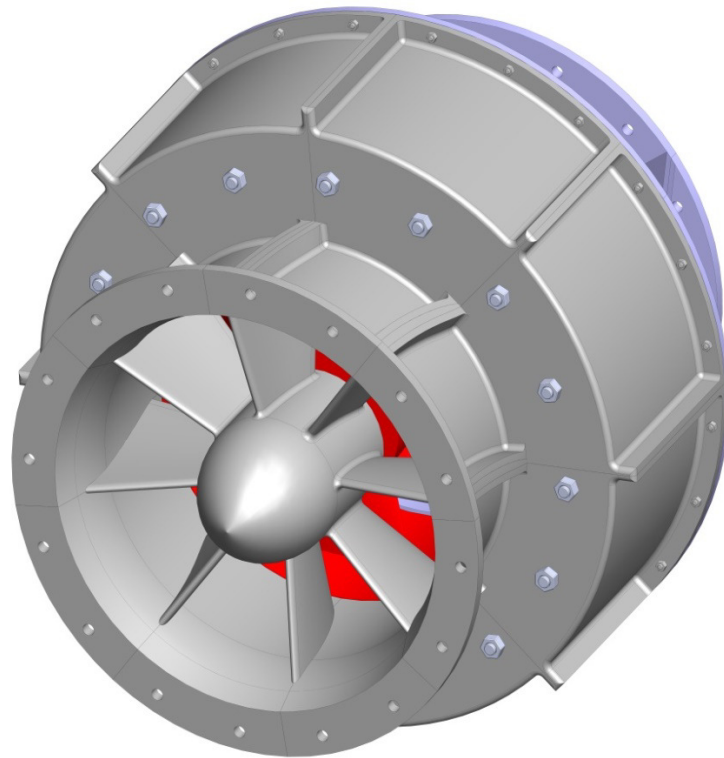
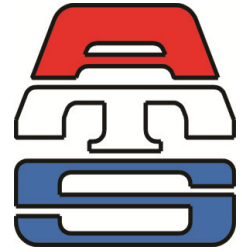


**AMJET Turbine Systems, LLC**

**THE *ATS-32* LOW-HEAD  
TURBINE/GENERATOR**



*ATS-32* turbine/generator with 32 inch diameter intake

- Power Range Selectable from 50 to 850 kW
- Head (net) 7 to 50 ft and Flows from 98 to 250 cfs
- Light Weight, Composite, Modularized, Mass-produced
- Corrosion-Free Materials, Operates Under Water
- One Moving Part -- No Mechanical Controls
- Electronic Flow Control Efficient Over Operating Range
- Overhaul or Replacement in One Day
- Low Cost, Fast Installation; No Cofferdam
- Simple Civil Works
- Delivery by Standard Truck or Container

## Description

The *ATS-32* series hydro turbine/generator combines the turbine and generator functions in a single housing, thereby producing an in-line unit that can be suspended in a conduit or placed on a bulkhead. The unit is made of high-strength, engineered composite components, reducing weight and eliminating corrosion. The resilient water-contact surfaces diminish erosion and reduce damage from small objects passing through the system. Power generation is by a brushless DC rim generator providing a very power-dense, low-weight, compact unit. Mechanical flow control surfaces are eliminated. Flow control is obtained electronically in a more efficient manner, producing efficient performance over a wide range rather than just the “sweet spot” of conventional systems. A 1/4-scale model was tested and validated by the University of Iowa, confirming the basic approach and performance capability of the *ATS-32*.

## Installation

The *ATS-32* series hydro turbine/generator, because of its compact size and low weight, has its own lifting mechanism to move the unit from an operating position to a maintenance position in which any part or the complete unit can be serviced or replaced in one day. In-line placement avoids the need for foundations, and a small footprint allows installations in locations otherwise impossible. Power delivery to the grid is done through an inverter specially adapted to operate in conjunction with the DC generator. The unit includes a control system that integrates operational data and accepts control commands for maintaining the pool level. *ATS* will maintain a central control station via the internet which monitors all *ATS* units in operation and includes automated early-warning signals and controls to alert local operators.

<i>ATS-32</i> series	Power (kW)	Net Head		Flow		ID		OD		Length		Weight	
		(ft)	(m)	(CFS)	(m3/s)	(in)	(m)	(in)	(m)	(in)	(m)	(lb.)	(kg)
32-50	50	7	2.1	98	2.8	32	.81	48	1.22	36	.91	1,220	554.6
32-100	100	12	3.7	110	3.1	32		48		36		1,319	600
32-150	150	16	4.9	135	3.8	32		48		36		1,517	689.5
32-200	200	19.0	5.8	150	4.2	32		48		36		1,750	795.5
32-250	250	22.0	6.7	160	4.6	32		48		36		1,980	900
32-300	300	25.5	7.8	173	4.9	32		48		36		2,227	1,012.3
32-400	400	31.0	9.4	191	5.4	32		48		36		2,653	1,205.9
32-500	500	35.0	10.7	205	5.8	32		48		36		3,033	1,378.6
32-600	600	40.0	12.2	220	6.2	32		48		36		3,950	1,795.5
32-850	850	50.0	15.0	250	7.0	32		48		36		4,851	2,200

(all data are approximate and subject to change)

*AMJET* Turbine Systems, LLC (*ATS*) has a manufacturing facility in Keokuk, Iowa to produce the *ATS-32* series hydro turbine/generator. Detailed specifications are available on request; please provide detailed application data such as head and flow data.

## **AMJET Turbine Systems, LLC**

**AFFORDABLE, RENEWABLE POWER**

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