

| <b>Overview</b>         |  |  |  |  |  |
|-------------------------|--|--|--|--|--|
| Type                    | KOOPMANS 48 Decksalon/Aluminium/Centerboard  |  |  |  |  |
| Boatname                | STORMVOGEL (since maiden journey 1997)   |  |  |  |  |
| Build                   | 1995 (into water 1997)   |  |  |  |  |
| Dimensions              | app. 14,46 x 3,95 x 2,70 m   |  |  |  |  |
| Draft                   | 1.45/2.70 m  |  |  |  |  |
| Mast hight              | app. 19 m  |  |  |  |  |
| Yard                    | Koopmans Kasko Sneek / Wilhelmina Yard<br>(both THE NETHERLANDS)                             |  |  |  |  |
| Design                  | Dick Koopmans  |  |  |  |  |
| Hull material           | Aluminium  |  |  |  |  |
| Superstructure material | Aluminium  |  |  |  |  |
| Deck material           | Aluminium / Teak   |  |  |  |  |
| Window material         | Aluminium / Doppelglas   |  |  |  |  |
| Hull shape              | S-Frame  |  |  |  |  |
| Keel                    | Centerboard (hydraulic, manual pump)   |  |  |  |  |
| Weight                  | app. 19 tons (net 16 tons)   |  |  |  |  |
| Ballast                 | app. 8 tons  |  |  |  |  |
| Dieseltank              | 2 Tanks, in total 650 Liter  |  |  |  |  |
| Watertank               | 2 Tanks, in total 750 Liter  |  |  |  |  |
| Black&Greywater tank    | 2 Tanks, in total 220 Liter  |  |  |  |  |
| Daytank                 | No (temprrarysolution for Genset)  |  |  |  |  |
| Wheel / Rudder          | Wheel, Whitlock (1 mechanic, 1 hydraulic)  |  |  |  |  |
| Emergency rudder        | Yes, in stern locker   |  |  |  |  |
| Windfane                | Yes, HYDROVANE (new 2/2012)  |  |  |  |  |
| Anchor                  | Yes, electric LEWMAR V4 electric (new 3/2014)<br>+ 100 meter chain (new 3/2014) + Deltaanker |  |  |  |  |
|                         |  |  |  |  |  |
| <b>Interior</b>         |  |  |  |  |  |
| Design/Style            | Custom spefic classic  |  |  |  |  |
| Material                | Bubinga hard wood  |  |  |  |  |
| Cabins                  | 2 (+Salon +Shower and toilett)   |  |  |  |  |
| Berth                   | 4 (+1 in Salon)  |  |  |  |  |
| Headroom                | Saloon+Deckhouse app. 1,90m / Forecabin app. 1.85m   |  |  |  |  |
|                         |  |  |  |  |  |
| Toilett                 | 1 (manuell)  |  |  |  |  |
| Shower                  | 1 (with sink)  |  |  |  |  |
| Heater                  | Webasto 2010 CV, hot water system with radiators   |  |  |  |  |
| Air condition           | No   |  |  |  |  |
| Hotwater                | Yes (Boiler via engine or shore power)   |  |  |  |  |
| Waterpressuresystem     | Yes  |  |  |  |  |
| Galley                  | Yes  |  |  |  |  |
| Fridge and Freezer      | Yes, two boxes with each a compressor, liquid cooled   |  |  |  |  |
| Stove                   | Ja, 3 Flammen FORECE TEN / Gas   |  |  |  |  |
| Oven                    | Ja, FORCE TEN / Gas  |  |  |  |  |
| Exhaust hood            | No   |  |  |  |  |
|                         |  |  |  |  |  |

| <b>Engine / Electric</b>      |  |  |  |  |  |
|-------------------------------|--|--|--|--|--|
| Main engine                   | NANNI 4 Zylinder   |  |  |  |  |
| Type                          | NANNI N.85   |  |  |  |  |
| Horse power                   | 85 PS  |  |  |  |  |
| Operating hours               | ca. 1.300 (neu in 09/2012)   |  |  |  |  |
| Impusion                      | MAXPROP / SHAFT / AQUADRIVE (refit HUTTING YACHTS 2009)  |  |  |  |  |
| Cooling system                | Indirekt   |  |  |  |  |
| Consumption                   | ca. 5 Liter Diesel   |  |  |  |  |
| Cruising speed                | ca. 7 Knoten   |  |  |  |  |
