



ETec

Engineering Solutions for the Movement of Water

**HYDRAULIC
EFFICIENCY**

RELIABILITY

INNOVATION



THE COMPANY

ETEC is synonymous of innovation, hydraulic efficiency and reliability

Technical innovation in manufacturing high volume pumps, and the subsequent breakdown of technological paradigms, has been the force that motivates our team of engineers since the origins of the company in the late 1980's.

ETEC's success relies in the continuous innovative developments on pumps, making every effort to ensure the efficiency and proper handling of large water volumes, through our products and engineering services.

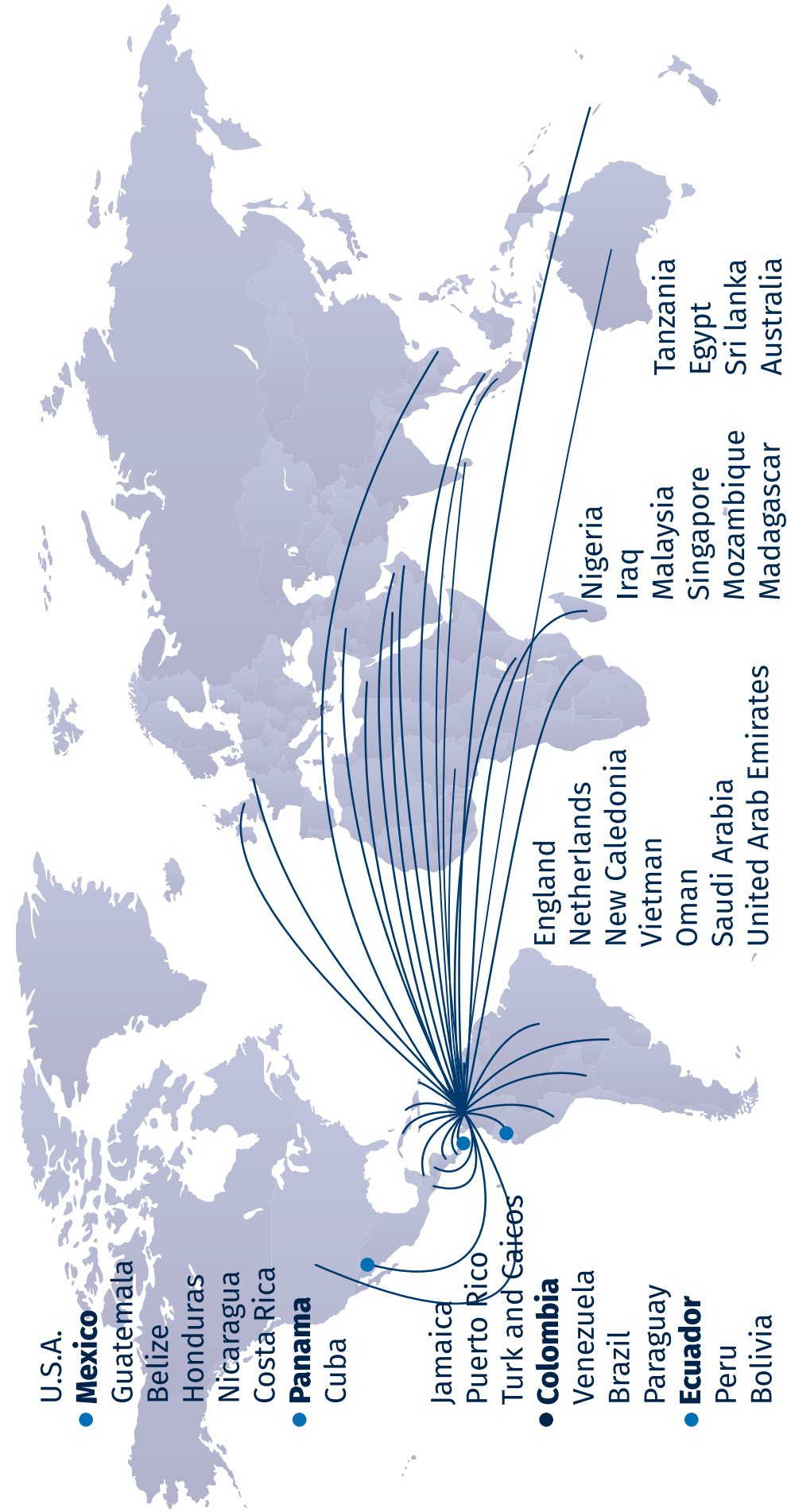
ETEC's efficiency has opened the trust of clients worldwide, with coverage in over 36 countries. Our solutions are growing into markets segments such as: aquaculture, flood control in urban and agricultural areas, irrigation districts, aqueducts and industrial applications.

