

# SAN JUAN YACHTS

## Specifications for the Construction Of The SJ40 IPS Motor Yacht

### DIMENSIONS

LENGTH	40'-7"	12.36 m
BEAM	12'-2"	3.71 m
DRAFT	2'-8"	0.82 m
DISPLACEMENT	17000 lbs.	7711 kg
FUEL CAPACITY	300 US Gallons	1155 l
WATER CAPACITY	80 US Gallons	303 l
CRUISING SPEED	30 Knots	
PROPULSION	Twin Volvo Penta IPS 500 (370 HP) D6 Common Rail Aftercooled Diesel Engines	

\*Specifications may be subject to change

### BUILDER:

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### DESIGNERS:

Gregory C. Marshall Naval Architect Ltd.  
&  
SANJUANYACHTS Design Team

Rev9/2/10

## BUILDERS COMMENTS

San Juan Composites LLC is pleased to introduce the new SJ40 IPS Sedan with Volvo Penta IPS pod drives; our newest model in our series of cruising lobster boat styled motor yachts.

We have heard from many prospects and owners of our SANJUANYACHTS over the years that have expressed a desire for us to update our SJ38 model by building a new high quality “lobster boat” styled motor yacht in the 40-foot range. This demand has prompted us to design and build our SJ40 IPS, which shares the handsome good looks of all our SanJuanYachts. Our SJ40 IPS combines lobster boat styling with state of the art design, engineering and composite construction to handle the rugged, no-nonsense environment of any ocean or waterway. Working with Gregory C. Marshall Naval Architects, our SANJUANYACHTS design team has designed a yacht on our proven hull form which provides comfort and sea keeping in difficult sea conditions yet allows for higher speed cruising in calm to moderate sea conditions.

At 40'-7" LOA x 12'-2" Beam our SJ40 IPS offers a premium level of interior space in a highly functional interior/exterior layout. Our industry recognized standard is used in building interiors, which offer unmatched care and craftsmanship. This standard includes fit and finish of joinery and systems, which is normally only available in the mega-yacht market.

The SJ40 IPS, like all of our SANJUANYACHTS, comes complete with an extensive list of standard equipment, which includes most items normally offered as optional equipment by others.

Performance for the SJ40 IPS includes a cruise speed of 30 knots made possible by its lightweight resin-infused composite structure and standard Volvo IPS 500 (370 hp) common rail diesel engines. Volvo IPS 450 (330 HP) and Volvo IPS 600 (435 HP) are offered as options.

The new SJ40 IPS offers increased speed with less horsepower resulting in reduced fuel consumption up to approximately 30%. IPS also provides faster acceleration, lower levels of sound and vibration and lower emissions per nautical mile. Low speed maneuvering is easier than ever before with a one hand joystick which controls fore and aft movement, sideways, diagonal and 360 degree rotation.

The SJ40 IPS is built in the USA using the American Bureau of Shipping Rules as guidelines. Machinery and equipment are installed using the rules and regulations of the United States Coast Guard and the American Boat and Yacht Council as guidelines. The result is yet another safe, high performance, personal motor yacht for the boat owner looking for unmatched fit, finish and attention to detail.

## HULL

The SJ40 hull has been designed and computer modeled to be both handsomely styled and capable in a broad range of sea conditions. The traditional flared bow with fine entry and tumble home aft is complemented by the hydro-dynamically efficient underbody. Tooling for the entire boat was modeled and cut by a computer controlled 5-axis router creating the most fair and precise parts available in the industry today. The SJ40 IPS hull is formed using a Kevlar® / E-glass and Corecell® foam core composite infused with vinyl ester resin. Dupont Kevlar® / E-glass hybrid is used to greatly increase the strength of the hull against damage caused by impact. The infusion process yields strong lightweight parts with high glass to resin ratios. The core is removed and replaced with solid glass and extra laminations in areas of major penetrations and high stress. Three composites watertight structural bulkheads separate the hull into damage control zones with dedicated bilge pumps. Structural bulkheads are built using Corecell® foam core with E-glass skins infused with vinyl ester resin. Longitudinal and transverse stringers are an E-glass Corecell® foam core composite. The entire structure of the boat is built using wood free composites. The hull is painted in the owner's choice of Imron LPU colors.

## DECK

The deck is a one piece infused composite molding using E-glass and Corecell® with vinyl ester resin. The hull is joined to the deck using an engineered flanged box joint and is bonded using a high strength adhesive with mechanical fasteners. This provides a permanent, watertight hull/deck joint.

