



The future in high-efficiency boilers and water heaters



THE
ORIGINAL
INNOVATORS
www.triangletube.com



The original innovators present the future in high-efficiency boilers and water heaters

As the original innovator of the fire tube boiler, creating warmth and comfort for families throughout North America is in our DNA.

Triangle Tube has been an industry leader in the manufacture and supply of quality stainless steel Hot Water Heating Equipment for over 70 years.

Our purpose is to deliver total comfort with heating and hot water products you can rely on.

Our motivation is to create warmth and happiness for families throughout North America.

Our goal is to offer complete peace of mind.





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With Triangle Tube, you can trust you're installing a product manufactured to the highest standards

Our products are engineered and manufactured with complete state-of-the-art reliability validation. This includes environmental testing of sub-assemblies, stress testing and simulated testing of appliances.

The Instinct is built in the same unit that develops these techniques for Ideal Boilers, a leading UK boiler manufacturer, which produces over 400,000 units per year and meets the highest quality standards.

The Instinct is engineered with reliability in mind and each product is manufactured from our factory using the No-Fault Forward production system where products receive over 200 quality checks before they even leave the factory.







Introducing a warranty program that rewards both the contractor and home owner

Our **Good, Better, Best** market leading warranty program is available on all of our Instinct and Prestige models.

Details of all of our warranties can be found at www.triangletube.com/support/warranties



GOOD

Our ENTRY level warranty

- Offers 2-years parts and 10-year primary heat exchanger warranty with a Triangle Tube Instinct or Prestige boiler.



BETTER

Our MID level warranty

- Offers 5-years parts, 2-years labor allowance and 10-year primary heat exchanger warranty with a Triangle Tube Instinct or Prestige boiler.
- When you register the installation (providing customer and contractor information).



BEST

Our HIGH level warranty

- Offers 6-years parts, 3-years labor allowance and 10-year primary heat exchanger warranty with a Triangle Tube Instinct or Prestige boiler.
- When you register the installation (providing customer and contractor information).
- Plus, upload a photo of the combustion readings from your combustion analyser.
- Your business will be added to the "find a contractor" section on the Triangle Tube website and highlighted as receiving the BEST warranty from the Triangle Tube warranty program.



10-year primary heat exchanger warranty

No matter which warranty you choose every Instinct and Prestige boiler comes with a 10-year heat exchanger warranty as standard.



Keeping families warm and comfortable is what we do

When you buy a Triangle Tube product, you're not just a Triangle Tube customer, you're part of our extended family.

As part of our extended family you should be assured, we are here for technical and customer support.



**Triangle Tube (Main Number)**

856-228-8881
info@triangletube.com

Customer Service

856-228-8881 ext:150
customerservice@triangletube.com

Tech Support

856-228-8881 ext:575
techsupport@triangletube.com

**Warranty Support**

856-228-8881 ext:580
warranty@triangletube.com

Spare Parts Support

856-228-8881 ext:576
info@triangletube.com

Sales Support

sales@triangletube.com



We've been industry leaders in manufacturing quality products for over 70 years



QUALITY ASSURANCE

With over 70 years of experience, you can trust we will always deliver the highest quality products.



RELIABILITY

Our quality products and knowledgeable team of experts means you can always count on us for a reliable service.



INNOVATION

Our innovative technology and practice ensures we deliver reliable heating and hot water products you can depend on.



MARKET-LEADING WARRANTY

We take pride in offering market-leading warranties that reward both the home owner and the contractor.



HIGH-EFFICIENCY

Our products lead the way in high-efficiency and provide the most energy saving solutions resulting in lower operating costs.



STAINLESS STEEL

The materials we use elevate our products to an outstanding level of reliability and durability resulting in happy customers.





Triangle Tube brings you the Instinct, the future of high-efficiency condensing boilers

INSTINCT SOLO 110 115 199
INSTINCT COMBI 155 199

The Instinct is engineered with reliability in mind and each product is manufactured from our factory using the No-Fault Forward production system where products receive over 200 quality checks before they even leave the factory.



