



## 'NANO 23 TUG'

Boat Series / Model	Nano 23 / Tug
Application	Line Handling / Hose Handling / Tug Boat
Classification	LRS: A1, Work Boat Mono G1
Hull Material	Aluminium 5083
Length Overall	6.90 m
Beam Overall	2.55 m (With fender)
Draught	0.75 m
Displacement	2.8 t (Light ship)
Bollard Pull	0.6 t
Max. Speed	10 kn
Fuel Capacity	100 L
Main Engine / Model	HATZ / 4L41C (Air-cooled diesel engine) 67 hp / 49.8 kW @ 3000 rpm
Gearbox / Model	ZF / 45A
Electrical System	24V with 2x 100AH Gel batteries
Bilge Pump System	2x elec. bilge pump + 1x manual bilge pump

## NANOTUG | Tug Boat

The NanoAir is a heavy duty versatile aluminium workboat with a Hatz air-cooled inboard diesel engine, with no thru-hull penetrations. Can be started outside the water and can operate in mud, oil slicks, or heavily contaminated waters. Designed by Lomocean of New Zealand, authors of Earthrace and Planet Solar Turanor and other award winning vessels.

### Main features:

- Thick marine Aluminium
- Extreme fendering + rubbing rails
- Deep Skeg, protecting hull, propeller and rudder
- Unsinkable (voids filled with foam)
- Heavy duty, air cooled, fully mechanical inboard diesel
- Engine can be hand started without battery (option)
- Engine can start and run with water as high up as crankshaft CL
- Engine uses oil only as lubricant and coolant, no water in engine
- No thru hull openings, no valves, no strainers and no water pumps
- Dry exhaust
- Cast iron heavy duty gearbox
- Straight shaft drive with water lubrication
- Large diameter propeller for high efficiency & large push/pull force
- Extremely fuel efficient
- Smooth planning transition
- Turns on a dime, despite being single prop.
- Very stable, soft and dry ride
- Wide walk around safe deck with hand grip everywhere
- Square bow for stable pushing and easy boarding
- Sheer line with rocker in plan view for easy breaking off
- Three sided wheelhouse with opening forward window(s)
- Small cabin for resting/storage/Porta-potty option.
- Towing bollard optional
- Oversized lifting lugs fit for daily lifting.
- Easy to dock on its own keel (integral chocking frame for side support)
- Trailerable (Trailer option available)
- Lloyds Register of Shipping (LRS) design approval
- Can be built under LRS survey
- CE approved
- MCA possible

