulls

Discovery Yachts are creators of the world's most inspired blue-water cruising yachts, designed to take two people on the ultimate journey of discovery.

The Discovery 55 is where the story started and Ron Holland's original design has established the hallmarks of a classic that is designed for performance, built for safety, equipped for luxury and defined by quality.



Her superb performance and easy motion come from her classic Ron Holland design, giving exhilarating and effortless passage-making. She is designed to be handled by just two people and it is this ease of handling, attention to detail and ingenious use of space that raises her above the competition.

Panoramic vision is the hallmark of the whole Discovery range, with a navigation position and raised saloon allowing you to enjoy the view – both on passage and in the beautiful anchorages that you plan to visit. The Discovery 55 is truly your luxurious 'home from home' to enjoy with family and friends.

Effortless Handling

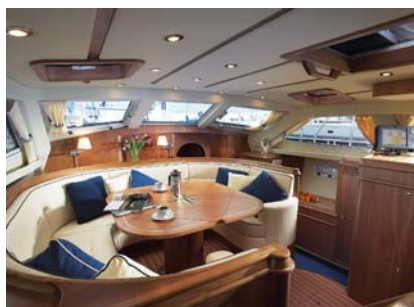
The Discovery 55 exudes a feeling of quiet confidence and effortlessly eats up the miles. Her sleek waterline, fine entry and beam carried well aft contribute to her stunning performance and comfortable passage-making, as do the high ballast ratio and generous sail plan. The semi-balanced, protected rudder and bulb keel ensure that she is light on the helm and easy to manoeuvre. Regardless of sea-state, she is a stiff, steady boat with an easy motion.

To achieve simplicity and reliability, the Discovery 55 has a rig that a couple can handle with ease in a wide range of conditions and sailing angles. With a self-tacking Jib, roller furling on all the sails, including the main, and electric winches as standard, the boat is easy to reef, and is effortless on all points of sailing. At the wheel, everything comes naturally to hand. This is a cruising yacht you can genuinely handle on your own – all from the safety and comfort of the cockpit.

An essential feature of any Discovery yacht is to enjoy the comfort and ease of being able to command your boat at the raised navigation station within the saloon. Close to the cockpit, you have panoramic vision to keep a good watch. Out of the elements, watch keeping is so much less tiring, and it is this, as much as the easy sail handling that truly makes this a two handed boat.

Discovery 55

Setting a Standard in the World of Monohulls



Key features

- **Solidly built by craftsmen to give you confidence to go anywhere**
- **Effortless sailing and living on a well thought through platform**
- **Luxury living and comfortable, easy, fast sailing**
- **Designed for two people to live on board and sail in comfort, effortlessly wherever you want to go**
- **Worldwide support from an experienced team**

Luxury Living

Living on the Discovery 55 is a joy. She is safe and easy to move around and throughout there are little touches that make life a pleasure.

Seats on the fore and aft decks are just perfect for watching dolphins or enjoying the sunset, whilst the transom provides a great swimming or diving platform at anchor. We've added a fun touch to the cockpit by incorporating a hot tub – great for trade wind sailing or lying back under the stars. The cockpit is sculptured to give real comfort and support.

Just three easy companionway steps take you in to the elegant saloon. It is here that the Discovery 55 is truly different from other yachts.

The signature feature of Discovery is the raised seating area that the deck saloon gives you. Not only are you always able to appreciate your surroundings, but the whole saloon is light and airy.

The spacious galley has a cavernous fridge and separate freezer, generous work surfaces and is a perfect width for true ease of use at sea. The luxurious master cabin features a king-sized, centreline bed. Good headroom, plenty of stowage and great ventilation are a design aspect throughout the boat.

Customisation options

Each Discovery yacht is bespoke. The Discovery 55 comes with a choice of sail plan options and alternative interior layouts. In addition, we offer you as much choice and flexibility with the joinery, finish and onboard equipment as possible to provide you with a semi-custom yacht to fulfil your dreams.

The highly successful Discovery 55 is a yacht built to the highest standards to cross oceans, that can be sailed without the need for crew, and that offers real luxury, reliability and safety.

Discovery 55

Design specifications



Design Dimensions

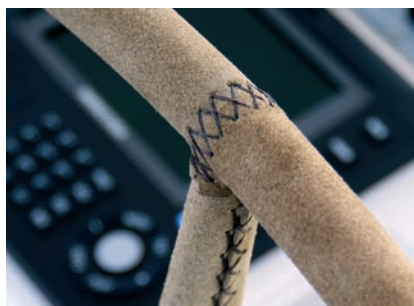
Overall Length	17.0m	55'9"
LOA	16.70m	54'9"
Beam	4.78m	15'8"
Displacement (half tanks)	22,500 kgs	49,500 lbs
Draft	2.23m	7'3"
Draft – shoal keel version	1.80m	5'11"
Fuel capacity	1,334 litres	352 US gals
Water capacity	1,008 litres	266 US gals
Engines	160hp Yanmar	
Ballast	9,500 kgs	20,900 lbs
Ballast Ratio (half tanks)	42.2%	
Air Draft	23.52m	

I =	21.83m
J =	6.21m
P =	19.33m
E =	6.78m

Sail Areas

Main:	65.0m ²
Jib:	50.0 m ²
Genoa:	87.5m ²

Hull



Key features

- **Shaped by the legendary Ron Holland design team providing a comfortable 'long legged' motion combined with a performance to get you there quickly**
- **Insulated hull minimises condensation and noise providing you maximum comfort**
- **Composite construction for strength, safety, comfort and performance**
- **5 year hull warranty**

Hull Construction

The hull is laid up in female moulds. The immensely strong lay up specified by the Designer and Structural Engineers meets or exceeds full CE regulations Category 'A-Ocean' and is constructed in a Lloyds Approved laminating facility. The hull has two coats of isothalic gelcoat. This is non-pigmented below the waterline. This is followed by powder-bound mat. Both the quality of the gelcoat and the use of non-pigmented gelcoat below the waterline make for an impervious hull surface that is highly resistant to osmosis. The hull carries a five year written guarantee against osmosis.

Vinylester resin is used throughout the hull, which gives superior strength over more traditional polyester resins. The lay-up incorporates an end-grain balsa core, which provides exceptional stiffness and insulation. This is laid-up under vacuum to ensure complete structural integrity. Woven mat is used extensively for optimum strength to weight ratio, and this is further stiffened by a layer of woven Kevlar throughout the forward part of the hull. There are massive stringers running the full length of the boat. These incorporate the engine beds and tank supports. Structural bulkheads are of marine grade plywood laminated to the hull and deck. There are two watertight bulkheads forward – one aft of the chain locker, and another between the main forward sail locker and the fore cabin.