NEW
instinct
SOLO AND COMBI



Trust your Instinct

FEATURES & BENEFITS



AFUE energy efficiency rating of 95%



CTRLMAX control system with 60 EZ second setup



3 in 1 universal vent adapter directly accepts PVC



439 Stainless-steel fire tube heat exchanger



Part of our **Good, Better, Best** market-leading warranty program



Industry leading performance with 5+ GPM hot water while fully condensing in DHW mode*



Turndown ratio of 8:1



Easy installation and serviceability



Integrated cascade function for up to six boilers

www.triangletube.com



Stainless-steel fire tube heat exchanger

The Instinct stainless-steel fire tube heat exchanger is manufactured and produced to the highest quality standards. ASME certified and pressure rated to 50PSI.



NEW

instinct

SOLO AND COMBI

SPECIFICATIONS & FEATURES

Instinct model	Solo 110	Solo 155	Solo 199	Combi 155	Combi 199
Min Input (BTU)	13,750	19,375	24,875	19,375	24,875
Max Input (BTU)	110,000	155,000	199,000	155,000	199,000
Turndown Ratio	8:1	8:1	8:1	8:1	8:1
AFUE	95%	95%	95%	95%	95%
DOE Heating Capacity (MBH)	102	142	184	142	184
AHRI Net Rating (MBH)	89	123	159	123	159
Fuel	NG & LP	NG & LP	NG & LP	NG & LP	NG & LP
Gas Connection	3/4"	3/4"	3/4"	3/4"	3/4"
Supply / Return Connections	1"	1"	1"	1"	1"
Domestic Inlet/Outlet Connections	-	-	-	3/4"	3/4"
Vent/Air Connections	3"	3"	3"	3"	3"
2" Maximum Vent Length	28"	28"	-	28"	-
3" Maximum Vent Length	100'	100'	100'	100'	100'
Water Volume (Gallons)	2	3	4	3	4
DHW Output GPM (70°F rise)	-	-	-	4.0	5.3
DHW Output GPM (75°F rise)	-	-	-	3.7	4.9
DHW Output GPM (80°F rise)	-	-	-	3.5	4.6
DHW Minimum Flow Rate (GPM)	-	-	-	0.5	0.5
DHW Maximum Operating Pressure (PSI)	-	-	-	150	150
CH Maximum Temperature (°F[°C])	185 (85)	185 (85)	185 (85)	185 (85)	185 (85)
DHW Maximum Temperature (°F[°C])	-	-	-	150 (65)	150 (65)
Cabinet Height	26"	26"	26"	33"	33"
Cabinet Width	21 3/4"	21 3/4"	21 3/4"	21 3/4"	21 3/4"
Cabinet Depth	16 1/2"	16 1/2"	16 1/2"	16 1/2"	16 1/2"
Weight (Lbs)	75	95	105	110	130





The flagship line of premium condensing fire tube gas boilers

PRESTIGE SOLO 80 110 155 175 250 299 399
PRESTIGE EXCELLENCE 110

The Prestige boiler continues to feature the uniquely designed stainless steel heat exchanger and boasts 95% efficiency across the entire range.

The Prestige has the capability to modulate with a turndown ratio of 5.5:1. This modulation means the boiler will alter its firing rate to meet the current demand, causing less cyclic behavior and resulting in lower operating costs.



prestige
SERIES



High-efficiency condensing boilers

FEATURES & BENEFITS



AFUE energy efficiency
rating of 95%



CTRLMAX control system
with 60 EZ second setup



Integrated cascade function
for up to six boilers



439 stainless-steel fire tube
heat exchanger



Part of our **Good, Better,
Best** market-leading
warranty program



Turndown
ratio of 5:5:1



High water content provides
stable temperature control



Reliable low maintenance
design - ASME certified



Extensive venting options
with a range of materials



439 stainless-steel heat exchanger

Our unique fire tube heat exchanger is
not only corrosion resistant it's also
designed to maximize heat transfer with
low thermal stress.

This results in peace of mind with
unparalleled reliability and longevity.



