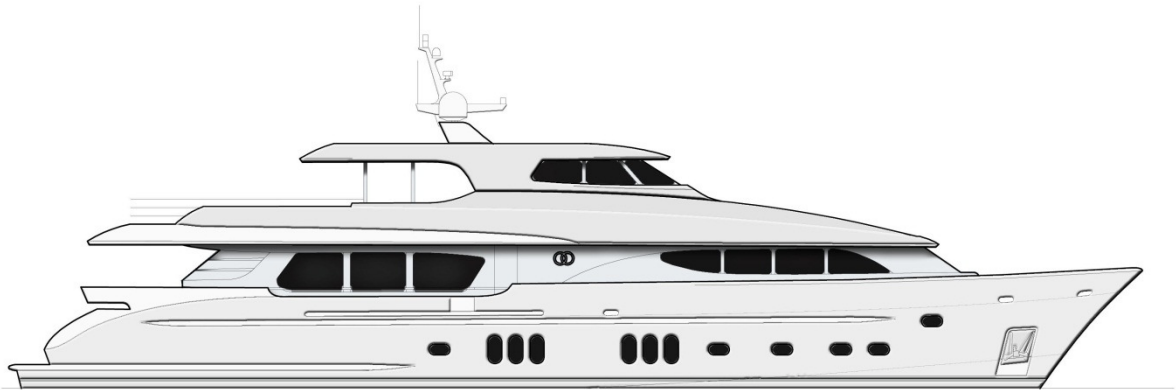




# Moonen 105 Alu

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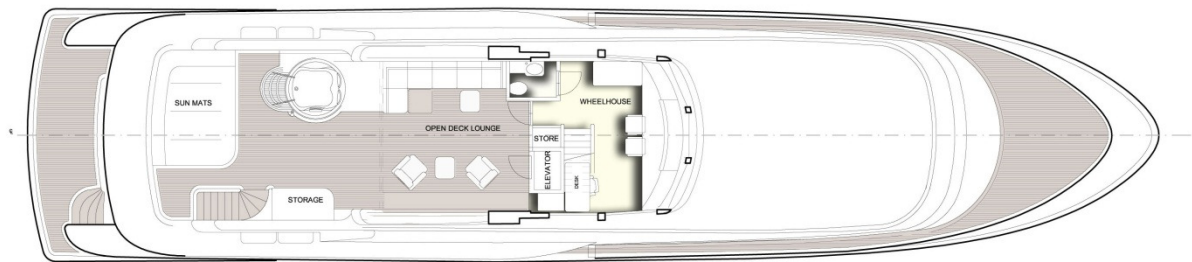




