Companion CWIS™
This ultra high efficiency, space-saving design incorporates EVO technology and includes an 80 or 119 gallon stainless steel storage tank containing Hamilton’s patent pending Cold Water Injection System™ (CWIS™). The combination of the EVO technology and CWIS™ provides a system with efficiency unmatched by tank type or circulating tank systems.

Hamilton Odd Water™ System
In poor water conditions (combined hardness & TDS of over 25 grains per gallon, or aggressive or acidic water) the Odd Water™ system eliminates scaling and other factors that contribute to premature failure of a conventional water heating system.

Innovative Condensing Combustion Technology
Hamilton’s EVO line is engineered using technology developed and patented in Europe in 1992. To date, this technology has been installed in more than 7 million facilities worldwide. Hamilton has combined the best of this technology with its years of experience in condensing equipment to design and develop a product line that broadens its applications and capacities, and eliminates many of the common mistakes made during installation.
How Condensing Technology Works

In the combustion process, a minimum of 11% of the heat generated is latent heat (wet heat, think steam). In non-condensing combustion, only a portion of the sensible heat (dry heat) is transferred to the water; the rest of the dry heat and all of the wet heat is released into the atmosphere through the venting system as wasted energy.

In the EVO condensing system, the products of combustion (some of the wet heat and all of the dry heat) are forced to pass over the portion of the heat exchanger where the coolest water enters the system. At this point, the flue gasses condense, releasing trapped heat that is then absorbed into the water through the heat exchanger. Condensate (water) and low temperature flue gasses are left behind - flue gasses so cool, in fact, they can be vented through PVC if desired.

EVO™ Condensing Water Heaters and Boilers

*Efficiency
Up to 99.8% depending on incoming water temperature

*Construction
All 316L stainless steel is used for the heat exchanger

*Capacities
Systems from 79,000 - 8,000,000 BTU/hr

*Unique Features
Common Venting - Up to 8 units may be common vented together - EVO’s non-return valves and proprietary software make this possible

Cascading Controls - Up to 8 units can communicate with each other to operate as one large system, maintaining precise temperature control

Modulating Burner - Up to 5:1 turndown ratio adjusts to meet demand, further increasing efficiency while reducing cycling

Pre-assembly Systems - All Rack Packs™ are factory tested and shipped ready to set in place with minimal assembly, reducing labor costs, downtime and installation issues

Scale Monitoring - Internal software constantly monitors heat exchanger performance to warn if scale formation is beginning

Freeze Protection - Controller starts the pump (and the burner if necessary) to protect against heat exchanger freeze-ups in cold climates

Heating Control Configurations - Outdoor reset, 0 - 10 VDC, open thermt/E-Bus/BMS, remote thermostat, remote sensor, boiler pump, system pump, indirect pump or three way valve - domestic hot water as priority or not. The EVO product line has a multitude of standard control configurations, all of which are possible without adding expensive boards or external control panels

Rack Mounted and Pre-Plumbed To Your Specifications

Rack Pack™ Six Pack Features Include:
- Steel Constructed Rack Mounting - Modular welded steel rack supports the entire system - includes leveling bolts
- Factory engineered Common Venting - Only one inlet air and one exhaust opening required for up to 8 units
- AL29-4C stainless steel or PVC (where local jurisdictions allow)
- Common Water Piping - All units are manifolded together with copper and brass plumbing, including individual isolation and drain valves

Electrical Power Supply (208/240v - 50/60Hz - 1ph)
- All units and their pumps are pre-wired with breaker panel service disconnects - one field connection
- Common Condensate Neutralizer - All condensate runs from individual units to a common drain system filled with limestone. Design allows for easy refilling when PH begins to drop from neutral (~7.0) at outset
- Gas Manifold - Welded black pipe gas manifold providing single point connection includes individual shut-offs
- Cascade Controls - A two wire communication cable between units facilitates the use of this feature, while maintaining independent primary safety controls. In the event of lost communication, control reverts back to the individual units

Model Sizes

80,000 / 136,000 / 180,000 / 199,999 BTU’s

300,000 / 399,999 / 630,000 BTU’s

1,500,000 / 1,999,999 BTU’s