All services passing forward of this bulkhead then pass through watertight glands or seals. The aft lazarette lockers are contained in their own watertight compartments. The transom locker is also self contained.

The hull below the waterline is epoxy painted and given two coats of anti-fouling before the boat is launched. A double boot top line is sprayed or moulded in, and a caveta line is hand applied when the boat is sign written.

Windows

All windows are constructed of toughened safety glass. The main saloon windows are double glazed to give extra insulation and to minimise condensation.

Hull to Deck Join

The deck moulding incorporates a raised flange for the bulwark. This is laid onto the matching hull flange with an epoxy bonding paste, and the two are then fastened with stainless bolts. The teak capping rail is then fastened onto the flange. The side decks drain through special scupper drains designed so that fresh rain water can be diverted to the starboard water tank (see plumbing section).

Hull Interior Finishes

All hull and deck surfaces are lined. All bilge areas are flow-coated in grey or white, and cabin sole areas are accessible via access panels. All hatches are edge sealed and varnished or painted on both sides. All wood surfaces are varnished, lacquered or painted as appropriate to best boat building practices.

Keel

The shape of the external ballast keel has been developed over many years of research and development by the Ron Holland design team. The weight is concentrated in a sophisticated shaped bulb near the bottom of the keel. It is lead cast with 3% antimony

hardening, through bolted to the hull stub with cast-in stainless steel bolts. The keel ballast weight is 9,500kgs (20,500lbs) giving a high ballast ratio of 42% with half tanks.

The positioning of the weight near the bottom of the keel gives a very low centre of gravity. Machinery, batteries and tanks have also all been set low in the boat for maximum stability and comfort. A shoal draft keel of 1.80m (5' 11") bulb keel is available as an option

Steering

A 1,060mm (42") stainless steel wheel, leather covered, controls a Whitlock solid rod steering system providing direct steering to the rudder quadrant. The rudder is semi-balanced on a massively reinforced half skeg. This provides light yet positive steering, whilst providing protection for the rudder itself. The rudder blade is GRP, bonded to a solid stainless steel shaft, with top and bottom bearings.

A stainless steel emergency tiller fits directly onto the top of the rudder shaft, which is accessed via a stainless deckplate. There is a friction brake on the wheel.

Discovery 55

Deck and superstructure



Key features

- **All bulkheads are laminated to the deck to minimise the possibility of squeaking and maximise stiffness which enhances performance and confidence**
- **High bulwarks to enhance safety when on deck**
- **Extra tall stanchions for additional safety when on deck**

Deck

The deck is moulded in GRP with a balsa core to provide strength and insulation. A bulwark runs around the whole deck edge to give strength and a feeling of security. Wherever there are load bearing areas, plywood replaces the balsa core. All load bearing fittings have aluminium or stainless steel backing plates. The deck incorporates a locker in the transom and two lazarette lockers, a self-draining gas locker, locker amidships, a large sail locker forward, and a self-draining chain locker at the bow. A fold out bathing ladder is built into the bottom transom step. A useful grab handle is provided when coming alongside in a dinghy. A bathing shower with hot and cold supply is standard. The lazarette lockers are fitted with interior lights, and the sail locker with a gas strut and interior light.

All sidedecks, forward coachroof, cockpit seats, helmsman's seat, forward cockpit sole and transom steps are teak laid, using finest quarter sawn teak, with no visible fastenings. There is teak capping on the bulwarks.

Cockpit

The cockpit, which is divided into two parts, is self-draining with large cockpit drains. All drains have slotted stainless covers to prevent small items being lost overboard.

The forward part of the cockpit provides a spacious, comfortable seating area, with carefully sculptured seat bases and well angled, deep seat backs for maximum comfort and safety. A substantial table, incorporating drinks stowage and glass holders, is mounted centrally for outdoor eating. This incorporates a stainless steel grab handle and a central foot rail. A pair of water-resistant cockpit speakers are fitted. There is an instrument housing just forward of the main hatch. The side benches extend through to the aft cockpit to provide maximum seating and sunbathing space. The cockpit seats and forward sole are finished in solid teak.

The aft part of the cockpit is designed to give the helmsman an uncluttered helming area. The curved helm seat provides good forward visibility and comfort, whether the boat is heeled or upright. The custom designed pedestal provides a clear instrument and control platform. The leather-covered wheel is mounted on the pedestal, with instruments, controls and single lever throttle immediately to hand. The side seats also provide a comfortable helm position. The aft cockpit is normally self-draining. However, this cockpit has the option of being filled with sea or fresh water to provide a "hot tub" or "splash pool", and the cockpit is shaped to allow two people to comfortably lie back and relax in this area.

There is cockpit lighting positioned on the underside of the boom for evening dining.

Sprayhood and (Optional) Bimini Top

The cockpit is well protected by a large folding sprayhood with 25mm (1") diameter stainless supports and a stainless grab handle on its aft edge. Large clear panels provide good forward visibility. When not in use, the sprayhood folds onto a moulded coaming on the coachroof.

A Bimini Top is offered as an option. This is set on stainless steel frames, and extends beyond the immediate cockpit. It provides good shade for the whole cockpit. It can have optional roll down side panels for when the sun is low on the horizon. Bimini Tops may be customised to suit owner's preference.

A full sun awning to cover half or all of the boat is also available as an option. This not only provides shade, but also shields open hatches.

Discovery 55

Deck Equipment



Key features

- **Electric winches provide effortless sail control**
- **Designed so there is no need to leave the safety of the cockpit whilst sailing**
- **High quality equipment provides reliability and peace of mind**

Winches

Lewmar winches are provided as standard. (Andersen winches are optional)

2 x Lewmar 64 EST electric self-tailing winches are provided as standard primary winches

1 x Lewmar 48 ST self-tailing winch provides control of the main sheet. (Electric 48 EST is optional)

1 x Lewmar 48 EST electric self-tailing winch for control of the main halyard, reefing lines and self-tacking staysail sheet

2 x Lewmar 44 ST on the mast for headsail halyards

2 x winch handles

2 x winch handle pockets

Mainsail reefing and other control lines are led aft from the mast area to the main electric control winch on the forward port side of the cockpit. The lines are led neatly over the coachroof via a bank of organisers with complete and immediate access to lines if required. Everything is accessible. A bank of Spinlock rope clutches forward of the winch controls the lines. Rope clutches are also provided for the staysail and Genoa reefing lines on the coachroof.