ETEC offers consultancy services and process analysis to achieve a correct diagnosis of a situation which is followed by conceptualization, design, and implementation of a suitable solution.

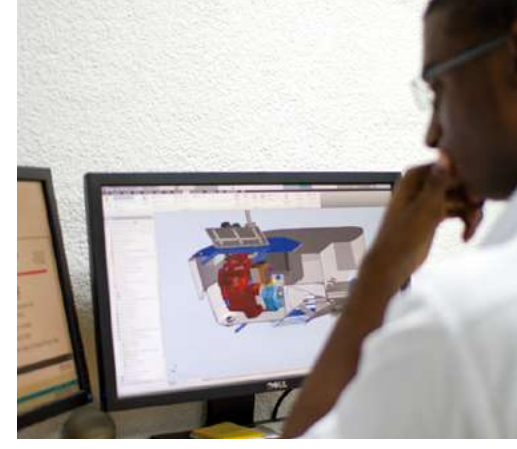
*ETEC has been awarded as "Winner of the **National Award of Exporters**", Proexport 2008 and 2019 for our exporting tradition, continuous growth in export, and diverse destinations.*



ETEC'S SOLUTIONS AROUND THE WORLD!



Thanks to our Efficiency, ETEC has a worldwide coverage on over 36 countries



Consulting



Commissioning



Maintenance



Repair

MISSION / VISION

Mission

To provide innovative, integral, reliable, long-lasting and efficient engineering solutions in the movement of large volumes of water, which translate into economic benefit for our clients.

Vision

To be recognized internationally by 2020 as an innovative engineering company, that represents to our customers the best solution according to their needs.

We want to be leaders in the water movement sector with a consolidated presence in all five continents.

We will reach our goal by having direct contact with our clients and showcasing our knowledge and infrastructure.



APPLICATIONS

Innovation at your service!

Every pump manufactured by ETEC reflects our extensive experience providing solutions for massive water movements, with high standards of reliability and durability, while maintaining unmatched efficiency levels even when operating under the toughest conditions.

ETEC assists every user of its pumps in a step-by-step process to implement the right design for the pump station and complementary constructions to guarantee the best performance of the system.



Agriculture



Irrigation Systems



Aquaculture



Flood Control



Industry



STATIONARY AXIAL FLOW PUMPS

Vertical Axial Pump with Naval Steel body

- Pump body fabricated with marine ASTM-131 Grade-A steel plates.
- All the welding personnel is periodically certified by Lloyd's Register of London
- The impeller is fabricated with cast profiled blades in stainless steel, the blades are designed with the best hydraulic profile.
- Stainless steel wear-protection ring with electrolytic isolation avoiding wear on the pump's surface next to the impeller
- Built-in Heat Exchanger optimizes output and efficiency in Diesel engines by replacing the Radiator.
- The pumps have Stainless Steel shaft supported by marine brass-rubber bushings lubricated by pumped water.



Optional: The shaft is lubricated by oil for operations where abrasive particles or strange objects exist in the water. The shaft is supported by a high resistance bronze bushing. The complete shaft system is submerged in oil, retained by a heavy duty mirror type seal.



Composite Vertical Axial Pump

- Pump column and structure built with polyester reinforced with fiber glass. Bushing housings and fixed vane systems are constructed in stainless steel 304.
- Double Profile suction cone made in Polyester Reinforced with Fiber Glass to increase efficiency.
- Assembled propeller, built with cast stainless steel blades.
- The propeller is thermally treated, balanced, and polished.
- Intake protection steel-made grill to avoid the intake of foreign objects.
- Stainless Steel wear protection ring to avoid premature wear in the area influenced by the propeller.
- Stainless steel 304 shaft, supported by Marine bronze-rubber bushings, water lubricated.
- Exchangeable sleeves, made in 304 stainless steel, installed at the bushing wear areas.
- Steel Support Base for the installation and anchoring of the pump.
- Constructive materials can be certified by Lloyd's Register of London. If certificate is required by the client.



Operating Capacity (Naval Steel or Composite)

SIZE	LITERS/SECOND	M ³ /H	GPM
12" - 305 mm	325	1,170	5,200
16" - 385 mm	515	1,854	8,200
20" - 500 mm	875	3,150	13,900
24" - 600 mm	1,250	4,500	19,800
30" - 750 mm	1,960	7,056	31,100
36" - 900 mm	2,800	10,080	44,400
42" - 1,050 mm	3,850	13,860	61,000
48" - 1,200 mm	5,000	18,000	79,300
60" - 1,500 mm	7,850	28,260	124,400
72" - 1,800 mm	11,300	40,680	179,100

FLOATING PUMPS

Product Catalogue

It's design and construction allows the equipment to save energy and to improve efficiencies. It's a resistant equipment to adverse situations that may be present in the different water intake, for example: strong watercourses, fluctuating tides, waste, etc.