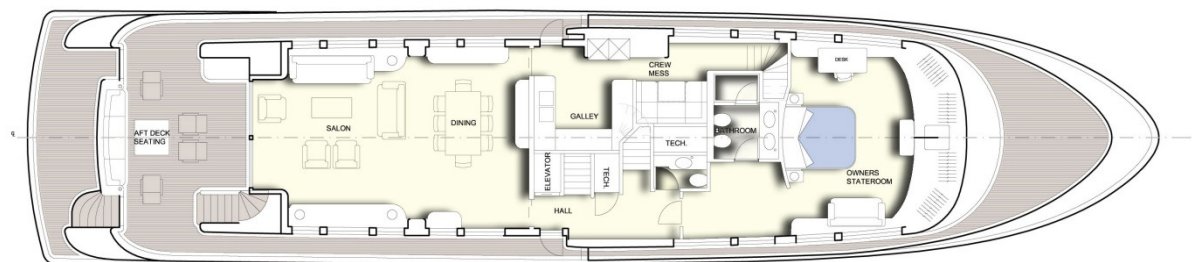
# Moonen 105 Alu

## GENERAL ARRANGEMENT

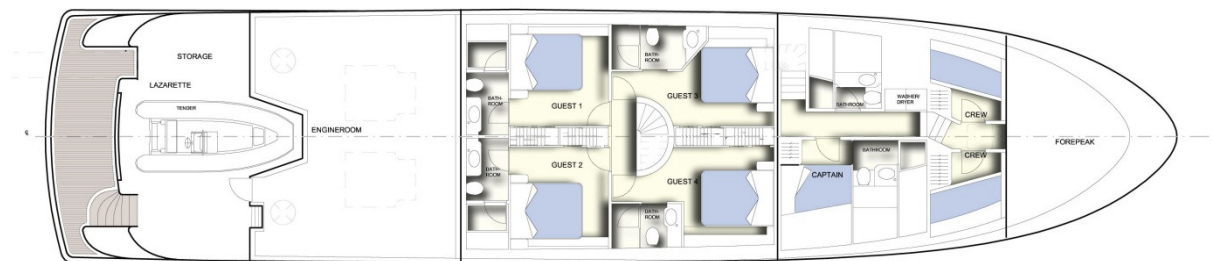
### Sun deck



### Main Deck



### Lower Deck





# Moonen 105 Alu

## PRELIMINARY SHORT SPECIFICATION

*All values and trade names are preliminary until final design*

### General

This is a twin-screw, three-deck semi-displacement aluminium motor yacht with swimming platform, half full beam superstructure, owners cabin at forward main deck, four double guest cabins and two double crew cabins at lower deck. At bridge the wheelhouse and an open deck lounge can be found. Optional a one person platform lift can be installed from main deck to bridge deck. In the aft ship a tender (owners delivery) can be stored and launched via a hatch in the transom.

Moonen Shipyards will build and fit out the yacht in accordance with their usual high quality standards and deliver it to the principal. After extensive sea trials, in a ready-to-operate condition.

Design:	René van der Velden Yacht Design & Moonen Shipyards bv
Naval architect:	t.b.d.
Interior design:	t.b.d. Optional in consultation with principle
Classification :	Bureau Veritas classification, notation to be determined (optional) MCA LY2 short range, Cayman Island interpretation. (optional)

### Main Dimensions

Length overall:	appr. 32,20 metres
Length waterline:	appr. 28,90 metres
Beam max:	appr. 7,50 metres
Beam moulded:	appr. 7,20 metres
Draught max.:	appr. 2,10 metres
Displacement full load:	appr. 160 metric tons
Maximum speed:	appr. 22,0 knots at 10% load
Cruising speed:	appr. 18,0 knots at 50% load
Range:	appr. 2.750 nautical miles at 11 knots

### Construction

Hull:	Aluminium, with round bilge, double bottom integrated tanks, box keel, stainless-steel portholes with hardened glass, watertight hinged bulkhead doors and watertight transom door.
Superstructure & mast:	Aluminium, welded window frames with double (tinted) glazing, hinged water tide doors, high-polish stainless-steel electrical sliding door at aft deck.
Insulation:	Thermal and acoustic insulation based on Rockwool as advised by an acoustics consultant.

### Tank capacities

Fuel:	appr. 25.000 litres
Fresh water:	appr. 5.000 litres
Waste water:	appr. 1.500 litres
Used lube oil:	appr. 500 litres



# Moonen 105 Alu

Propulsion, manoeuvring and stabilisation	
Diesel engines:	Caterpillar C32 Acert with wet exhaust
Power rating:	E, 2x 1343kW at 2300 rpm
Transmission:	t.b.d.
Propellor shafts:	Rubber Design, oil bath lubricated
Propellers:	NiAlBronze 5-blade fixed pitch propeller (FPP)
Engine controls:	Marex OS-II
Steering:	Naca shaped stainless steel rudders, Rubber Design grease lubricated shaft with double hydraulic ram system
Bowthruster:	Twin propeller, appr. 65kW.
Stabilizers:	Hydraulic stabilisation underway with fins. Optional hydraulic-electrical stabilisation at anchor.
Systems	
Fuel:	Integrated double bottom tanks and a day tank in engine room, Kübler Level sensors, Racor double filters, electrical fuel trimming pump and manual Back up pump. Optional Alfa Laval fuel separator.
Clean lube oil:	Oil supply system with electrical pump, optional clean oil tank.
Used lube oil:	Used lube oil tank with electrical pump and shore connection point.
Cooling water:	Two water inlets with filters and butterfly valves connected to a cross-over.
Bilge water:	Two electrical pumps in the engine room (one is general service pump) and suction points through the boat, connected at a manifold. Optional bilge water separator with bilge water tank.
Fire extinguishing:	General service pump with several hose connections through the yacht, Novec hand remote fire extinguishing system in engine room and free standing foam extinguishers in each area.
Fresh water:	Integrated and painted double bottom tank, two Speck water-pressure pumps, Idromar carbon filter, 2x210 litre hot water boilers. Optional water maker.
Waste water:	Integrated and painted double bottom tanks and/or Poly-ethylene tanks with electrical overboard pump or to shore connection. Optional Hamann sewage treatment system with solid waste tank.
Hydraulic:	Central hydraulic system with two pumps at main engines, 400V electrical harbour pump. Supplying bow thruster, anchor winches, Capstans, deck crane and passerelle. Hydraulic steering machine with separate hydraulic power pack and wired controls.