Stainless Steel

All stainless steel fabrications are in finest marine 316-grade stainless steel, mirror polished. The stainless steel pulpit rail is the 'Swedish' style opening (with safety chain) for Mediterranean bows-to mooring. There are separate port and starboard navigation lights set in protective stainless housings. Near the bow, there are two seats laid with teak to port and starboard for 'dolphin watching'.

The stern rail extends well forward. It has an opening gate to the transom area. The navigation light is mounted on a protective plate high on the stern rail. Large and comfortable "wake watching" seats are also provided as standard.

There are opening side gates to port and starboard for boarding. High stainless steel stanchions – 715mm (28") – are set on the gunwales, providing clear, uncluttered side decks. Double stainless guard wires are fitted. An optional stainless steel side boarding ladder that can be mounted on either side of the boat facilitates boarding.

There are 8 stainless steel mooring cleats set into the bulwarks with anti-chafe rails as appropriate.

Stainless steel guards are mounted over all three dorade boxes.

Stainless grab handles run along the deck saloon roof.

Three stainless steel U-bolts are fitted in the cockpit for safety harness attachment, and webbing jackstay (safety lines) run up each side of the deck from right aft to the bows.

Sail Handling Equipment

Lewmar equipment is standard. (Harken equipment is optional)

Both the Genoa and self-tacking Jib are set on manual control Furlex headsail roller reefing as standard. (Electric control is available as an option).

The self-tacking Solent Jib runs on a curved Lewmar track set on an integral GRP moulding. The staysail sheet is led via Lewmar blocks to the cockpit control clutches. The reefing control lines are run aft via turning blocks to the electric control winch on the coachroof.

Genoa sheets are led to a Lewmar size 3 Genoa sheet track with Lewmar Genoa cars, port and starboard. They are then led to a pair of Harken turning footblocks and onto the primary electric winches.

The main sheet is led to a Lewmar track fitted with Lewmar mainsheet car system, with control lines.

Discovery 55

Anchoring



Key features

- **Oversized anchor for safety and peace of mind**
- **Drop or raise the anchor easily from the cockpit**
- **Effortless anchoring with the powered windlass**

Anchoring

A Lewmar V4 vertical windlass is installed on deck. The 24v motor is installed in the dry locker aft of the forward bulkhead, whilst the chain fall leads directly into the self-draining anchor well, which has access from the deck. The windlass has a two-way control switch forward. An option is to have a remote control in the cockpit. Great attention to detail has been given to the stemhead fitting and bow rollers, since easy anchoring is so important to shorthanded, long-term cruisers. Both stemhead rollers incorporate two large diameter delrin rollers for easy chain flow, and to allow self launching of the anchor.

An oversize 40kg (88lbs) Delta anchor self stows in the stemhead fitting, and this comes with 60m of 10mm calibrated galvanised chain fitted. The bitter end is securely fastened high in the anchor well.

The stern is fitted with a stainless steel anchor roller on the starboard side for mooring bowsto, positioned in such a way that the anchor rope can be led to the electric primary winch.



Discovery 55

Interior



Key features

- **Luxurious and comfortable – your home from home**
- **Design your own interior with our expert team**
- **Heating keeps you cosy on the those chilly days**
- **Semi –custom. Take delivery of the boat that you want**

Interior Layout Options

There are two interior layouts available, with a number of variations possible within those. The main difference in the layouts is in the main saloon. Both layouts have the raised deck saloon, which provides panoramic views when seated. The two versions differ in the design of the seating and storage areas. With option of a pilot berth or comfortable armchairs on the starboard side.

Interior Finishes

The standard joinery finish is in cherry, with no cost options in maple, teak or light oak. We will be pleased to discuss the characteristics of each wood, and show samples of finish. There is also a wide choice of soft furnishings available.

Part of the main saloon and all the cabins are finished with a high quality carpet. The rest of the main saloon and the galley sole are finished in teak and holly laminate flooring with a non-slip finish. However, if an owner prefers a wood finish throughout, this is available as an option.

Main Saloon

The standard saloon layout is designed to allow panoramic views whether standing or seated. The saloon can dine six to eight people in comfort and the saloon table easily folds down from dining to 'coffee table' size, when needed. The saloon seating is really comfortable and

long enough to be used as an additional berth. To starboard is a good size single berth, which is an excellent pilot berth while underway. There is a drinks locker under the pilot berth and generous stowage lockers. Two opening deck hatches, together with the oversize companionway hatch provide excellent ventilation.

Access to the main saloon from the cockpit is via three easy steps with good handholds. There are grab handles and sturdy fiddles positioned throughout, to allow easy movement around the boat.

Navigation Area

The raised navigator's station affords good visibility outwards. Reflecting the way that most people now navigate, the chart table has been designed to incorporate the plotter/radar screen, but still leave desk space for logs and chart work. Other navigation aids and radios are mounted beside the navigator's seat itself, while stowage for HF radios, almanacs, etc is conveniently to hand. There are both white and red night lighting in this area. The large navigator's seat is well curved for maximum comfort. There is a separate chart drawer under the pilot berth.

Galley

The galley has been designed with both use at sea and in harbour in mind. The general layout is as shown on the plan. The double sink is set

near the centreline of the boat, so that it can drain on either tack. Since water from washing up and food preparation seems to have a mind of its own at sea, the whole of this inboard worktop is 'Corian' (or equivalent) with large Corian and wooden fiddles to contain any spillages, which can be wiped back into the sinks easily! Hot and cold pressure water is fed to a mixer tap. There is a separate foot-operated fresh water pump. A saltwater tap is available as an option. A large draining sink is built in beside the sinks, so that crockery can be left to dry securely. This is also a useful place to put things down and know that they will be secure. There is a handy chute leading to a pull-out garbage container under the worktop. There is extensive stowage in lockers and drawers above and below the worktop and there are fiddles and grab handles throughout.

There is enough space for an optional front-loading dishwasher. Halogen down lights provide good working light. Two opening ports in the coachroof provide ventilation and light. There is also a fixed port in the hull, an opening hatch overhead, and a good sized opening hatch into the cockpit, which allows food to be passed directly to the cockpit. A 230v (110v) extractor fan is fitted over the cooker.

