

Cross-flow turbine generators

For lower head, higher volumes of water.

The Scott Cross-Flow Turbine is capable of 1500+ watts of output with only 35 feet or more of head. A minimum of 20 feet of head is recommended and a 6" penstock, although a 4" penstock could be used for higher head, lower flow applications.

This is a high-flow turbine so the creek must have a minimum of 300 gallons per minute.

The Scott turbine sends 3-phase AC to a rectifier located near the battery bank. After the rectifier, a MidNite Classic 250 charge control charges the battery bank. A MidNite Clipper or a stop switch is not recommended with this unit.

Includes water-cooled alternator: a custom-made copper radiator keeps the alternator cool.

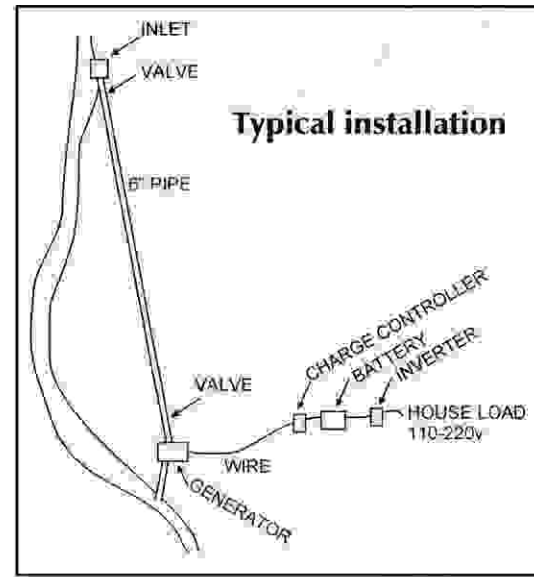
This high-output turbine would be great for a lodge or off-grid home or shop requiring larger amounts of power. May also be used to tie into the grid.

The Scott turbine is industrial-grade with cast aluminum and stainless steel runner and shaft.

Scott Cross-Flow Hydro Turbine Only
\$3900



We can supply all the electronic components necessary for off-grid or grid-tie installation.



For more information, contact

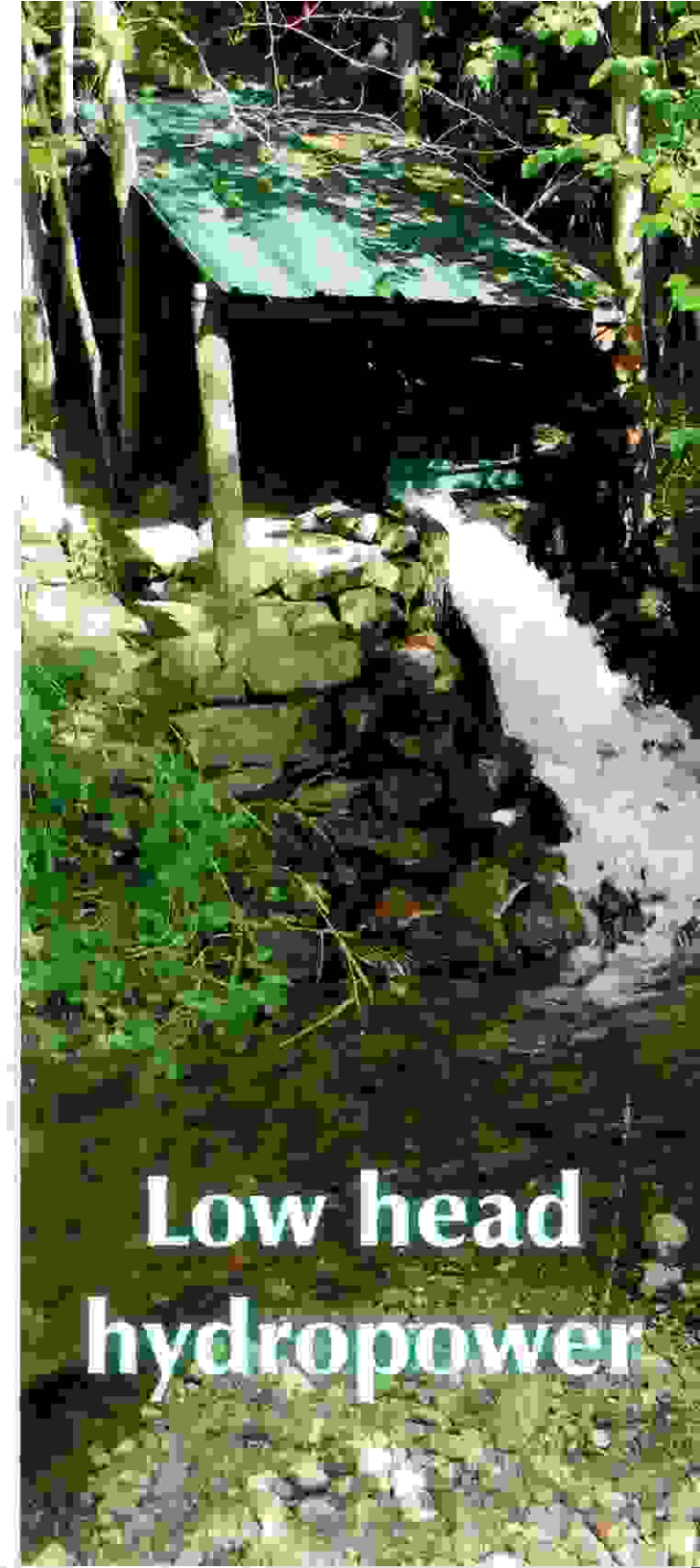
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**Low head
hydropower**

