Accel CS™

Simply the smartest heating design ever developed for home or business, with the industry's proven top efficiency!

UP TO 97% AFUE

Exceptional Features:

- **Cuts fuel bills up to 40% or more beyond boilers with the same AFUE!** *
- Why settle for yesterday's reset controls that can leave you out in the cold?
- Quietest operation of all boilers!
- ***LONGER hot showers!***
- ***BEST Lifetime Limited Warranty***
- Natural Gas or Propane!

Plus! Accel CS improves on the highest real efficiency of all systems tested!

-In a US Department of Energy Brookhaven Laboratory study

See page 2

Most Efficient 2017
ENERGY STAR www.energystar.gov

Awarded the ENERGY STAR® Most Efficient mark in 2017.

Accel CS is an integrated system, which means it produces both heat *and* hot water!

Heat and hot water are the largest energy consumers in cold climate homes. Accel CS is a single high efficiency appliance that delivers the best of *both.* The result is comfortable warmth for living spaces, plus abundant kitchen, bath, and laundry hot water including nearly endless hot showers.

What is the primary advantage of Accel CS?

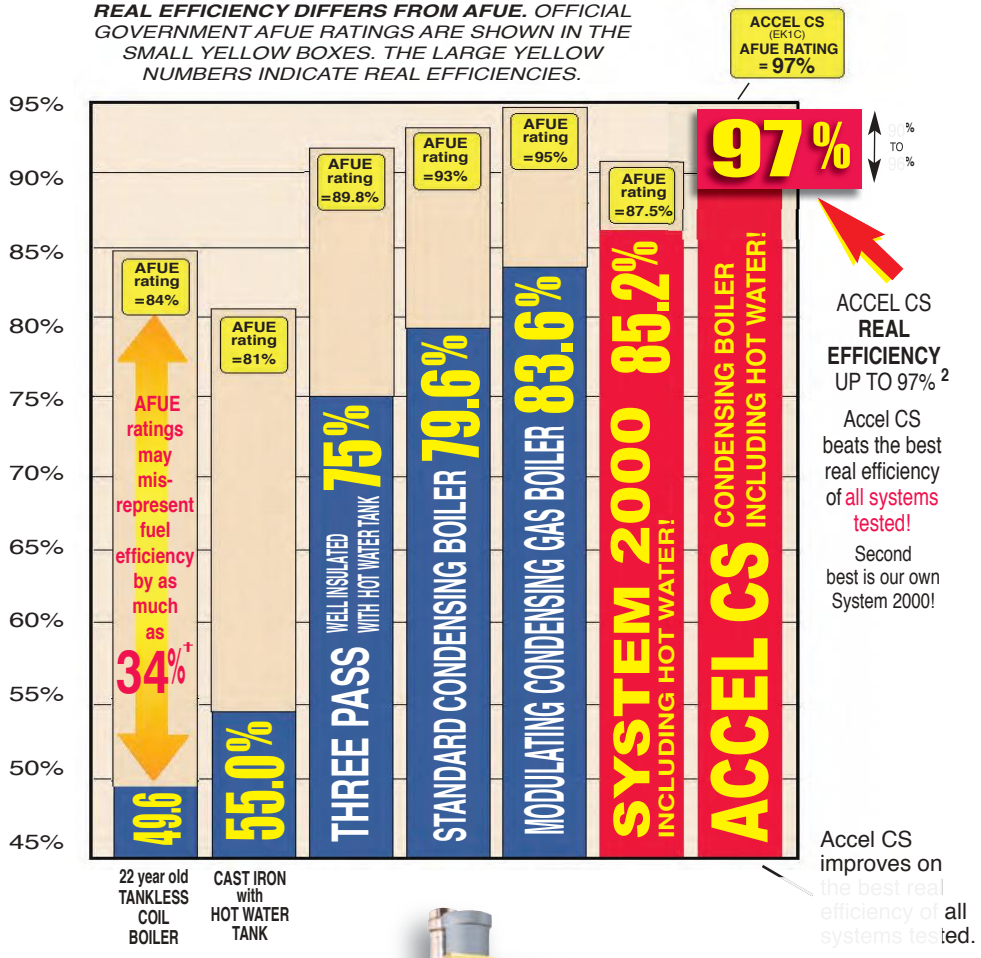
Condensing technology is already established as a high efficiency heating method. Accel CS takes it further, first with better construction and then by incorporating condensing technology in a *combined system,* a common sense marriage of processes that is simply smarter than any other heating system. Among many benefits, Accel CS runs more intelligently and adapts more swiftly to changing demands. As a result, it delivers bigger fuel savings (greater efficiency) in *every* area of heat and hot water production.