Discovery 55

Interior



Key features

- **Hold watches from the safety of the saloon raised navigation desk**
- **Double glazing and hull insulation extends the sailing season**
- **The most comfortable mattresses we can find to make your stay on board as pleasant as possible**
- **Breathable mattresses and membranes prevent dampness**

There is a four burner gimballed cooker, with grill and oven set into a GRP moulded recess. It is fitted with fiddles/pan holders and has flame failure devices. A safety switch is provided to the remote gas supply solenoid shut off valve.

There is a stainless 'crash' bar running in front of the cooker. There are deep fiddles around the Corian finish worktop. A 230v (110v) microwave oven is also fitted as standard.

Refrigeration

The main fridge of 290 litre (10 cu.ft) capacity has a front opening door. This is fitted with shelves and an internal light. There is a large, well insulated deep freeze of 170 litre (6.0 cu.ft) capacity, fitted with baskets. The fridge and freezer are positioned so that crew can reach cold drinks and snacks without disturbing the cook! The freezer can also be used as a fridge should an extra chill cabinet be required.

The standard refrigeration and freezer are 24v Frigomatic systems, with sea-water keel cooled heat exchangers. Both the fridge boxes and freezer are constructed with 80mm to 120mm closed cell insulation, and vapour barriers are fitted round the doors. Both fridge and freezer are specified for full tropical use.

Wet Locker

A ventilated wet locker is located at the aft end of the galley.

Owner's Stateroom (Aft)

This cabin is light, airy and spacious. The king size double berth is 6'6" long by 5'9" wide (2m x 1.8m). The high quality split mattress is set on special breathable fabric for maximum comfort and to allow it to 'breathe'. To starboard is a comfortable armchair, and there is generous drawer, locker and wardrobe stowage. There is a central vanity unit. A large hatch is positioned over the berth, with an additional opening port aft, recessed into the transom that can be left open even in rain showers.

There are two opening portlights in the coach roof, two fixed ports in the hull (opening ports are optional) and two dorade vents for extra ventilation. 24v fans are available as an option.

En-suite Heads Compartment (Aft)

To starboard in the Owner's Stateroom (aft) is access to the en-suite heads compartment with hand basin, Tecma electric WC and separate large shower compartment with built in seat. The heads compartments are GRP mouldings for easy cleaning. The basin surrounds are 'Corian' finish (or equivalent) in colours to owner's choice. Ventilation is by two opening portlights in the coachroof, and an opening hatch overhead. Pressure hot and cold water is fed to a mixer tap at the handbasin and to the shower.

A full size washer/dryer is fitted as standard – a great luxury.

Main Forward Cabin (Standard Layout)

The forward cabin provides sleeping accommodation that is nearly as spacious as the Owner's Stateroom (aft).

The king size bed is 6'8" long with a maximum width of 5'3" (2m x 1.6m). The split mattress is set on special breathable fabric. This has the head of the bed forwards, but is big enough to sleep either way round.

Main Forward Cabin (Alternative Layout)

An alternative layout of the forward cabin is available as an option. This has the bed head aft. There are two small seats. Shelves, lockers, drawers and wardrobe provide good storage. We are happy to discuss the relative merits of each layout.

Light and ventilation are provided by two fixed ports in the hull, a large opening hatch overhead and a dorade vent. 24v fans are available as an option.

Discovery 55

Interior



Key features

- **LED lighting available to reduce power consumption**
- **Custom layouts to suit your family and guests**

Forward Guest (Pullman) Cabin

The forward guest cabin (to port) offers two good size single berths – upper and lower – fitted with lee cloths. There are drawers, a mirrored hanging locker and a shelved cupboard. There are two opening hatches overhead, and a fixed port in the hull. 24v fans are available as an option. This cabin shares the Forward Heads Compartment with the Main Forward Cabin.

Forward Heads Compartment

The Forward Heads Compartment incorporates a Tecma electric WC, handbasin with mixer tap, and a spacious shower compartment with seat. This is a GRP moulding for easy cleaning. The basin surrounds are in 'Corian', colour to owner's choice. Two opening deck hatches provide ventilation.

Alternative Forward Stateroom Layout

This option utilises all the accommodation forward of the main saloon to provide a magnificent second master cabin or guest stateroom forward, with en-suite heads and shower compartment. This cabin is light, airy and spacious. It provides a fine option for those who want to cruise mainly with two couples aboard, or for owners who prefer to sleep at the forward end of the yacht when at anchor. The king size double berth is 6'6" long by 5'2" wide (2m x 1.6m). Like the Owner's Stateroom

(aft) it has a high quality split mattresses set on special breathable fabric for maximum comfort and to allow the mattresses to 'breathe'. Lee cloths are provided. There is a comfortable armchair with a vanity table or computer desk. Throughout there is ample drawer, locker and wardrobe stowage. A large hatch is positioned over the berth, with two additional opening overhead hatches. There are three fixed ports in the hull (opening ports are optional), and a dorade vent for extra ventilation. 24v fans are available as an option.

Lighting

Halogen lights (LED optional) are provided throughout the boat. In addition, each berth is equipped with a bedside reading light. Red night courtesy lights are provided at strategic points throughout the boat.

