

# TARTAN 4100 SPECIFICATIONS & FEATURES

## Hull

- NPG Isothalic gelcoat for superior gloss retention
- Epoxy hull laminate producing a strength to weight ratio not attainable in any production polyester laminates
- Epoxy allows all uni-directional fabric laminate
- Epoxy's superior adhesive strength reduces overall hull weight while increasing strength producing a faster and safer performance cruising yacht
- Strict resin control through use of resin impregnation produces glass to resin ratio of 65% glass, 35% resin. (production polyester boats are typically 25% glass, 75% resin=heavy and brittle)
- Superior fatigue and cyclic loading characteristics of epoxy ensure a hull that retains its shape and strength longer resulting in higher resale value
- Extensive internal structure designed to carry rig and keel loads, glass taped into hull using modified epoxy resin
- Synthetic foam hull coring, provides lightweight structure, stiffness, sound and thermal insulation and superior impact resistance
- Hull is vacuum-bagged and structure is laminated in "one shot" thus does not rely on secondary bonding of structural materials
- Epoxy hull laminate is far stronger than any polyester laminate of similar weight, i.e. greater safety margins while delivering superior performance over normal production polyester hulls
- 90 degree throw, Marelon, flush thru hull fittings. Marelon fittings are UL and ABS approved and are corrosion free
- Complete interior paintout for enhanced cosmetics and to seal interior laminate surfaces
- Built to meet ABS Plan Certification
- Industry leading, non-prorated 15 year hull structural and blister guarantee
- Warranty is transferable

## Deck

- Deck is a balanced composite laminate utilizing vinylester resin, uni-directional "E"-glass reinforcement, and high strength/stiffness Baltek premium AL 600 balsa coring
- Our custom resin infusion process creates the best resin-to-glass reinforcement ratio possible resulting in the stiffest, lightest, strongest deck in production boatbuilding
- Weight saved high increases righting moment improving safety and performance
- Infusion process with vinylester resin provides a stronger more fatigue resistant deck laminate than typical production polyester deck laminates
- Deck is locally reinforced at high load areas with additional plies of bi-directional "E"-glass reinforcement
- NPG Isothalic gelcoat for improved color and gloss retention
- Gelcoat is formulated for greater flexibility reducing occurrence of common gel coat crazing
- White or off-white gelcoat with patterned, molded non-skid surface on horizontal deck areas
- Balsa coring also offers acoustic as well as thermal insulation increasing interior comfort
- Core "windows" at all deck hardware installations. Window is reinforced with solid laminate and isolates hardware installations from cored laminate, reducing stress crazes around hardware often seen in laminates reinforced with plywood and eliminates rot problems associated with decks reinforced with plywood
- Structurally loaded hardware backed with either FRP or 6061 T6 aluminum backing plates
- Time-tested hull to deck joint. Deck is fastened to inward facing hull flange with integrally molded hardened 6061 T6 aluminum bar forming a full sheer length backing plate
- Stainless steel fasteners sized to meet or exceed ABS standard for offshore use, are drilled and tapped into aluminum bar, offering full serviceability from the outside of the boat
- Deck to hull joint bonded with 3M 5200 adhesive sealant

## Keel & Ballast

- 6,400 lb. (2904 kg) fin, 8,000 lb. (3629 kg) beavertail or 8,600 lb. (3901 kg) keel centerboard, 4% antimonial hardened lead casting
- Template ground for fit and maximum performance
- Faired and epoxy coated
- Beavertail bulb or keel/centerboard design significantly lowers center of gravity improving righting moment. Result is increased sail carrying ability, performance and safety
- Ballast is through-bolted to hull with cast in place stainless steel bolts. Quantity and size exceed ABS standard for offshore use

## Rudder & Steering System

- Console style rack and pinion steering pedestal
- 44" stainless steel Commodore wheel with leather cover
- Stainless steel pedestal guard
- Single lever engine control with stainless steel handle
- 6" binnacle compass with stainless steel hood
- Engine controls mounted on pedestal for easy access and viewing
- High density, closed cell urethane foam rudder blade with modified epoxy reinforced skins
- 4" diameter 1/2" wall thickness type 304 stainless steel rudder post
- High-density, low-friction rudder bearings
- Bronze rudder stuffing box