Under contract with the US Department of Energy, a Brookhaven National Lab study confirmed:

U.S. energy guide (AFUE) ratings miss significant areas of energy loss, and do not reflect the real efficiencies of common heating systems.[1]

THIS CHART SHOWS HOW ACCEL CS BEATS THE BEST REAL EFFICIENCIES OF ALL SYSTEMS TESTED.

REAL EFFICIENCY DIFFERS FROM AFUE. *OFFICIAL GOVERNMENT AFUE RATINGS ARE SHOWN IN THE SMALL YELLOW BOXES. THE LARGE YELLOW NUMBERS INDICATE REAL EFFICIENCIES.*



ACCEL CS **REAL EFFICIENCY** UP TO 97% [2]

Accel CS beats the best real efficiency of all systems tested!

Second best is our own System 2000!

Accel CS improves on the best real efficiency of all systems tested.

†This means that some Annual Fuel Utilization Efficiency (AFUE) ratings ***underestimate fuel consumption by more than 50%.***

[1] Data and conclusions are drawn from the report "Performance of Integrated Hydronic Heating Systems." Paper and presentation by Brookhaven National Laboratory, Upton, NY, under contract No. DE-ACO298CH10886 with the United States Department of Energy by Dr. T. Butcher; and "Chimney Related Energy Losses in Residential Oil-Fired Heating Systems."

[2] The real efficiency rating for Accel CS of 97% is based on boiler return water temperature of 118°F (comparable to AFUE test conditions). Higher return water temperatures normally found in American heating systems may reduce annual efficiency to 90%; lower heating efficiency is associated with higher water return temperature on all condensing boilers.

ACCEL CS™
ENERGY KINETICS INC.

Our plate heat exchanger vastly outperforms old fashion coil in tank systems.

Old fashioned tank with coil
This design is inefficient because the tank heats slowly all over, even when you need only a small amount of heat or hot water.

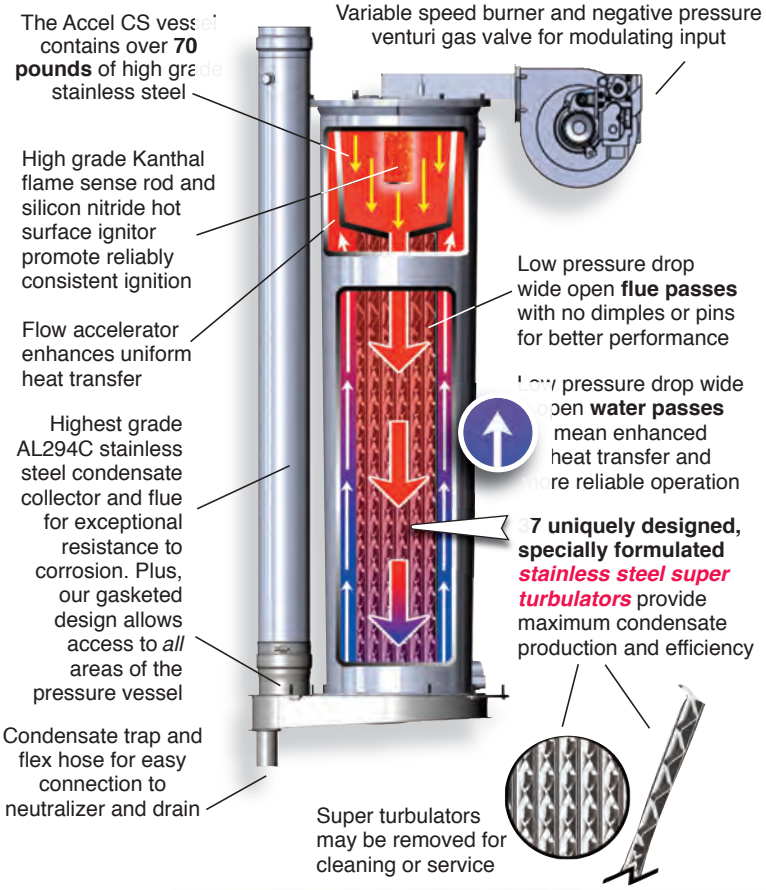
In addition, the temperature of the system's boiler is allowed to rise *above* the tank's temperature, meaning there is an automatic loss of heat energy every time the boiler heat has nowhere to go, which wastes energy.

Plate Heat Exchanger
By comparison, our plate heat exchanger draws cold water from the *bottom* of the tank and feeds hot water from the *top down*. This delivers the highest efficiency through the entire hot water cycle.