## COCKPIT AND DECK

The large cockpit was designed to allow ample room for sitting, dining, fishing and sunbathing. An opening walk through transom door provides easy access on and off the boat via the swim step. The built-in transom seat provides both seating and underside bin storage. The storage bin is removable to provide additional storage space below in the lazarette. The centerline bin may be used as a cooler or may be set up as bait locker as an option for fishing. Sitting and sunbathing space is also available on the port and starboard engine compartment boxes with hatches that lift with the aid of lifting cylinders for engine access. Engine compartment hatches are supplied with teak decking as a standard. The cockpit deck is molded with 1" waterways. Teak decking is standard for the cockpit, pilothouse and on the composite swim step. A flush hatch in the deck provides easy access to the engines. Port and starboard cockpit bulwark lockers allow for storage of fenders and mooring lines. A removable teak cockpit table may be provided as an option.

### COCKPIT AND DECK, CONT.

Teak toe-rails and solid stainless steel half-round guards are fastened through the hull and deck flange. Six polished stainless steel deck cleats are provided for bow, stern, and spring lines along with custom stainless steel bow and midship chocks and chafe guards. A stainless steel deck fuel fill is located starboard side amidships. The water tank fill and holding tank dump are located on the starboard side forward. The foredeck anchor handling system consists of a stainless steel bow roller with a 22 lb. stainless steel “Bruce type” anchor and 20 feet of 5/16”galvanized chain spliced to 200 feet of 9/16” nylon rope. A Muir anchor windlass is standard. A Lewmar Low Profile 40 deck hatch is located over the forward stateroom. Four opening stainless steel portlights with screens provide ventilation to the cabin area. A stainless flagpole with stainless steel socket is supplied aft with a stainless steel flagpole supplied forward at the bow. Four stainless steel handrails provide handholds when moving forward on the side decks. A stainless steel bow rail is available as an option.

### PILOTHOUSE

The pilothouse is built of an E-glass, Corecell®, resin infused composite providing a stiff, strong, lightweight structure with sound and vibration dampening qualities. The pilothouse is accessed from the cockpit via a tempered glass door with locking hand set for security. Out board of the door are removable windows providing ventilation and all round visibility. A glass power opening sun roof is located on center line in the pilothouse providing additional ventilation. The starboard side helm is equipped with a Stidd Systems helm chair. Aft of the helm seat is the bar area with counter, stainless steel bar sink and teak storage locker. An optional icemaker may be installed in lieu of the teak locker. The portside settee with bright finished teak table provides seating for four with panoramic views. The power high / low table lowers to provide a double berth. A hatch below the table provides access to the storage space below. The pilothouse helm station provides for a complete array of electronics and instruments, and offers 360-degree visibility. Fresh air ventilation ducting with power vents allow for fresh air ventilation. The pilothouse is open to the galley below.

## INTERIOR

The interior is trimmed with teak and finished to a satin sheen. The hull sides forward are sheathed with teak “ceiling” strips. The galley and forward cabin sole is teak with holly splines. Countertops are surfaced with solid surfacing material. Forward of the galley is a walk around queen size berth which lifts for access to storage below. Teak drawers are supplied at the foot of the bed. The forward stateroom boasts two hanging lockers port and starboard. Ventilation and daylight are provided via a screened Lewmar overhead hatch and four opening screened portlights. Berth mattress is 5” foam composite with a wide variety of fabrics available for berth upholstery. Overheads are Majelite or equal with teak trim supports. Reverse cycle air conditioning is provided as standard equipment for cabin and pilothouse heating and cooling.

## GALLEY

The below decks galley is open to the pilothouse with an abundance of daylight provided by the pilothouse windshield directly above. A two-burner electric stove and built-in micro-convection oven are standard. A stainless steel sink is supplied with hot and cold water through a Scandvik mixer with a pullout-extending faucet. An abundance of storage is provided in above counter cabinets, below counter cabinets and drawers. The refrigerator is a custom stainless steel refrigerator/freezer with remote mount compressor. An opening portlight with screen above the galley provides ventilation. Drawers and overhead cabinets provide ample storage for galley supplies.

## HEAD

The head, with separate shower, is designed to be easily cleaned and maintained. A Sealand Traveler head is connected to a holding tank with shore side pump out fitting on deck. A discharge pump is provided for overboard use where allowed. The holding tank is sounded with a Tank Tender gauge. A stainless steel sink is supplied with hot and cold water. The separate shower with seat drains to a sump and is discharged via a drain pump. A mirror and lockers with shelves are provided. The head has an opening portlight with a screen.

## ELECTRICAL SYSTEM

A bank of two 4D AGM batteries provide ship's power. Two 4D AGM batteries provide starting power. Isolation is provided between the lighting and house circuits and the starting bank with the provision for emergency starting if necessary. Charging of the system is done through alternators mounted on each engine as well as a Magnum 2800 watt battery charger/inverter.

Two shore power receptacles are provided amidships on the starboard side to provide 110 V power to outlets in each cabin as well as the galley, head and pilothouse. A Northern Lights 6.0kw marine generator is standard with switching located at the main distribution panel. Switching for both the 12V and 110V are provided at the main distribution panel located on the inboard side of the helm seat as well as in the galley above the refrigerator both are equipped with a voltmeter and ammeter. All circuits are protected with circuit breakers and main disconnects. All hull penetrating marine hardware is bonded and connected to a sacrificial zinc plate located at the transom below the swim step.

