

Tidy compact well-maneuvering all-round inland waters tug/ push boat which produces 7.8 tons bollard pull. Outfitted with propeller in nozzle and two balanced hydraulically operated rudders, hydraulically driven bow thruster, liftable wheelhouse, 2 hydraulically driven coupling winches and two towing bits. Through the years vessel frequently updated with new outfitting, in 2019 new main engine installed.

Type	Tug/ push boat	
Built	1979, Shipyard Jac. Den Breejen & Zn., the Netherlands	
Dimensions	14.56 x 4.64 x 2.03 mtrs	
Draft	1.96 up to 2.40 mtrs	
Propulsion	Single fixed pitch 5-blade dia. 1200 mm propeller in nozzle	
Main engine	Volvo Penta, type D16C-D-MH, mfd. 2017, newly installed 2019. Emission label CCR2	
Output	600 hp at 1800 rpm	
Gearbox	Masson, type RSD281, ratio 4.704 :1	
Cooling system	Flat bottom cooling and partly also via heat exchanger in combination with wet exhaust gas system	
Steering system	2 hydraulically operated balanced type rudders, 1 make Buyck steering unit, 1 steering wheel hydraulic pump / 1 via PTO main engine and by 1 electrically 24V driven hydraulic pump, built 2019	
Speed	± 10 knots free sailing	
Bollard pull	7.8 tons	
Displacement	Max. 72.881 / min. 63.745 m ³ (according to inland tonnage certificate)	
Deck equipment	Bow push chair with rubber fender Small stern rubber fender Tyre fendering along sides Two hydraulically driven 25 tons coupling winches on aft deck Main towing bitt with 10 tons towing hook Small extra towing bitt aft Two removable towing wire guide pins Electrically 380V driven drum type bow anchor winch Hydraulically lowerable navigation mast Fuel transfer pump with hose reel and gun (installed in aft peak)	
Aux. engines	In engine room 1 generator set make Kubota diesel engine, type V3300-BG-EU1, built 2016, liquid cooled, emission label EU Fase III, with Stamford alternator; in aft peak/ aux. engine room 1 make Mastervolt, type Whisper 6 silent pack gen set, diesel engine driven emission label N/A, liquid cooled	
Output	25 kVA (220/ 380V) and 6.4 kVA (220V)	
Bow thruster	Make Kalkman, channel type, hydraulically driven 45 pk, built 2017	
Hydraulic powerpack	Unit for coupling winches and bow propeller, with 380V driven and 1 via PTO main engine driven	
Tank capacities	Fuel oil	8.0 m ³
	Fresh water	3.5 m ³
	Dirty water	1.2 m ³ (in use for ballast water)
Accommodation	Below deck 2 bunks and small galley; spacious wheelhouse also in use as day room with diner table and 1 bench which can be transformed in 1 bed. Above deck 1 shower and toilet space	
Heating/ climate systems	CV system with make Baxi gasoil type heater. Wheelhouse with electrical floor heating system and airco-unit	
Nav./comm. equipment	3x VHF, river radar, auto pilot, rudder and turn angle indicator, GPS compass, echo sounder, AIS, camera system, 2 remote controlled search lights, intercom system	
Class	EU inland waters certificate for inland vessel as tugboat for EU zone 3 and 4 and rivers Rijn, Waal and Lek in the Netherlands; with push boat certificate appendix for inland waters in the Netherlands; with Kingdom of the Netherlands Dutch limited dangerous dry goods AND certificate type 7.1.2.19.1.	
Remark	Aluminium wheelhouse hydraulically liftable. Variable view height ± 2.20 up to 6.00 m (above empty waterline).	

