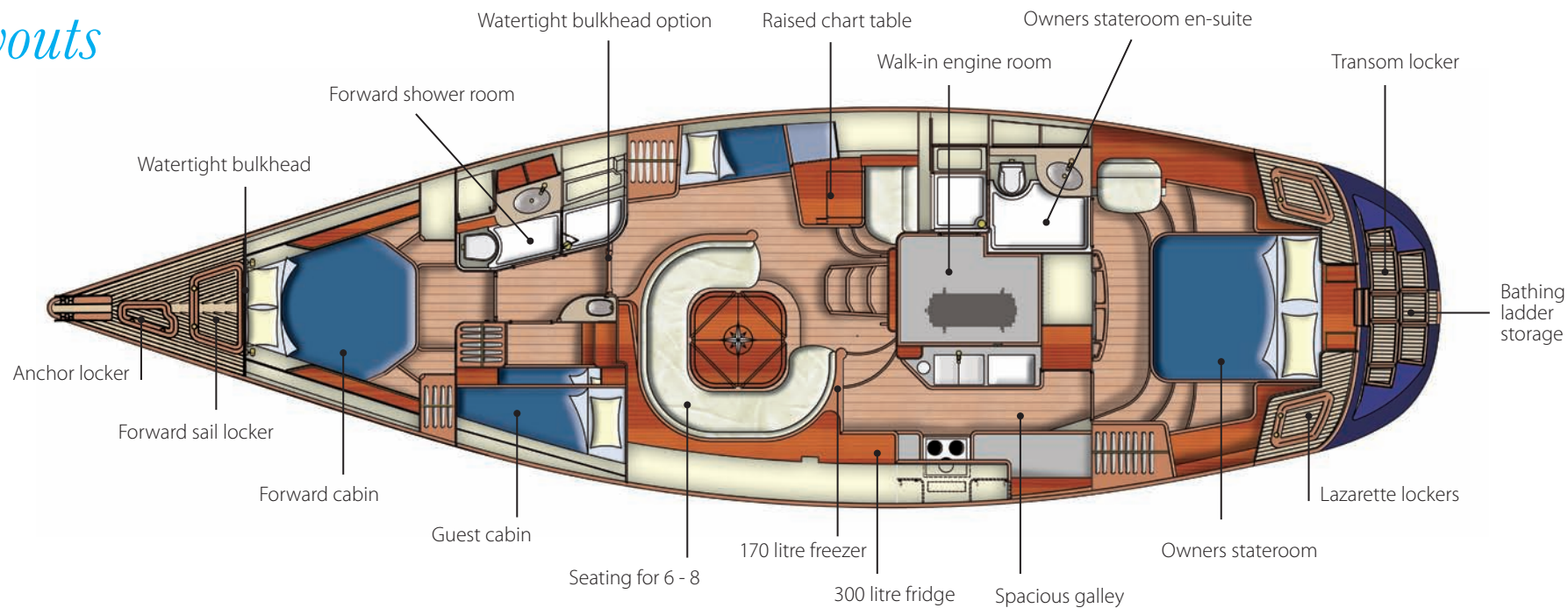
Heating

Heating to all parts of the boat is provided by an Eberspacher Hydronic M10 hot water central heating system (or comparable). Each heads compartment is fitted with an electric heated towel rail.

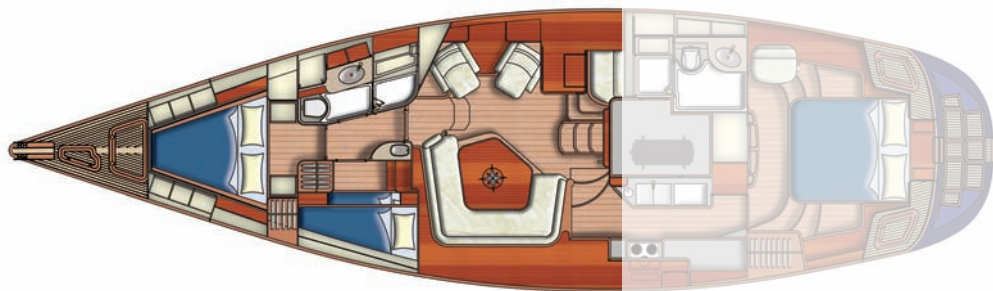
Discovery 55

Interior layouts

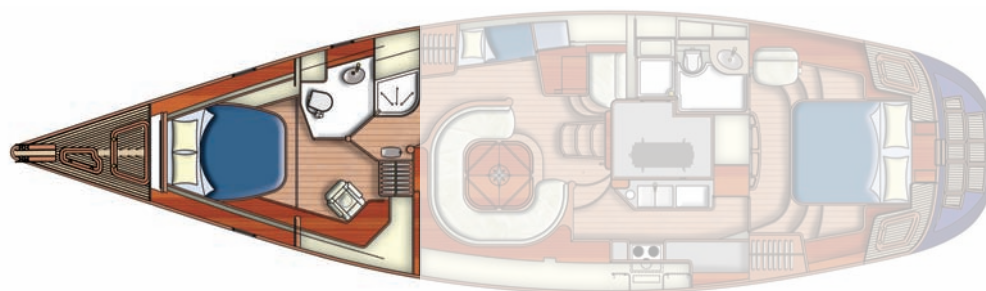
Standard layout



Alternative Forward Cabin and Saloon Layout



Alternative Forward Stateroom Layout



Spars and rigging



Key features

- **Configured for short-handed sailing**
- **Powered controls makes sailing effortless**
- **Reliable and proven equipment providing peace of mind**
- **Thoughtfully laid out to make control easy**

Mast and Rig Options

The oval section Selden mast is keel stepped, with double swept back spreaders, which does away with the need for running backstays and forward facing lowers. The result is clear, uncluttered decks and easy handling.

The standard finish is extruded silver anodised aluminium alloy. White finish (Awlgrip or powder coated) spars are available as an option. The standard rig is electric in-mast reefing. Push button control from the cockpit allows one person to reef and furl away the sail. There is a manual over-ride of the electric motor. The mast is fitted with internal halyards. A conventional horizontal battened main is available as an option.

The standard headsail arrangement is a double headsail rig (A) – see illustration. This has a roller reefing self-tacking blade Jib (c. 90%) and roller reefing Genoa (used just off the wind). This is sometimes called a Solent Jib rig. It has the advantage of having the ideal sail available for any condition. It also lends itself to double headsail downwind sailing.

Sail plan (B) offers a roller furling self-tacking staysail and roller furling Genoa. Sail plan (C) offers a 100% self-tacking roller furling Jib. Each of these rigs has its own advantages.

We would be delighted to talk through your own preferences.

Running Rigging (According to Sailplan Chosen)

Main, Genoa and Staysail Halyards	12 mm Vectran
2 Genoa Sheets	16 mm Polyester Braid
Staysail or Jib Sheet	14 mm Vectran
Main Sheet	14 mm Polyester Braid
Outhaul	14 mm Dyneema
Mainsheet Traveller Lines	10 mm Polyester Braid
Jackstay (safety) Lines	25 mm Jackstay Webbing

Mast Electrics

The mast is fitted with a masthead VHF antenna and cable, masthead tricolour and anchor lights, steaming and deck lights. Raymarine ST60 wind instruments. Windex wind indicator. Cabling for radar antenna.

Boom

The oval section Selden boom is designed for use with the electric in-mast reefing. Selden solid rod kicker/boom vang with control lines run aft to electric control winch point and rope clutch. A hydraulic boom vang is available as an option.

Standing Rigging

All standing rigging is of 1 x 19 stainless steel wire terminating in Norseman Gibb or swaged terminals with chromed bronze rigging screws and stainless steel toggles at the lower ends.