# TARTAN 4100 SPECIFICATIONS & FEATURES

## Interior

- Structural fiberglass timbers bonded to hull to carry mast and keel loads
- Structural bulkheads bonded to hull
- Bulkheads and risers are pressure laminate or varnished cherry faced marine plywood
- Hand fit varnished cherry trim throughout
- Solid stock raised panel varnished cherry cabinet doors with ventilation slots
- Positive lock polished chrome cabinet hardware
- 1" solid stock raised panel varnished cherry passage doors in full cherry framed jambs
- Polished chrome Mobella mortised door lock sets
- Solid stock varnished cherry cabinet faces throughout
- Tongue and groove solid cherry hull ceilings in forward stateroom
- Solid cherry face, dovetail joined, all wood drawers throughout
- Custom solid stock main salon table with inlaid Tartan logo and centerline drawer storage
- Easy maintenance, varnished cherry battened overhead with strategically placed access panels
- Varnished teak and holly cabin sole with extensive teak banded access hatches
- Varnished teak handrails placed for security in a seaway
- Selection of designer fabrics available for interior upholstery

## Ventilation

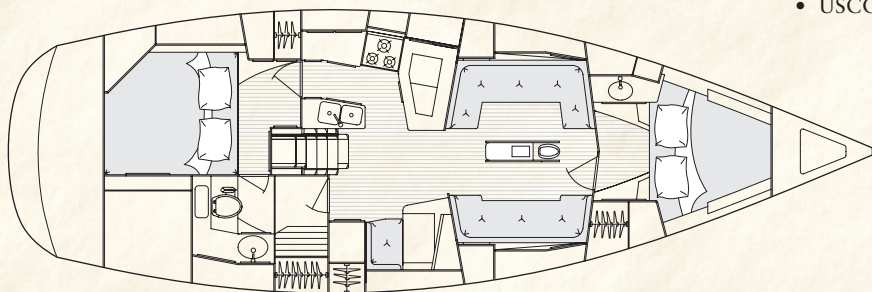
- (5) Stainless steel unlimited offshore CE approved deck hatches
- (12) Cabin side mounted stainless steel opening port lights with fly screens
- (3) Cockpit mounted stainless steel opening port lights with fly screens
- (2) 4" Chrome dorade vents with stainless steel guard
- Lexan sliding companionway hatch with fiberglass spray hood, solid teak hatch boards and trim

## Engine & Mechanical

- 56 hp diesel with pedestal mount single lever controls
- Pedestal mount engine panel
- 50 gallon (189.27 l) fuel capacity in aluminum tank with remote gauge
- Racor fuel filter/water separator
- Lead lined engine insulation
- Excellent engine service access front, sides, and aft
- Fixed three-blade prop on stainless steel shaft

## Electrical

- Batteries, 2 8D gel house batteries and 1 size 27 gel starting battery
- Freedom 10 inverter/charger
- Polished chrome and stainless steel interior lighting
- Automatic lights in hanging locker, liquor locker and refrigerator compartment
- Service lighting in engine compartment
- Service lighting in cockpit lockers
- Directional reading lights at berths and main cabin settees
- Directional spotlights in galley and over main cabin table
- Recessed, dimmable overhead spotlights in cabin over head
- Interior courtesy lighting
- Cockpit and swim ladder courtesies lighting
- Dual 30 amp shore power services
- 50 foot shore power cord
- 110 VAC distribution panel prepped to accept gen set
- 110 VAC shore power outlets in each cabin, GFI protected
- 12 VDC metered distribution panel
- Battery selector switch
- Electrical bonding system
- Electric sump pump with automatic float switch for icebox and shower drains
- Electric bilge pump with automatic float switch with manual override
- UL approved, stranded, tinned copper wiring for increased corrosion resistance
- Wiring bundled in PVC conduit with additional conduit in place and available for future installations
- All wiring is properly chafe protected where it passes through bulkheads, liners and cabinetry
- ABYC color coded wiring throughout
- USCG approved navigation lights on bow rail, stern rail and mast