- Designed for continuous operation with the capacity to handle large water volumes
- Complete integrated unit
- Ideal structural design and light weight
- Long lasting high resistance construction materials
- Civil works significantly reduced by design, doesn't require to build a pumping station for functioning
- Quick installation and start-up.
- Flexibility to conditions of fluctuating levels due to natural effects or climate changes.
- Alternative pumping station solution in areas with highly unstable soils
- Easy relocation, they can operate in any other place require with similar hydraulic conditions.
- ETEC's Floating Pumps don't have problems of alignment, stability, anchoring or load manage.



We have been granted National INNOVATION Award 2008 (INNOVA) for the development of the floating pump.



Patented Equipment.



Floating Pumps

- Axial floating pump with standard rotation for high efficiency at low heads.
- "Ready to run"
- Versatile
- Low maintenance costs
- Excellent cost-benefit ratio
- Naval steel pump body
- Compact hull design for easy transportation and handling.
- The geometry of the hull has smooth curves to improve the water entry profile and receive an optimum hydraulic performance in multiple installation conditions.
- Reliable design, widely used propulsion driveline with marine transmission
- Performance: Maximum TDH up to 12M
- The Intake is protected with a metal grid
- Stainless steel 304 wear-ring, protecting the area influenced by the impeller
- Stainless Steel 304 profiled Cast blades for the impeller. The impeller is austenitized through heat treatment.



Operating Capacity

SIZE	LITERS/SECOND	M ³ /H	GPM
16" - 400 mm	500	1,800	7,950
24" - 600 mm	1,250	4,500	19,800
36" - 900 mm	2,800	10,080	44,400
42" - 1050 mm	3,850	13,860	61,000

Container Type

The ETEC's Axial Flow – Floating Pump is constructed under the dimensions and exact measures of a 20' container, facilitating transportation of the unit.

- All the hydraulic elements are built on ASTM 131 Marine grade-A steel plates.
- Water lubricated enclosed shaft with exchangeable sleeves and protection tunnel (oil lubrication optional)
- The impeller is made of cast profiled stainless steel blades shaped and designed for optimum hydraulic performance.
- Keel-cooler refrigeration system for the diesel operated units (electrical operation available also).
- The polyester reinforced with fiber glass flotation chambers are filled with low density closed cell polyurethane foam to prevent sinking if perforated.
- Intake is protected by a trash control screen.
- Flexible coupling between the floating pump and pipe allows the equipment to rest at different angles depending on tide levels.



Operating Capacity

SIZE	LITER/SECOND	M ³ /H	GPM
30" - 750 mm	1,960	7,056	31,100
36" - 900 mm	2,800	10,080	44,400
42" - 1,000 mm	3,850	13,860	61,000
48" - 1,200 mm	5,000	18,000	79,300

US Patent N° 6755.623 June 29, 2004.



CM

ETECS AXIAL FLOW – FLOATING PUMP structure built in Composite Fiberglass with polyester resin, covered with gel coat. Equipment is constructed under dimensions that allow the transportation in one 40' flat rack container.

Flotation is accomplished with the construction of Fiber-Glass flotation platforms. The fiber glass compartments are filled by Low Density Polyurethane foam for security. The submerged motor compartment is made of Composite Fiber Glass. Motor compartment is equipped with an automatic electric bilge pump, with battery charger.

- Motor compartment is equipped with one access hatch for maintenance and two ventilation ducts to ensure adequate compartment temperature (inlet/outlet).
- The pump's bowl is constructed in fiber glass with polyester resin, covered with gel coat.
- Stainless Steel 304 Cast blades for the impeller. The impeller is austenitized through heat treatment.

- Stainless Steel 304 shaft, water lubricated.
- The water lubricated pumps have exchangeable stainless steel 304 sleeves
- Stainless steel 304 wear-ring, protecting the area influenced by the impeller.
- The Intake is protected with a metal grid. Metal grid is made out with of Stainless Steel 304 rods.
- All the welding personnel is periodically certified by Lloyd's Register of London, under ASME Norms, Code Section IX.