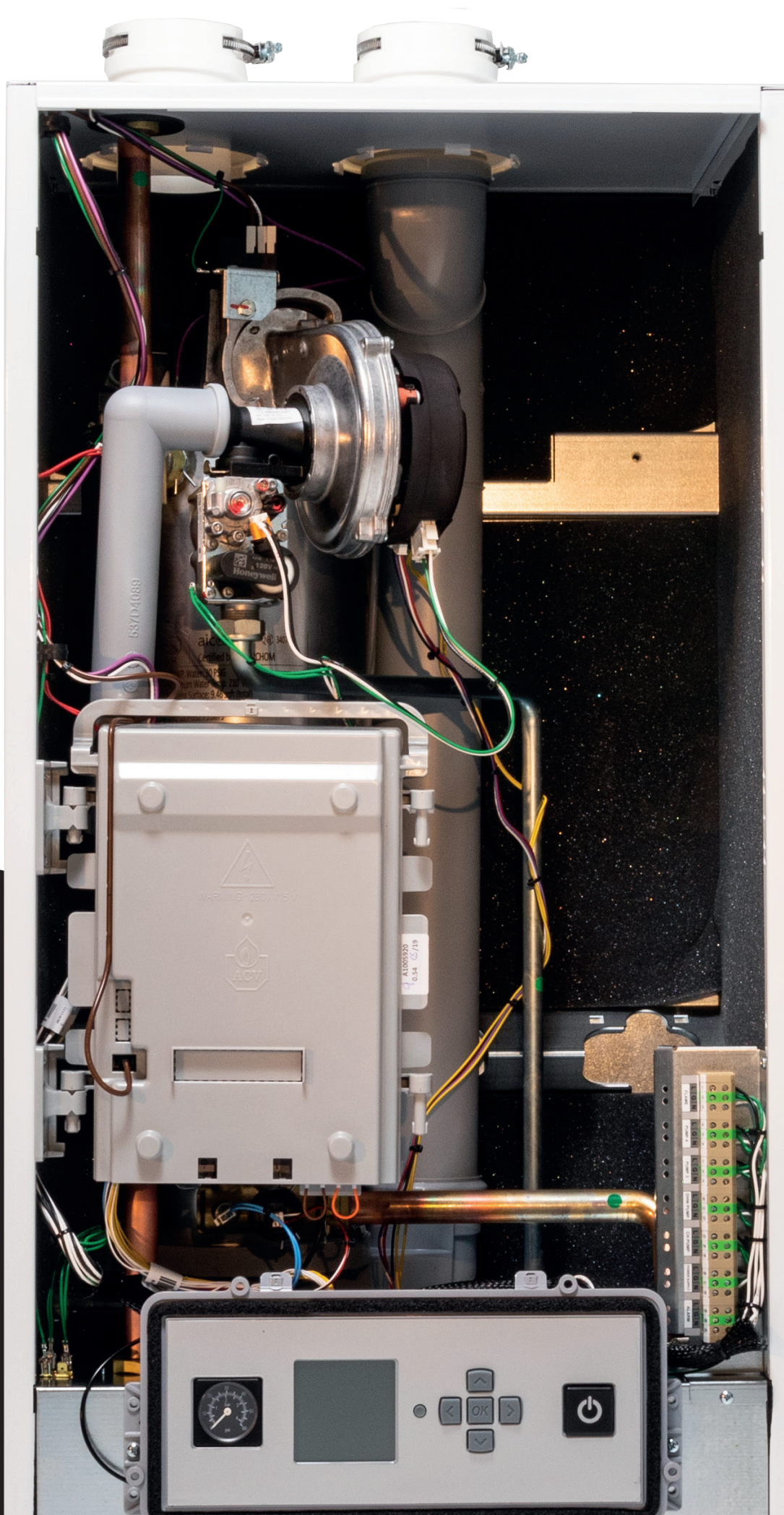


SPECIFICATIONS & FEATURES

Prestige model	Solo 80	Solo 110	Solo 155	Solo 175	Solo 125	Solo 299	Solo 399	Excellence 110
Input Modulation (MBH)	16 to 80	20 to 110	27.8 to 153	30.9 to 170	43.6 to 240	72.5 to 299	72.5 to 399	20 to 110
AFUE	95%	95%	95%	95%	95%	95%	95.1%**	95%
DOE Heating Capacity (MBH)	74	102	142	157	222	278	379	102
Net Boiler AHRI Rating (MBH)	64	89	123	137	193	242	330	89
Fuel	NG & LP	NG & LP	NG & LP	NG & LP	NG & LP	NG & LP	NG & LP	NG & LP
Turndown Ratio	5.0:1	5.5:1	5.5:1	5.5:1	5.5:1	4.1:1	5.5:1	5.5:1
Vent/Air Diameter	3"	3"	3"	3"	3"	4"	4"	3"
Supply/Return Connections	1"	1"	1-1/4"	1-1/4"	1-1/4"	1-1/2"	1-1/2"	1"
Gas Connections	1/2"	1/2"	3/4"	3/4"	3/4"	1"	1"	1/2"
Water Volume Gal	2.1	2.1	4	5.3	4.5	7.4	7.4	4.4
Weight (Lbs)	103	103	118	128	140	210	216	190
Cabinet Depth (inch)	17-5/16"	17-5/16"	17-5/16"	17-5/16"	17-5/16"	23-5/8"	23-5/8"	23-5/8"
Cabinet Width (inch)	19-3/4"	19-3/4"	19-3/4"	19-3/4"	19-3/4"	24-7/8"	24-7/8"	24-7/8"
Cabinet Height (inch)	36-9/16"	36-9/16"	36-9/16"	36-9/16"	36-9/16"	39-3/8"	39-3/8"	39-3/8"
10 Min. Peak Flow* (Gal.)	-	-	-	-	-	-	-	55
1st Hour Rating* (GPH)	-	-	-	-	-	-	-	210
Continuous Flow @ 70 Temp. Rise* (GPH)	-	-	-	-	-	-	-	180
Domestic Inlet/Outlet	-	-	-	-	-	-	-	3/4"
Domestic Capacity (Gal.)	-	-	-	-	-	-	-	14

*Domestic performance based on average water temperature of 108°F at mixing valve outlet and 50°F inlet

**Thermal Efficiency





Triangle Tube offers the Smart choice in domestic hot water

SMART 30 40 50 60 80 100 120

The Smart Series, Stainless Steel Indirect Fired Water Heater, heats more hot water with less fuel for the energy conscious consumer.

With exclusive **Tank-in-Tank** technology, the Smart delivers endless hot water with low maintenance and reliability.



smart
SERIES



Efficient and dependable