Our hot water plate heat exchanger maximizes condensing – *during every hot water cycle.*

Accel CS features an internal pressure vessel of American made 316L domestic stainless steel

. . . plus the highest grade AL294C stainless steel for its condensate collector and flue (a rugged material originally developed for the nuclear power generating industry).



Accel CS features removable panels for very easy service if the need arises.

Ask for our free Accel CS DVD!

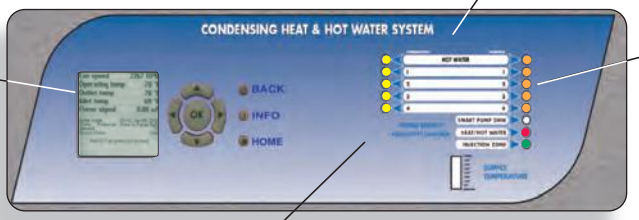
Accel CS means better heating and bigger savings, plus peace of mind for you and your family.

Hybrid Energy Recovery®– the easy-set controls behind Accel CS efficiency!

The Accel CS Condensing Hybrid Energy Recovery Control integrates thermal purge with temperature reset for the best year-round performance and hot water efficiency.

Friendly lighted indicators show thermostats calling, zone operation, heat and hot water demand, primary loop circulator operation, and boiler supply water temperature.

Large easy-read display



Hot water plus 4 zones (standard) **Expandable to 12 zones**

Accel CS control panel

Control panel features

Zone Control – The primary/secondary loop option controls up to 4 separate thermostats and zones, and includes a relay for the primary loop circulator, with fast and easy setup.

SmartBoost™ Comfort – *Outdoor temperature reset can leave your home cold* when recovering from overnight setback or whenever you turn up your thermostat. But our *Smart Boost* technology automatically adjusts to make your home warm and comfortable faster.

Accel CS's rapid hot water recovery squeezes more out of your fuel dollars. Unlike systems where the boiler heats up along with the tank (which can virtually *stop* the condensing operation) our advanced plate heat exchanger can run at full output while maintaining *peak condensing!*

Auto Express temperature settings allow quick selection for baseboard, radiators, air handlers and other sysems. Optional custom outdoor reset boiler supply temperatures can be enabled with the flick of a switch.

ESTABLISHED 1979
ACCEL CS
LIFETIME LIMITED WARRANTY
ENERGY KINETICS

Peace of Mind!

Exceptional residential lifetime limited warranty on pressure vessel and condensing energy manager!

See actual warranty for details.

ACCEL CS SPECIFICATIONS	EK1C		EK2C	
Maximum Input, Btu/Hr	90,000	120,000	150,000	200,000
Maximum Output, Btu/Hr	86,000	115,000	143,000	190,000
AFUE	97%		95.3%	
Maximum Supply Temperature	Water 210°F		Water 210°F	
Maximum Pressure	75 PSI		75 PSI	
Weight, Pressure Vessel, dry	70 lbs		90 lbs	
Weight, dry w/o stand	200 lbs		275 lbs	
Weight, w/water and w/ stand	270 lbs		375 lbs	
Water content	5 gallons		6-1/2 gallons	
Supply & Return Piping Size	1"		1-1/4"	
Gas Supply Connection	3/4"		3/4"	
Size with Stand	15"D x 25-7/8"W x 62-7/16" H		17-1/2"D x 28-1/8"W x 69-7/16"H	
Size without Stand	15"D x 25-7/8"W x 50-7/16"H		17-1/2"D x 28-1/8"W x 57-7/16"H	
Maximum Venting and Air intake Lengths	100 ft equiv 3" polypropylene 50 ft equiv 2" polypropylene (intake may be pvc)		100 ft equiv 4" polypropylene 50 ft equiv 3" polypropylene (intake may be pvc)	
Power requirements	120 VAC, minimum of 12 amps		120 VAC, minimum of 12 amps	

AFUE UP TO 97%

Energy Verified
Your trusted alternative to AFUE industry listings.

HAND CRAFTED BY AMERICANS FOR AMERICAN HOMES
ENERGY KINETICS ACCEL CS

NB® GAS FIRED UL LISTED ASME H

INSTALLATION FLEXIBILITY

WITH MULTIPLE VENTING OPTIONS

Sidewall direct venting | Through the roof | Chimney

ACCEL CS™
ENERGY KINETICS
Better heating. Bigger Savings.

Energy Kinetics / System 2000®

51 Molasses Hill Road, Lebanon, NJ 08833
(800) 323-2066 Fax (800) 735-2068

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visit **energykinetics.com**

10-2066 Rev. 11/16