## Galley & Plumbing

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- 3 burner Force 10 gimbale LPG stove with oven and broiler
- (1) 11 lb (5kg) LPG Tank
- LPG sniffer with automatic shut off
- Cherry faced cabinetry with raised panel access doors
- Cherry faced, dovetailed cutlery drawers
- 9" deep stainless steel double sinks with premium marine grade galley faucet and manual foot pump with swivel spigot
- Granicote solid surface galley countertops available in several designer colors
- Storage under galley sink through ventilated raised panel cherry doors
- Hinge out galley trash bin with cherry raised panel door access
- Molded icebox with Granicote solid surface counter top and 4" foam insulation, insulated front and top load access
- Hot and cold pressure water with easy service access to pump and plumbing
- Freshwater plumbing features polyethylene tubing and Whale mechanical fittings
- All below water hose connections are double stainless steel clamped for added security
- Premium marine grade hoses used throughout
- 100 gallons (378.5 l) of freshwater tankage with distribution manifold
- Forespar Marelon thru-hull fittings throughout, UL approved and corrosion free
- Forward cabin vanity with sink, hot and cold water and Granicote solid surface counter top
- 11 gallon (41.64 l) water heater, with engine heat exchanger and 110 VAC

## Head

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- Marine head with 20 gallon (75.7 l) holding tank w/deck pump out and vent
- Y-valve with direct overboard discharge for offshore use
- Macerator pump for holding tank discharge for offshore use
- Snake river holding tank remote level indicator
- Premium marine grade sanitation hoses with low odor permeability
- Separate stall shower with Plexiglas enclosure, molded seat and teak floor grate
- Shower drains to separate sump with automatic electric pump for overboard discharge
- Premium marine grade head faucet and shower mixer
- Molded Granicote solid surface counter tops with integral sink
- Utility storage under sink through raised panel cherry door
- Hanging/wet locker outboard of shower seat
- Ample storage in upper vanity

## Accommodations & Storage

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- Forward cabin with vanity and sink, extensive lockers, hanging locker and dovetail drawers
- Approximately 80" x 60" berth in forward cabin with quilted mattress
- Furniture grade main cabin settees and seats with contoured cushions
- Main cabin fit with cherry cabinets and ventilated raised panel doors throughout
- Through bulkhead raised panel ventilation door to forward cabin
- Large storage outboard of main cabin seat backs
- Varnished, drop leaf, solid stock cherry table with center storage bin and two dovetail drawers
- Forward-facing navigation station to starboard
- Navigation lockers with installation space for extensive electronics
- Aft cabin with a full-width 88" x 63" double berth, hanging locker and shelves
- Storage below berths
- Cockpit seat locker to starboard
- Cockpit lazarette hatches port and starboard
- Propane gas bottle storage in cockpit for two 11 lb (5 kg) tanks

## Spars & Rigging

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### Mast:

- Novis Composites carbon-fiber mast for greater strength, lower weight, increased safety margins and improved performance
- White AwlGrip coated double spreader design
- Tapered mast section for reduced weight aloft
- Tapered airfoil swept spreaders
- Custom designed aluminum masthead with sheaves for 2 headsail halyards, 2 main halyards and spinnaker crane
- 1 x 19 Stainless steel wire rigging with forged turnbuckles
- Internal halyards
- Mast to deck tie rod to carry running rigging loads
- Custom designed stainless steel chainplate system ties to extensive internal FRP structure and hull
- Masthead anchor light
- Steaming light with foredeck illuminator
- Mast wiring conduit
- VHF wiring for masthead antenna
- Spartite mast sealing and chock system

# TARTAN 4100 SPECIFICATIONS & FEATURES

## Spars & Rigging cont'd

### Boom:

- White powder-coated aluminum boom
- (2) Single line reefs led aft to cockpit winch, allows reefing from the cockpit
- Internal 4:1 outhaul
- Two-part boom topping lift

### Running Rigging:

- (1) Low stretch genoa halyard
- (1) Low stretch main halyard
- (2) Dacron genoa sheets
- (1) Dacron mainsheet
- (2) Main traveler taglines
- (2) Adjustable genoa track lead taglines led to cockpit
- (2) Reef lines