FEATURES & BENEFITS



Exclusive **Tank-in-Tank** technology



Lowest pressure drop in the industry



Self cleaning / self descaling heat exchanger



2" polyurethane foam insulation



Limited residential lifetime warranty



Seven sizes to suit your customers needs



Less fuel consumption, more energy conservation



Long term dependability

The average life span of a SMART Series Indirect Fired Water Heater exceeds 20 years! That is two or three times the average life of a conventional gas, oil or electric water heater.



Energy efficiency

The Smart series, stainless steel indirect fired water heater is heated by the hot water from your boiler. As your home is being heated, your domestic hot water is being heated at the same time, thereby, consuming less fuel and conserving energy. Combine this with a recovery rate that is up to three times faster than conventional gas or electric water heaters, and The SMART Series Indirect Fired Water Heater heats more hot water with less fuel for the energy conscious consumer.



SPECIFICATIONS & FEATURES

Smart model	Smart 30	Smart 40	Smart 50	Smart 60	Smart 80	Smart 100	Smart 120
Diameter	22"	22"	22"	22"	26"	26"	32"
Height	38"	46"	57"	66"	61"	78"	72"
Boiler/Supply Return	1"	1"	1 ¼"	1 ¼"	1 ½"	1 ½"	2"
Domestic Inlet/Outlet	¾"	¾"	¾"	¾"	1 ½"	1 ½"	1 ½"
3rd Domestic Connection*	¾"	¾"	¾"	¾"	1 ½"	1 ½"	1 ½"
Domestic Capacity (gal)	28	36	46	56	70	95	119
Heating Water Capacity (gal)	5	6	8	8	14	25	43
Heat Surface (sq. ft.)	13	16	20	24	28	36	42
Empty Weight (lbs)	115	135	165	190	271	362	479
Boiler Output (btu/hr)	87,000	112,000	140,000	270,000	300,000	337,000	420,000
1st Hour Recovery (gal/hr)	140	180	220	410	460	525	650
Continuous Flow (gal/hr)	115	150	185	360	400	450	560
Peak Flow (gal/10min)	40	50	65	100	125	150	190

Conditions: -200° boiler water supply.