Sails

Sails by Hood Sails, (or comparable)

Mainsail cut for in-mast reefing

Furling crosscut Blade Jib in Dacron – with luff pad and UV protective strip

Furling crosscut Genoa in Dacron (140%) – with luff pad and UV protective strip

Furling crosscut Blade Jib in Dacron – with luff pad and UV protective strip

Vectran cloth is available as an option

Discovery 55

Spars and rigging



Key features

- Effortless sailing handling with powered winches
- Electric in mast furling means short-handed sailing is easy
- Self tacking jib allows easy tacking by just turning the wheel
- Great performance means you get there quicker, coupled with the easy motion and handling means you arrive less tired
- Choices of sail plan to suit your sailing desires

Sail Plan

Standard rig is electric in mast reefing. Standard headsail arrangement (with appropriate deck gear) offers either a 130% roller reefing Genoa or a 100% roller reefing self-tacking blade Jib (Solent Jib).

Discovery 55 Sail Areas

Mainsail	65.0m
Jib	50.0m
Genoa	87.5m

Sail Plan

I =	21.83m
J =	6.21m
P =	19.33m
E =	6.78m

Sail Plan A

Standard rig is electric in mast reefing. Standard headsail arrangement offers furling self tacking 90% blade Jib (Solent Jib) and roller furling Genoa.



Sail Plan B

Cutter rig with roller reefing on the Genoa and self-tacking roller staysail.



Sail Plan C

A 100% self-tacking roller furling Jib.



Discovery 55

Engine and machinery



Key features

- **Backups to systems to enable you to 'get home'**
- **All systems thought through for easy maintenance and reliability**
- **Walk in engine room providing easy access to maintainable items**

Engine Rooms

The Discovery 55 has a full walk-in engine room, with the main access door from the Owner's Stateroom en-suite. There is good access to the engine and to ancillary equipment. There is good lighting and fan ventilation in the engine room area. Two automatic fire extinguishers are fitted as standard.

Insulation

The engine room is fully lined with fire retardant insulation that is faced to prevent any contamination by diesel or inflammable substances. All access panels have rubber sealing strips. All ancillary pumps and motors are rubber mounted for quietness. Ventilation ducting is also sound-insulated where appropriate.

Engine

The standard engine is the YANMAR 4LHA-HTP. This is a 4-cylinder, turbo charged engine, which develops 160hp (118kW) at 3,300 RPM. Fitted with a 2.7:1 reduction gearbox, it is designed for smooth, long running operation. It has excellent torque characteristics that allow it to power a large, slow turning propeller for quiet motoring. The engine is fitted with dual alternators. (See electrical specification for more details). Yanmar provide a good world-wide service network.

Propeller

A folding three-bladed 24" diameter Gori propeller is fitted as standard. The propeller folds automatically to maximise sailing performance. It gives excellent handling performance, ahead or astern.

Fuel Tanks

Fuel is provided from three rigid tanks made of special fuel grade high-density polyethylene. Total capacity of the tanks is 1,334 litres (352 US gals). The tanks are fitted with baffles and inspection covers. We have fitted these because we believe them to be far superior to stainless steel or aluminium tanks, as they minimise condensation and are much less likely to suffer from stress cracks. They have the added advantages that they are lighter. Each tank has its own deck filler and breather. Each tank has a pick-up point at the very bottom to permit the removal of any water or contaminants. The main fuel feed is then led to a Separ (or equivalent) fuel filter and water separator. This has a warning light on the main panel. This is in addition to the main engine and generators filters. There are fuel contents gauges for all tanks.

Stern Gear

The engine is mounted on captive flexible feet to minimise vibration. An Aquadrive coupling at the inboard end of the 38mm (1.5") stainless steel shaft then transfers the thrust to the hull via a thrust bearing. This further reduces vibration, noise and wear. The shaft is led to a cast bronze P-bracket. An anode is fitted to the shaft. A rope cutter is optional.

Generator

An ONAN low speed, heavy-duty generator of 7kW 50Hz (9kW at 60Hz) is fitted as standard. This comes with its own insulated sound shield, and is located in its own space under the deck saloon for easy access. This area is then fully sound insulated for near silent running. The exhaust is fed to an HMI water separator, which eliminates almost all exhaust and cooling water noise. A remote control panel includes automatic shut down facilities. There is the option to upgrade to a higher output generator to support full air-conditioning, if specified.

Bow Thruster

A 10hp MaxPower tunnel bow thruster (24v) is fitted as standard. The tunnel is fully faired into the hull.

Discovery 55

Plumbing



Key features

- **Filtered fresh water**
- **Colour coded plumbing for easy maintenance**
- **Huge water capacity minimises trips to the marina**
- **Electric toilets provide luxury on board**

Fresh Water System

Fresh water is stored in two separate food grade high-density polyethylene tanks. These are fitted with baffles and inspection covers. They are completely taint free and do not suffer from the corrosion that can affect stainless steel tanks in some parts of the world. Total capacity of the two tanks is 1008 litres (266 US gals). Each of these has its own deck filler and breather. The starboard tank can also be fed from the rainwater catching system. This is ideal for showers, washing up and 'hot-tub' use. Very often this water is rather nicer and softer than water taken from ashore! Each tank is fitted with a contents gauge. A water maker is available as an option. If this option is not taken, one of the fuel tanks can be used as a water tank, increasing water capacity.

Hot water is fed from a 50 litre insulated calorifier, taking heat from the engine's heat exchanger. It is also fitted with a thermostatically controlled immersion heater (230v or 110v as specified) for use when alongside, or when the generator is running.

Hot and cold pressurised water is fed throughout the yacht by an automatic water pump system. There are outlets in the galley, at both hand basins and showers, in the cockpit and at the aft deck shower. There is also a foot-operated freshwater pump in the galley. There is an optional salt water outlet in the galley. Hot

and cold fresh water, together with salt water can be supplied to the 'Hot Tub' as an option.

Toilets and Holding Tanks

The Discovery 55 is designed to meet all the current international regulations on discharge overboard and holding tanks.

The yacht is fitted with Tecma electric WCs in both forward and aft heads as standard. The WCs can discharge directly overboard when at sea or into holding tanks (black water tanks) each of approximately 60 litres. The holding tanks are positioned in such a way that they are discharged overboard by gravity. They can also be emptied by shore side facilities. All pipe work is reinforced sanitation grade hose designed for use with marine heads, and is double clamped.

Grey Water Holding Tank (Optional)

A grey water holding tank of 150 litres can be fitted as an option. This would be situated above the keel sump, and the galley, showers and hand basins can all be diverted into this.

