



MECTRON ENGINEERING PTE LTD
Engineered Systems & Solutions for Marine & Offshore

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Compact

HYDROPHORE SET (unmanned and fully automated)

WATER SUPPLY MADE SIMPLE. This is what a Mectron supplied Hydrophore System will do for your vessel. The Mectron's Intelligent series of Hydrophore will ensure that you have water at sufficient amount and pressure at all times for your potable and sanitary water usage. It can also serve as a fire pump jockey system.

Each unit is pre-wired, factory set and tested before delivery. Therefore the end user only requires to perform 3 simple steps of Plug, Connect and Operate. They will only need to plug in the power supply, connect the inlet/outlet pipes & air supply and the unit will be ready for operation.

The Intelligent series of Hydrophore come in 3 ranges:

- Compact • Standard • Customised

The Compact range of the hydrophore is designed for supply vessels like the AHTS (Anchor Handling Tug Supply) with limited space in mind. The pressure tank not only provides the storage space but the pumps and control are mounted on the side of the pressure tank to reduce the foot print required.

The Standard range of hydrophore will be suitable for most vessels. The pressure tank, pumps, control and piping appurtenances are mounted on a structural skid which is grit blasted and epoxy painted for marine application. The structural skid will allow ease of lifting of the system during installation.

The Customised range of hydrophore is specially engineered system tailored to yards' and owners' special requirement like low operating temperature units, redundant pressure vessel, health authority grading of tanks, example NIPH (Norwegian Institute of Public Health)

Each Mectron's Intelligent series of Hydrophore is equipped with an adequately sized stainless steel pressure tank that is built in accordance with ASME section VIII Div.1. ASME U stamp and Class approved pressure vessels are available upon request.

The Intelligent series of Hydrophore will be equipped with two units of self priming centrifugal pumps in a duty and standby configuration to allow for sufficient redundancy. The System Controller with its in-built logic and with a pair of pressure controllers will ensure that the duty pumps operation will maintain the system pressure and delivery capacity at all times.



Standard

In instances when the water demand is higher than the normal consumption, the system will also start the standby pump automatically to cater for this extra demand effortlessly.

The expansion and contraction of the air pocket inside the pressure vessel works as an air cushion in synchronization with the pumps and controllers. The minimum starting and stopping of the pumps ensure the system water pressure is maintained without erratic pressures surges.

Safety is an important aspect to the Intelligent Hydrophore. The system's pressure vessel is designed with a factory set pressure relief valve and self closing level gauge in case of an accidental breakage of the sight glass. The in-built control logic will not allow the pumps to over pressure the tank even when system is operating manually. The electrical wiring are of Class approved fire retardant cables and are mounted on heavy duty galvanized cable tray.

The hydrophore system piping is constructed from high strength hot galvanized piping or stainless steel piping. The valves and piping appurtenances are made from high quality bronze. The piping is factory fitted and tested for leakage prior to delivery to ensure the system integrity is not compromised.

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INTELLIGENT COMPACT SERIES

Type	Capacity		Power		Dimension				Connection		
	Tank (litre)	Pump m ³ /hr	Pump kw	Supply Amp(3 ph)	Length mm	Width mm	Height mm	Weight kg (dry)	Water(in) dia. mm	Water(out) dia. mm	Air (in) dia. mm
C500	500	4	2.2	20	1115	915	1900	550	32	50	12.5
C750	750	4.8	5.7(x2)	32	1115	915	2050	650	40(x2)	50	12.5

INTELLIGENT STANDARD SERIES

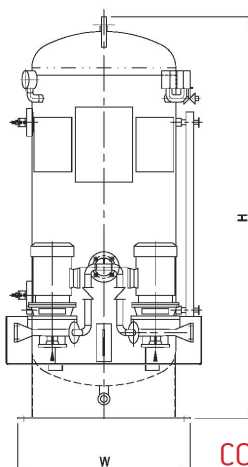
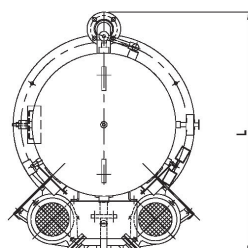
Type	Capacity		Power		Dimension				Connection		
	Tank (liter)	Pump m ³ /hr	Pump kw(x2)	Supply Amp(3 ph)	Length mm	Width mm	Height mm	Weight kg (dry)	Water(in) dia. mm	Water(out) dia. mm	Air (in) dia. mm
S800	800	18	11	80	2000	1300	1930	1400	65	50	12.5
S900	900	19.5	15	80	2000	1300	2100	1500	65	50	12.5
S1000	1200	34	25	150	2200	1800	2350	2000	65	50	12.5
S1500	1500	34	25	150	2200	1800	2650	2200	65	50	12.5

INTELLIGENT CUSTOMISED SERIES

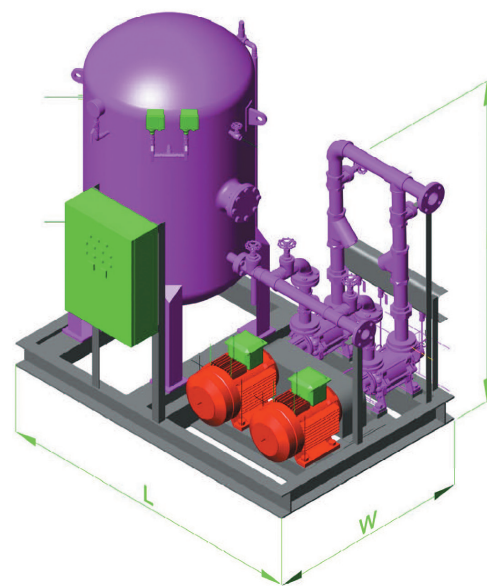
Please contact us if a customised system is required.

Reference Installations

Project	Owner
B248	Ensco 102
B252	Atwood Oceanics
B257	Ensco 106
B263	DDI 2 - Deep Driller 2
B264	Ensco 107
B267	DDI 3 - Deep Driller 3
B269	Awilco 1 - Wilcraft
B271	DDI 5 - Deep Driller 5
B277	Sea Drill 1 (Sea Tankers)
B278	Ensco 108
B282	Diamond Offshore
P194	Diamond Offshore
B283	GDI - Gulf 5
B284	DDI 6 - Deep Driller 6
B285	Awilco 2 - Wilboss
B286	Ensco 8500
B287	Ensco 8501
B288	Global Santa Fe
B289	DDI 8 - Deep Driller 8
B290	Discovery Hydrocarbons - J.U.
B291	Sea Drill 8
B292	Jindal Pipes - J.U.
B293	Awilco 3 - WilStrike
B294	Mercator Lines - J.U.
B297	The Great Eastern Chartering
B298	Ensco 8502



COMPACT



STANDARD

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