Limited lifetime warranty

*Triangle Tube hereby warrants the Triangle Tube water heater when properly registered with our factory at the time of purchase to be free from defects in material or workmanship. Triangle Tube will repair or, at its option, replace the component part. Limited lifetime warranty only applicable to residential installations.



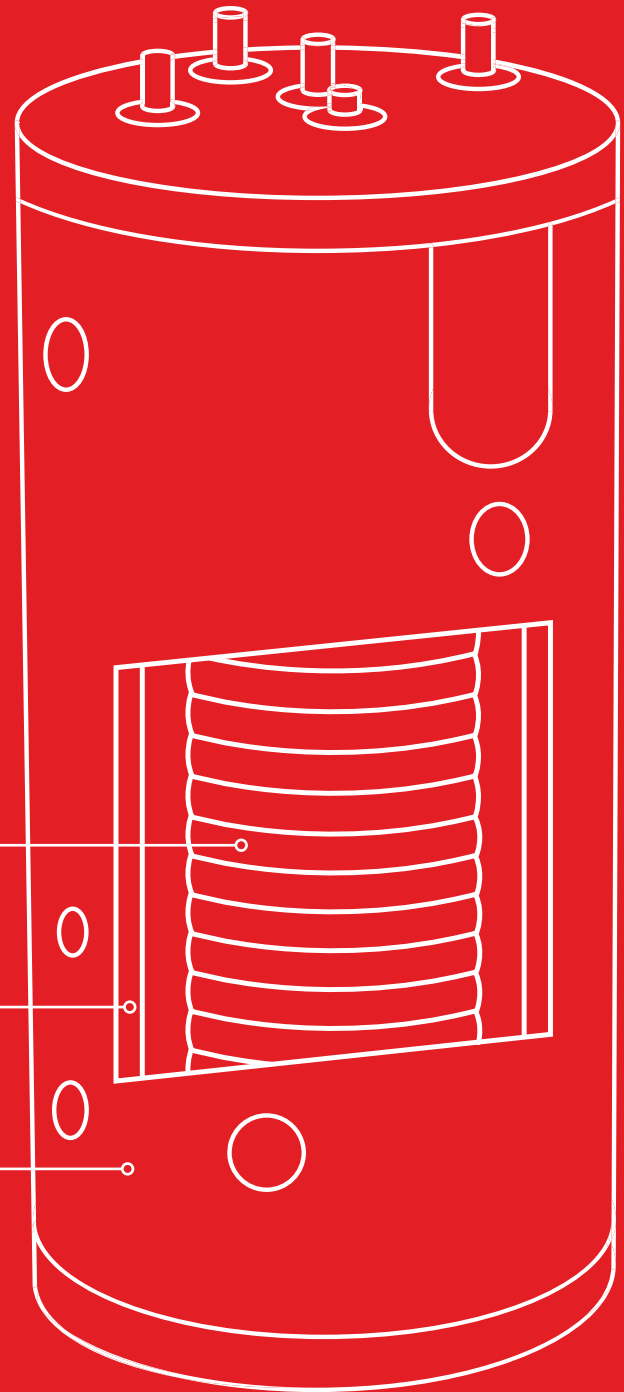
Exclusive Tank-in-Tank technology

Tank-in-Tank technology is a stainless steel hot water tank entirely immersed within an outer tank which contains the primary water. The corrugated inner stainless steel tank forms a large heat exchange surface that can heat the domestic hot water in a very short time. The outer tank is covered with a high-quality insulation, protected by a shock resistant plastic jacket.