This can be discharged overboard with its own electric pump.

Bilge Pumps

All interior areas are designed to drain via limber holes in to a deep keel sump which is fitted with a high output electric bilge pump operated by an automatic switch. The design

of the switching allows the pump to be set 'On' or on 'Automatic'. The sail locker and both lazarette lockers are fitted with bilge pumps that have automatic switching.

A manual main bilge pump, fitted with a strum box, can be operated from the cockpit.

Deck Wash System

A salt water pressure pump is fitted, with an outlet at the anchor well. The supply terminates with a snap-on connection, and comes complete with hose and a hose gun allowing easy anchor and deck cleaning. A fresh water outlet is provided in the cockpit for fresh water deck rinsing.

Through Hull Fittings

All through-hull fittings near or below the waterline are fitted with shut-off valves, and double stainless steel clamps.

Electrical



Key features

- **Tinned wiring throughout provides reliability and longevity**
- **Worldwide compatible electrical systems**
- **High capacity batteries as standard**

D.C. Electrics

The engine and generator are 12v start. The main engine is fitted with a 55 amp/hour 12v alternator. Both the main engine and the generator have their own 120 amp/hour start batteries.

A second 24v, 110 amp/hour alternator on the engine supplies the yacht's main 24v system. The domestic batteries are industrial heavy duty, deep cycle, sealed gel batteries totalling 480 amp/hour capacity at 24v. (Equivalent to 960 amps at 12v, rated at 20C) These batteries, under normal use, should have a ten year plus operational life, and are the best batteries available. They are completely maintenance free and are fully secured.

A 24v to 12v converter provides a 12v power source.

All wiring is tinned multi-strand marine grade cable, sized to ABS voltage loss regulations. Heavy-duty battery switches isolate all circuits except bilge pumps which are independent. All circuits are connected to circuit breakers on the main control panel. All wiring is clearly labelled and numbered or colour coded throughout. Wiring is fed in conduits wherever appropriate.

The control panel provides full power management information (both D.C. and A.C.).

All chain plates, skin fittings (where appropriate) and mast are grounded to the ballast keel for lightning protection.

Stern gear, chainplates, seacocks and keel are electrically bonded and linked to the common earth system.

A.C. Electrical System

An A.C. panel controls a 30 amp 230v (110v option) ring main, with power sockets in the galley, main saloon and cabins. A.C. power can be provided by the standard Victron Quattro, dockside supply, or standard diesel generator. (A second 2.5kW static inverter is available as an option). A 2kW immersion heater is fitted in the hot water tank for use when using dockside supply or with the generator.

A three core Marinco double insulated 32 amp PVC dockside power cable (20m) with appropriate sockets is provided.

Battery Charging

Engine and generator start batteries are charged by their own alternators. This provides secure starting back up with the two separate batteries. These have an emergency link facility, which would also allow charging from either alternator. The 24v domestic battery bank is charged by the 110 amp/hour alternator on the engine or by the Victron Quattro.

The Quattro charger/inverter charges at 70 amp/hours (24v) from the generator or shore power. The Quattro provides 2.5kW of 220v A.C. power from the batteries when required.

Discovery 55

Instruments and electronics



Key features

- **Our Owner Care Team support you in your travels – world wide**
- **Sail away package as standard**
- **Designed to get you there, quickly, safely and in comfort**

Instruments

Instruments by Raymarine. ST60+ boat speed, wind speed and direction, and depth systems. Instruments are mounted in housing at the forward end of the cockpit. A multi-function repeater is incorporated in the optional plotter.

Colour Plotter/Radar

A Raymarine combined colour plotter/radar with a 4kW radar transmitter is fitted as standard. Garmin touch screen plotter is available as an option.

Autopilot

Raymarine 7002 + automatic pilot, with control at the steering pedestal. A second cordless handheld autopilot control is an option at the chart table.

VHF

ICOM 505 25w multi-channel VHF complete with DSC. Cockpit speaker for VHF optional. Masthead antenna.

Stereo

Sony or equivalent stereo FM radio with CD player. Twin speakers in the main saloon. A pair of water resistant speakers in the cockpit. There are many options available for the Audio Visual system.

Additional Loose Equipment

Equipment

- 6 x Fenders
- 2 x 15m nylon mooring warps
- 2 x 10m nylon mooring warps
- 2 x Locking winch handles
- 1 x Emergency tiller
- 1 x Emergency handle for in mast reefing
- 1 x Bilge pump handle
- 3 x Dry powder fire extinguishers
- 1 x Ensign staff
- 1 x Boathook
- 1 x 6 kg Propane gas bottle and regulator

Full Owner's Manual

The full Owner's Manual includes drawings and specification of the engine and generator, sails and rigging, A.C. and D.C. wiring circuits and equipment, seacock and plumbing circuits, refrigeration systems, black and greywater systems, etc. In addition, we keep a full record of the manufacturer, type, and serial number of all significant components on each boat. We will also supply the same information, printed and on disk, to each owner to ensure that any spares that are needed can be rapidly dispatched, wherever you may be.

Warranty

The hull is guaranteed against osmosis for a period of five years from the completion of the boat. A one year warranty is given against any manufacturing or materials defects, and all installed equipment is covered by the manufacturers' warranties in accordance with their conditions.

Insurance

The builder's insurance covers the boat and its equipment during the period of construction. This shall apply to all equipment, whether supplied by the builder or the owner.

CE Certification

The Discovery 55 is designed to meet or exceed all the requirements for full Category "A-Ocean" classification for CE marking, and international standards (ISO's) ruling at the time.

Yacht Familiarisation

We provide up to three days of free boat handling and systems familiarisation for a new owner and/or crew, so that you can feel fully confident with your boat and its equipment. This would normally be in the Solent/English Channel area.