Operating Capacity

SIZE	LITERS/SECOND	M ³ /H	GPM
60" - 1500 mm	8,000	28,800	126,000

Available in bigger sizes according to client's needs

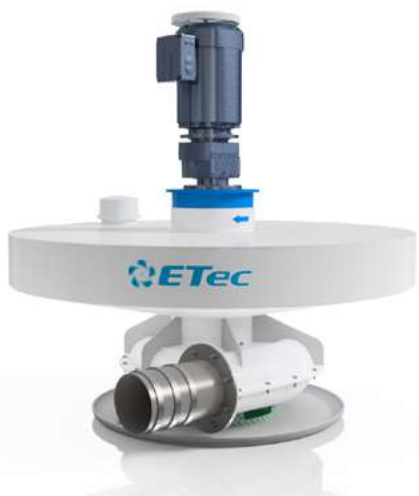


CENTRIFUGAL FLOATING PUMP



BF 8"

- Electrical motor
- "Ready to run"
- Versatile
- Ideal for agriculture crops and drainages



Operating Capacity

SIZE	LITERS/SECOND	M ³ /H	GPM
8" - 200 mm	180	648	2,900

VT

- Equipped with a floating element made in fiber glass and filled with low density polyurethane ensuring it's buoyancy, despite from any shock the equipment might suffer.
- The body is made in ASTM 131grade A, Marine steel, 3/8" steel. All the welding personnel is periodically certified by Lloyd's Register of London, under ASME Norms, Code Section IX.
- The Intake is protected with a metal grid.
- Stainless steel 304 wear-ring, protecting the area influenced by the impeller. Epoxy insulation to prevent inter-metal contact
- Stainless Steel 304 profiled Cast blades for the impeller.



Operating Capacity

SIZE	LITERS/SECOND	M ³ /H	GPM
12" - 305 mm	3251	1,170	5.200



MOBILE AXIAL PUMPS

Mobile Axial Pump

ETEC's mobile axial pump, capable of operating in alternate locations.

The equipment is mounted on a self contained trailer, with all the necessary elements for the operation of the pump; this feature makes the MOVILTEC usable where no structure nor pump station exist, but where immediate and high capacity pumping action is required.

The Moviltec is the precise equipment for intervention in emergencies and adverse situations, like urban or countryside flooding.

The pump may operate up to a maximum 60° angle without the need of adjustment in the transmission. The pump is simply trailed to the site and lowered to the water by means of the manual hoist supplied.

- Impeller made of cast profiled stainless steel blades
- Stainless Steel propeller. Steel Shaft submerged in oil, installed inside a tunnel, with mechanical seals.
- Intake bowl made of Plastic Reinforced fiberglass.
- Pump intake protected with a steel grill.
- Power is transmitted by a combination of gear drive, pulleys and belts.
- 8 mt Total Dynamic Head



Operating Capacity

SIZE	LITERS/SECOND	M ³ /H	GPM
20" - 305 mm	8753	1,150	13,900

HYDRAULIC FLOATING PUMP

- Compact and light floating pump element
- Pump body manufactured in stainless steel
- Floatation system manufactured in fiber glass
- Hydraulic motor coupled directly to the impeller
- Integrated hydraulic power system mounted on metallic skid self-contained

HYDRAULIC SYSTEM

- Diesel/electrical engine coupled directly to hydraulic pump
- Circuit is controlled by graduated relief valve
- Two hoses, one high pressure and the other low pressure to feed hydraulic system.
- Relief valve and hydraulic oil filter
- Hydraulic oil tank with security system for low level control
- Air oil cooler

- Maximum Flow Rate @ TDH = 3.2m : 0.57 Mts³/sec
- Maximum dynamic head (MaxTDH): 8.00 m
- Power required by Pump (maximum TDH): 70.1 h.p.
- Nominal diameter of impeller: 16"



SPECIAL DEVELOPMENTS

HARVESTEC

Aquaculture/shrimp harvester

The Shrimp harvester system ensures a lower percentage of stress, handling, loose head and dirty gills in the shrimp.

- Substantially reduces harvesting time compared to manual and other solutions that are being offered in the market
- Harvest rapidly, efficiently and places product where the client decides (truck or different height bins)
- Allows harvesting over any type of structure
- Compact design, light and easily transported
- Less labor work required for harvesting



HIDROTEC

Drainage Pump

The drainage pump is a self contained unit, designed to be completely autonomous. It is a high capacity pump that can be towed to the chosen site when it is needed.

The Hidrotec pump is a versatile unit designed to operate with an agricultural tractor. The pump is easily taken to the chosen site when it is needed.

The pump can be installed in drainage structures built for this purpose or coupled directly to the pipe. The modular components permit alternate configurations through the use of flanges.

- Impeller fabricated with profiled stainless steel blades.
- The discharge is controlled by a check valve (flap-gate) made in fiber glass. It avoids water return once pumping has been suspended.
- Flange unions allows the use of components in a modular way.
- Suction made in polyester reinforced fiber-glass with protective intake screen.



Operating Capacity

SIZE	LITERS/SECOND	M ³ /H	GPM
700 mm (28")	1.500	5.400	24.000

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