## Deck Hardware

- (2) Harken 53.2 STC (self-tailing chrome) primary genoa winches
- (2) Harken 40.2 STC (self-tailing chrome) aft house top-mounted winches for sail controls and mainsheet
- (1) Harken 40.2 C genoa halyard winch mounted on mast
- 27" x 1 1/8" diameter, all-welded stainless steel stanchions, 4 hole mounting base with backing plate installation
- 27" x 1 1/8" tube double stainless steel bow rail with rail-mounted combination navigation light
- 27" x 1 1/8" tube double stainless steel split stern rail with rail mounted navigation light
- 7 x 19 double lifelines with port, starboard, and stern boarding gates with pelican hooks
- Custom designed and fabricated stainless steel stem fitting with integral double bow roller
- Custom fabricated rail mount chocks for bow mooring cleats
- Stainless steel 10" bow mooring cleats with backing plate
- Custom fabricated mid mooring chocks with 10" stainless steel mooring cleats, installed with backing plates
- Stern stainless steel quarter caps
- Stainless steel 10" aft mooring cleats
- 2" x 1 1/2" teak toerails through-bolted to 6060 T6 aluminum bar in hull flange
- Teak taffrail
- Polished stainless steel toerail mounted genoa track with eye slides, for outboard trimming of genoa when reaching
- Inboard Harken adjustable lead genoa tracks with wide sheave cars
- (3) Harken aluminum winch handles
- (8) Spinlock rope clutches for aft sail control leads
- Harken stacked double aft lead control blocks
- Harken turning blocks at base of mast for aft sail control leads
- Five-part Harken mainsheet system led to housetop self-tailing winch
- Harken traveler with six-part tagline adjustment led to aft end of housetop for easy adjustment
- Custom stainless steel mast collar with multiple attachments for blocks
- Polished chrome 4" dorades on teak dorade caps
- (2) Stainless steel dorade guards
- Companionway hatch sea hood with instrument pod
- 6" binnacle compass
- Split anchor locker lid with latch
- CE unlimited offshore approved stainless steel deck hatches
- CE unlimited offshore approved stainless steel port lights
- On deck drains to waterline discharge, eliminates hull streaking
- Extensive housetop teak handrails
- Manual cockpit mounted bilge pump
- Drink holders in cockpit
- Offshore ready, match molded, and gasketed cockpit seat hatches
- Hinge down swim platform with retracting cockpit seat hatches

## Tartan 4100 Design Dimensions

LOA.....	41 ft 3 in (12.57 m)
LWL.....	35 ft 9 in (10.9 m)
Beam.....	13 ft 6 in (4.11 m)

### DRAFT

Fin.....	7 ft (2.13 m)
Beavertail.....	5 ft 4 in (1.62 m)
Keel/Centerboard.....	4 ft 7 in (1.4 m)

### DISPLACEMENT

Fin.....	19,000 lbs (8618 kg)
Beavertail.....	20,400 lbs (9253 kg)
Keel/Centerboard.....	21,000 lbs ( 9525 kg)

### BALLAST

Fin.....	6,400 lbs (2903 kg)
Beavertail.....	8,000 lbs (3629 kg)
Centerboard.....	8,600 lbs (3901 kg)

### CAPACITIES

Fuel.....	50 gal (189.27 l)
Water.....	100 gal (378.54 l)
Auxiliary.....	56 hp diesel
Berths.....	7

### SAIL DIMENSIONS

Sail area.....	885 sq ft (82.22 sq m)
L.....	57 ft (17.37 m)
J.....	15 ft (4.57 m)
P.....	50 ft 10 in (15.49 m)
E.....	18 ft (5.49 m)
Mainsail Area.....	457.5 sq ft (42.5 sq m)
100% foretriangle.....	427.5 sq ft (39.1 sq m)

Bridge clearance.....	61 ft 6 in (18.75 m)
Ballast/displacement.....	36
Displacement/length.....	227.8
Sail area/displacement.....	17.1
Designer.....	Tim Jackett

CE approved for category "A" unlimited offshore  
Specifications are subject to change without prior notice.