Discovery 55

Specification summary



General

- Supplied with CE certification to conform with RCD category A – Ocean
- The hull is guaranteed against Osmosis for 5 years

Hull Construction

- Composite construction with end grain balsa core providing superior strength, thermal insulation and acoustic insulation but keeping the weight down which adds to performance
- Layer of Kevlar massively adding to the hull strength
- Non pigmented gel is used below the waterline to help prevent osmosis
- Vinylester resins are used throughout for added strength and osmosis prevention
- 3 layers of epoxy as a barrier against moisture ingress
- 2 coats of anti-foul in colour of your choice
- White gel coat with blue boot top and caveta line
- Two water tight bulkheads providing sealed buoyancy and safety
- Bathing ladder provided

Deck

- Composite construction with end grain balsa core providing strength, thermal insulation and acoustic

insulation but keeping the weight down which adds to performance

- Marine ply, stainless steel or alloy is used in all load bearing areas for added strength
- White gel coat with optional black mullions
- Teak capping rail & decks
- Lights in deck lockers (except two on port side deck)
- Deep self draining chain locker
- Large sail locker
- Joined to the hull with epoxy paste and stainless bolts for security
- All bulkheads are laminated into the deck for strength and stiffness
- Hot/cold freshwater shower on aft deck to wash down after your swim
- Saltwater pressurised deck & anchor wash located in the chain locker

Deck Fittings

- Stainless pulpit with teak seats for dolphin watching
- Stainless stern rail with teak seats for wake watching
- Stainless stanchions with higher than standard guard rail for added safety around deck
- 8 stainless steel mooring cleats
- Lewmar electric winches – (except mast winches)
- Stainless guardrails over dorade boxes
- Strong webbing Jackstays for safety

Keel

- 9,500kgs (20,500lbs) shaped lead keel and a depth of 2.23m (7'3") provides a ballast ratio of 42% providing maximum stability and comfort

Engines & Generator

- Yanmar 160hp (118kW) fresh water cooled
- Full walk-in engine room
- 55 amp/hour 12v alternator for charging the start battery
- 110 amp/hour alternator for charging the main house batteries
- Single lever controls at cockpit pedestal
- 24" Gori folding propeller – for manoeuvrability and speed when both sailing and under power
- 7kW Onan generator
- 10hp Bow Thruster
- Eberspacher Hydronic M10 central heating
- 32 amp shore power cable

Tanks

- Fuel: 1334 litres (352 US gals) fuel in three polyethylene tanks
- Fresh Water: 2 x polyethylene tanks totalling 1008 litres (266 US gals)
- Black Water holding tanks: 2 x 80 litre
- 50 litre insulated Calorifier with immersion heater

Electrics

- Marine grade tinned cabling is used throughout This reduces corrosion and provides longevity
- 24v System for efficiency
- Halogen lighting throughout
- 3kW Inverter providing 230v/50 Hz
- 230v/50Hz Shore power (USA pack available as option)
- 16 amp shore power cable
- Automatic fire extinguisher fitted in the engine room
- Night lights throughout the boat

Batteries

- 12 x 2v sealed gel batteries for house providing 480 amp/hour at 24v
- 1 x 120 amp/hour start battery for engine
- 1 x 120 amp/hour start battery for generator
- House battery charging via shore power or on board 7kW generator & charger

Instruments

- Raymarine ST60 speed, wind & depth
- Garmin 128 GPS
- Raymarine Autopilot ST7002+
- Icom M505 VHF with DSC and masthead antenna
- Raymarine E80 chart plotter and 2kW radar

Discovery 55

Specification summary



Entertainment

- Sony CD and Tuner

Plumbing & Heating

- Pressurised hot and cold fresh water
- 50 litre Calorifier providing plenty of hot water for showers etc
- Pressurised sea water for deck wash, electric toilets and hot tub
- Fitted full size washer/dryer

Steering

- 1060mm leather covered stainless wheel controlling a Whitlock Mamba, solid rod steering system, providing direct & positive steering
- Stainless steel leather bound wheel
- Semi balanced large kevlar reinforced rudder provides light but powerful steerage
- Oversized autopilot means reliability and shorthanded sailing
- Emergency steering tiller

Spars & Rigging

- Double spreader B&R rig for strength and safety and clear decks
- Anodised aluminium mast and boom (White powder coated as option)
- Lewmar manual mast winches x 2
- Lewmar mainsheet traveller track
- Lewmar traveller for self tacking Jib
- Electric in-mast furling for mainsail
- Lewmar turning blocks
- Standing rigging – 1 x 19 stainless steel wire in swaged terminals

Sails

- Sails in Dacron
- Fully vertical battened in-mast furled mainsail with UV protection at clew
- 140% Genoa with UV protection on leach
- 90% blade Jib sheeted on self tacking track with UV protection on leach

Anchoring

- Lewmar electric windlass
- 60m of 10mm calibrated chain
- 40kg Delta anchor stows in stemhead fitting
- Kedge anchor roller fitted to transom

Cockpit

- Deep centre cockpit for safety and comfort
- Large drains to remove water quickly with steel grating to stop smaller items being lost
- Deep shaped seat backs for maximum comfort and safety
- Substantial cockpit table with drinks holders
- Water resistant cockpit speakers
- Single steering pedestal
- Hot tub
- Sprayhood

Windows Hatches & Ventilation

- Tinted double glazed windows in main saloon minimising condensation and providing insulation
- All main saloon windows are toughened safety glass
- Lewmar and Gebo opening and fixed hatches around the boat

Internal Joinery

- Cherry as standard
- Choices of upholstery

Galley

- Modern galley design makes working here easy whether at sea or anchor
- Large and efficient front opening fridge for easy access (300 litres/10.4 cu.ft)
- Large and efficient front opening freezer (170 litres/6 cu.ft)
- Force 10 – 3 or 4 burner gas cooker
- 230v Microwave

Saloon

- Raised seating providing panoramic vision
- Vented wet locker at end of the galley
- 2 opening deck hatches

Navigation Area

- Raised navigation seat providing panoramic vision
- Red night light

Aft Cabins

- King size double berth with split interior sprung mattress
- 3 x lee cloths
- 1 x hanging cupboard
- Ensuite heads
- 1 x vanity desk
- 1 opening hatches
- 2 x dorade vents

Heads

- Pressurised hot and cold water
- Electric shower and sink sump pump
- GRP moulded units for easy cleaning
- Seats in all showers
- Separate showers keep heads areas dry
- Tecma electric heads as standard

Main Forward Cabin

- Double bed with split mattress
- Central lee cloth
- 1 x opening hatch
- Dorade vent
- Wardrobe, shelves and drawers

Pullman Cabin

- 2 berths
- Lee cloths
- Drawers and hanging locker

Discovery 55

For further information please contact:



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E&OE

NOTE: Following a policy of continuous improvement, Discovery Yachts reserve the right to alter and improve specifications further.

A full specification will be agreed with the owner of each boat before construction begins.

Designer

Ron Holland
Kinsale, Ireland

Interior Designer

Ken Freivokh Design
Fareham, England

Structural and Design Engineers

High Modulus Engineering
Auckland, New Zealand
and Hamble, England

Builder

Discovery Yachts Limited