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HVAC:	Marineair aircondition, Caribbean conditions, with chiller in engine room and fancoils in accommodations. Heating through reverse cycle and optional in line water heater and/or chill chasers at each fan coil.
	Marineair fresh air system in lower-deck cabins, crew area and owners cabin at maindeck.
	Frequency controlled Salor engine room ventilation, with fire shutters and one mist eliminator in inlet. Floor heating in bathroom
<b>Electrical installation</b>	
Main:	230 / 400 volt 3-phase system, 24V emergency system.
Power supply:	Synchronized generators, appr. 2x50kW. Shore power 400V / 100 A with shore transformer.
Monitoring and control	PLC controlled with touchscreens in wheelhouse and engine room
Interior lighting:	220V, 12V halogen and 24V emergency lighting, partly with dimmers.
Navigation lighting	24V Aqua Signal.
Deck lighting:	Savage Marine.
Searchlight:	Remote controlled Sanshin searchlight in mast.
Alarm systems	Integrated burglar and fire-alarm system.
<b>Navigation &amp; communication equipment, provisional sum, to be selected.</b>	
<b>Entertainment equipment, provisional sum, to be selected.</b>	
<b>Household equipment, provisional sum, to be selected.</b>	
Galley equipment:	Miele or equal.
Laundry:	Professional Miele washing machine and dryer.
Bar bridge deck:	Refrigerator and icemaker.
Wetbar aft deck:	Refrigerator.
<b>Exterior equipment</b>	
Bollards and fairleads:	Eight stainless steel tubular double bollards with stainless steel fairleads, two midship fairleads with horn, two smaller V-bollards at swimming platform.
Anchor and chain:	Two Balanced appr. 120 kg Pool-N anchors. 2x110m 14 mm galvanised chains.
stainless steel anchor pocket	
Anchor winch:	Two Muir hydraulic winches type VRC 6000.
Capstans:	Two Muir hydraulic capstans, type VC 3500.
Gangway:	Hydromar hydraulic gangway.
Life rafts:	RFD life rafts.
Swimming ladder:	Stainless-steel, removable.
Accommodation ladder:	Marquipt manual.
Railing:	High-polish stainless-steel round 38mm where applicable.
Decking:	15mm teak decking at main deck, flying bridge, swimming platform, outside stairs and benches.
Covers:	Provisional sum, to be selected.



# Moonen 105 Alu

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## Interior

A high-quality silk-sprayed cherry wood interior will be installed according the layout in the general arrangement.  
The interior flexibly mounted to dampen vibration and to reduce noise.

Floors:	Insulated multiplex plates covered with carpet.
Walls and doors	Multiplex plating with silk cherry finish.
Ceilings:	Fabric lined multiplex panels.
Cabinets and bedframes	Multiplex plating with massive details with a silk cherry finish.
Crew:	White HPL multiplex plating with massive cherry profiles, fabric lined ceilings.
Upholstery:	Provisional sum, to be selected.
Marble, granite, tiles:	Provisional sum, to be selected.
Door hardware:	Provisional sum, to be selected.
Sanitary equipment:	Provisional sum, to be selected.

As an option an interior designer can be invited to style the interior in cooperation with the principal, to make a fully customized interior.

<b>Exterior paintwork</b>	Awl-Grip exterior paint system.
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