Interior lighting is Imtra LED lighting for low power draw and extended bulb life. Overhead recessed lights are positioned in the pilothouse and cabin areas and are controlled by bulkhead-mounted dimmer switches. Two bulkhead mounted reading lights are located forward over the queen berth. Courtesy lights illuminate the walkway from the cockpit to the cabin sole. Six lights are located in the engine compartments, mechanical compartment and lazarette. LED navigation lights meeting International Rules are provided. Two Roca pilothouse windshield wipers with washers are supplied. An ACR spotlight with remote control is offered as optional equipment.

Most Navigation electronics packages may be installed at the helm as optional equipment including Autopilot, GPS, VHF, Chart Plotter, Sounder / Fishfinder and Radar systems. A Fusion AV700 multi zone stereo system supplies video to the recessed flat screen TV below decks as well as stereo throughout the boat.

## MACHINERY

The standard main engines are twin Volvo Penta IPS 500 common rail aftercooled diesel engines rated at 370 H.P each. The main engines are equipped with IPS drives for exceptional performance and maneuvering. All engines are painted white. The propellers are Nibral bronze, counter rotating. The engine compartment is protected by an automatic fire extinguisher system. An oil transfer pump system is standard for main engine and transmission oil changes.

The single 300-gallon capacity aluminum fuel tank is fully baffled and has a starboard side deck fill. The tank is sounded with a Tank Tender gauge. In-line Racor fuel / water separators are provided for each engine. Ventilation is provided via side deck vents in the aft cockpit bulwarks. The engine compartment is well lit and is easily accessed via a flush cockpit hatch and the large twin-engine hatches opening with lift cylinders.

### SOUND INSULATION

The cored hull, deck and superstructure construction provides for excellent sound and vibration damping. The main engines and machinery are isolation mounted to reduce noise and vibration. The engine compartment is lined with sound insulation to reduce noise levels providing quiet operation. Engine compartment hatches are lined with sound insulation and are gasketed to reduce noise levels.

### CONTROLS AND INSTRUMENTS

Transmission and throttle control for the main engines is achieved using electronic controls. The controls offer shift and throttle control with built-in safety factors for use during emergency maneuvers. Electronic engine synchronization is standard. Volvo IPS one handed maneuvering is provided with a joy stick located at the helm. The main engines are fully alarmed including both low oil pressure and high coolant temperature. The LCD engine instrument panels located at the helm console displays RPM's, oil pressure, water temperature and gear temperature and LCD display readouts can be customized. A 4 ½" Ritchie Navigator compass is mounted forward of the helm console. A Kahlenberg air horn system with tank-mounted compressor is standard. An 18" stainless steel destroyer type wheel with varnished mahogany trim is provided at the helm. A Raymarine autopilot system may be installed as optional equipment.

### PLUMBING

Eighty gallons of fresh water are stored in a baffled stainless steel tank with a Tank Tender sounding gauge. A water pump system provides water pressure. Hot water is supplied by a stainless steel six-gallon hot water heater. The shower has a sump pump system for discharge overboard. Three Rule 2000 GPH electric bilge pumps with Rule Ultra automatic float switches are located forward in the cabin, aft in the engine compartment and in the lazarette. Bronze thru hull fittings throughout are U.L. listed, and fitted with seacocks. A Village Marine 350 GPD water-maker is available as an option.

### PAINING

All exterior teak trim is finished to a high gloss using multiple coats of UV inhibited West System epoxy and finally numerous coats of clear Imron providing an extremely hard, low maintenance finish. The deck, pilothouse and fly bridge are painted with Imron paint. The hull is painted in the owner's choice of our standard Imron paint colors. Additional hull paint colors are available. Two coats of premium yacht bottom paint are applied according to owners color choice from standards offered. Name and hail in vinyl gold leaf on the transom is included in the commissioning.

### CANVAS AND UPHOLSTERY

All interior and exterior upholstery items are provided as standard equipment with owners choice of Sunbrella fabrics. Pilothouse cushions may be upgraded to Ultraleather or Spinneybeck leather. A wide assortment of exterior covers, canvas, biminis, and sunshades are provided for the cockpit and fly bridge as both standard and optional equipment.

### COMMISSIONING

All SanJuan Yachts are commissioned, launched and extensively sea trialed before delivery in the San Juan Islands. Standard commissioning items include:

- Custom owner's manual and equipment file
- Four 8" fenders
- Six dock lines (6 x 35')
- Anchor with 20' of chain and 200' of line
- Six adult and two child's life jackets
- Oil discharge plaque/waste discharge plaque
- Three 2.5 lb. ABC fire extinguishers
- Flare kit
- First-aid kit
- One waterproof flashlight
- Name and hailing port in vinyl "gold leaf" on the transom