| Propeller                     | 3 Flügel MAXPROP (neu HUTTING YACHTS 2/2012)   |  |  |  |  |
| Lubrication                   | Seewasser  |  |  |  |  |
| Bowthruster                   | Ja (neu HUTTING YACHTS 2009)   |  |  |  |  |
| Gas detector                  | Nein   |  |  |  |  |
| Bilgepump (electric / manuel) | 1 Manuell, 2 Elektrisch  |  |  |  |  |
| Electrical installation       | Zentrale Sicherungen unter dem Kartentisch   |  |  |  |  |
| Voltage                       | 12 volt + 220 volt via inverter or genset; 24 volt for bow thruster  |  |  |  |  |
| Batteries                     | Mainengine 12V/90Ah, generator 12V/90Ah,Housing 3*12V/200 Ah (all new 2/2015),bow thruster 2*12V/110 Ah (new 4/2015) |  |  |  |  |
| Genset                        | Yes, EMI MDS 102 (4 kW, 2 cylinder PERKINS)  |  |  |  |  |
| Charger                       | Yes, 2 VICTRON PALLAS  |  |  |  |  |
| Inverter                      | Yes, VICTRON 1.500 Watt  |  |  |  |  |
| Batterie monitor              | Yes  |  |  |  |  |
| Solarpanel                    | Yes, 3 (1*30 Watt, 2*95 Watt)  |  |  |  |  |
| Wind- and towing generator    | Yes,AMPAIR AQUAIR 100 Watt (Windmill, Propellerturbine)  |  |  |  |  |
|                               |  |  |  |  |  |
|                               |  |  |  |  |  |
|                               |  |  |  |  |  |
| <b>Rigging</b>                |  |  |  |  |  |
| Rig                           | Cutter   |  |  |  |  |
| Mast                          | Aluminium, brand Proctor, withe painted  |  |  |  |  |
| Furler                        | Yes, Yankee RECKMANN 30 and Staysail RECKMANN 20 (both new 2/2012)   |  |  |  |  |
| Sails                         | Mainsail 42 m2 Triradiaal, Hydra Net Radial 433 + Persenning + Lazyjack (new 2/2012)                                 |  |  |  |  |
|                               | Yankee 48.5 m2 Triradiaal, Hydra Net Radial 433 (new 2/2012)   |  |  |  |  |
|                               | Staysail 27.2 m2 Triradiaal, Hydra Net Radial 433 (new 2/2012)   |  |  |  |  |
|                               | Storrsail ca. 9 m2 (new 2/2012)  |  |  |  |  |
|                               | Parasailor brand WINGAKER app, 148 m2 (new 4/2012)   |  |  |  |  |
| Reffsystem                    | Foresails: Furler / Mainsail jiffy reef with lazy jacks  |  |  |  |  |
| Backstay tigthner             | Yes, hydraulic (NAVTEC, refit 2/2012)  |  |  |  |  |
| Downhauler                    | Yes, Proctor mechanic  |  |  |  |  |
| Winch                         | 8x LEWMAR self tailer (2*54st / 5x44st / 1x34st)   |  |  |  |  |
| Spiboom                       | Yes, Aluminium   |  |  |  |  |
| Shrouds                       | 2 lower shrouds, 4 upper shrouds, DYFORM (new 2/2012)  |  |  |  |  |
|                               |  |  |  |  |  |
|                               |  |  |  |  |  |

| <b>Navigation (all new 2/2012ff)</b> |   |  |  |
|--------------------------------------|---|--|--|
| Compass                              | Yes, 2, RIVIERA URANIA and FURUNO PG700   |  |  |
| GPS                                  | Yes,2, FURUNO GPS-33 and FURUNO AIS-50  |  |  |
| Depth sounder                        | Yes, FURUNO DST800  |  |  |
| Speed indicator                      | Yes, FURUNO DST800  |  |  |
| Wind indicator                       | Yes, FURUNO RO WIND PLUS  |  |  |
| VHF                                  | Yes, RAYMARIN i100 and ICOM Handheld  |  |  |
| Radar                                | Yes, FURUNO DRS2D (lan)   |  |  |
| Plotter                              | Yes, FURUNO MDF12 with worldwide charts (new 2/2012)<br>(coconut milkrun)               |  |  |
| Autopilot                            | Yes, FURUNO NAVPILOT 700 (hydraulic)  |  |  |
| AIS                                  | Yes, FURUNO AIS-50  |  |  |