The Scott Turbine/Generator Unit

Cross-Flow Turbine

Unlike most water turbines, which have axial or radial flows, in a cross-flow turbine the water passes through the turbine transversely, or across the turbine blades. As with a water wheel, the water is admitted at the turbine's edge. After passing the runner, it leaves on the opposite side. Going through the runner twice provides additional efficiency. When the water leaves the runner, it also helps clean the runner of small debris and pollution. The cross-flow turbine is a low-speed machine that is well-suited for locations with a low head.

Technical requirements

- 6" pipe, 8-bolt pattern, 9.5 b.c. (at turbine).
- Recommend 20 feet net head (fall) or 9 psi minimum.
- Screened intake to prevent fish, leaves and rocks from entering system.
- Small shelter to cover unit.

Scott's Turbine/Generator

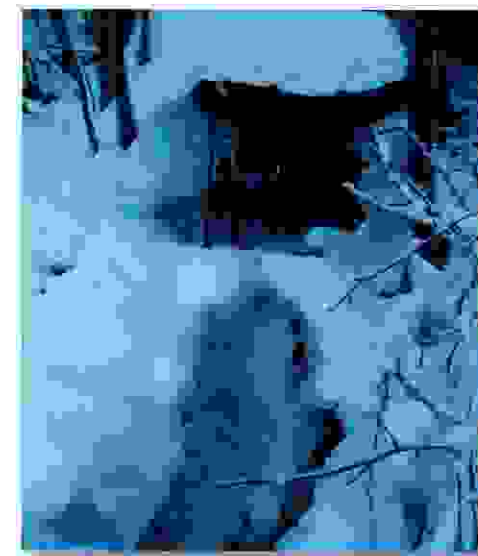
- Designed & Manufactured for years of maintenance free service
- Turbine housing constructed of heat treated aluminum with powder coated finish
- Entire assembly made of non-corrosive material
- Double-sealed permanently lubed Timken bearings
- Runner is made from 300 series stainless steel.
- Shaft and fasteners are also stainless steel
- Alternator is 3-phase AC high voltage for long line transmission
- 3-phase rectifier changes AC to DC for battery charging
- Generator is capable of up to 2000 watts. These figures will vary according by installation.
- Made in the United States of America.



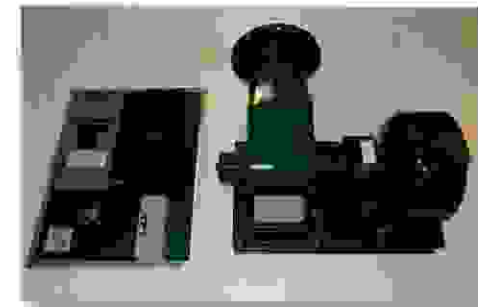
No dam is required, only an upstream diversion through a 6" pipe, which is coupled to the unit.



A low-RPM permanent magnet generator is direct-coupled to the turbine.



20 degrees Fahrenheit below zero. A winter shelter is recommended.



6" intake.



We run an electric refrigerator, washer, lights, TV, computer, appliances plus 110-volt shop tools on a Scott Hydroelectric turbine at our home in Republic, Washington.