| Navtex                               | Yes, FURUNO FAX-30  |  |  |
| Wetterfax                            | Yes, FURUNO FAX-30  |  |  |
| Navigation-PC                        | Yes, PANASONIC Toughbook CF29 mit MAXSEA 1.9x and<br>worldwide chars (coconut milkrun)  |  |  |
| SSB short wave radio                 | Yes, ICOM 801 with AT 101 antenna tuner   |  |  |
| Satellite communication              | Yes, SAILOR Thrane&Thrane 150   |  |  |
| Stereo Radio                         | Yes, Kenwood CD/SD/BT Radio   |  |  |
|                                      |   |  |  |
|                                      |   |  |  |
| <b>Equipment</b>                     |   |  |  |
| Sprayhood                            | Yes   |  |  |
| Bimini                               | Yes   |  |  |
| Liferaft                             | Yes, VIKING RescYou 6 persons (new 2/2012; maintain 3/2014)                             |  |  |
| Winter tent                          | Yes (t.b.v.)  |  |  |
| Bathing platform                     | Yes (can not be used because of mounted HYDROVANE)                                      |  |  |
| Deck shower                          | Yes   |  |  |
| Deck wash                            | Yes   |  |  |
| Anchor wash                          | Yes   |  |  |
| Fenders                              | Yes, 6  |  |  |
| Watermaker                           | Yes, DESOLATOR DUO60 (12V/220V); 60 Liter/h (new 01/2013)                               |  |  |
|                                      |   |  |  |
|                                      |   |  |  |
| <b>Miscellaneous</b>                 |   |  |  |
| Shipping routes                      | few years Northsea and Balticsea / since 2012 worldwide                                 |  |  |
| Value added tax                      | Yes, paid in THE NETHERLANDS, documents available                                       |  |  |
| Maintenance and Repair               | Yes, permanent by professional yards in THE NETHERLANDS and<br>NEWZEALAND               |  |  |
|                                      | 2005: Hull new painted; New Teakdeck  |  |  |
|                                      | 2009: Bowthruster, Corrosion removal; Sealings; Propellershaft                          |  |  |
|                                      | 2012: Major refit (see separate documentation)  |  |  |
|                                      | 2014: Refit and improvement (see separate documentation)                                |  |  |
|                                      | Documentation: Building and Refit2012   |  |  |
| Owners                               | 3, Builder (app. 12 Years); Hobbysailor (app. 3 Years);<br>World cruiser (3 Years plus) |  |  |

|                         |  |  |  |  |  |
|-------------------------|--|--|--|--|--|
|                         |  |  |  |  |  |
|                         |  |  |  |  |  |
| <b>Known Projects</b>   |  |  |  |  |  |
| Hull and Superstructure | Corrosion removal / Bubble removal                             |  |  |  |  |
| Watermaker              | Tankfilling improvement  |  |  |  |  |
| Genset                  | Starter engine maintenance                                     |  |  |  |  |
|                         |  |  |  |  |  |
|                         |  |  |  |  |  |
| <b>Special Events</b>   |  |  |  |  |  |
| Main engine             | Flodded by seawater in 9/2012; Maintained 10/2012              |  |  |  |  |
| Rig                     | Hit by sqall in12/2012; Maintained 01/2013                     |  |  |  |  |
| Rig                     | Crack of lower starboard shroud in 10/2013; Maintained 11/2013 |  |  |  |  |
| Center board            | Leack of center board shaft in 06/2014; Maintained 07/2014     |  |  |  |  |