CORRUGATED INNER
STAINLESS STEEL TANK

OPTIMAL INSULATION MADE
FROM 2" POLYURETHRANE FOAM

OUTER TANK PROTECTED BY
SHOCK RESISTANT PLASTIC JACKET



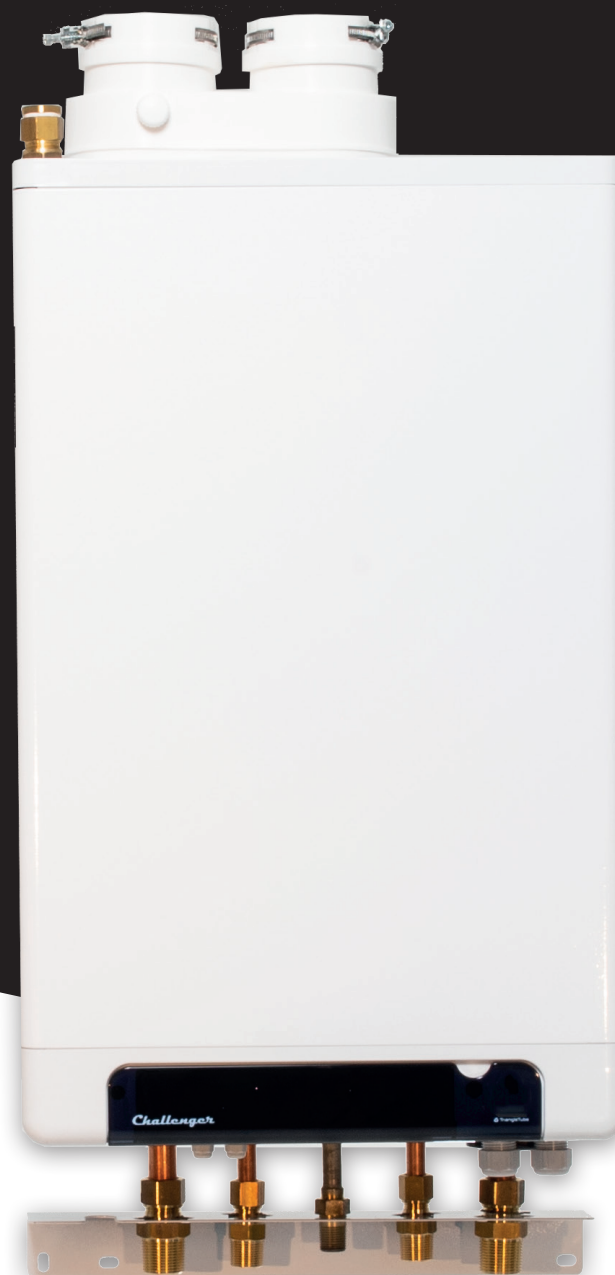


The energy efficient, compact fit solution

**CHALLENGER SOLO 50S 85S 105S 125S 150S
CHALLENGER COMBI 105 CC125**

Our Challenger Boiler features a unique "Two in One" heat exchanger that provides both space heating and domestic hot water.

The unique heat exchanger in the Challenger heats domestic hot water directly, allowing the boiler to condense in the DHW mode and eliminating a separate heat exchanger and three-way valve.



challenger
SOLO AND COMBI



Reliability without compromise

FEATURES & BENEFITS



Up to 95%
AFUE rating



ASME stamped
heat exchanger



Indirect water heater
compatible



Cast aluminium heat
exchanger with vertical
flueways



10-year limited warranty,
with 1-year parts warranty



Turn-down ratio
up to 6:2:1 with outdoor reset



Whisper quiet
operation



Compact size, perfect for
closet installation



Easy service
and maintenance



Best possible installation for optimal performance

The timesaver primary-secondary manifold is included with all Challenger boilers.

This pre-assembled manifold not only simplifies the installation, saving you time and money, but also ensures the best possible installation for peak performance and efficiency.





SPECIFICATIONS & FEATURES

Challenger model	CC 50S	CC 85S	CC 105S	CC 125HS	CC 150S	CC 105	CC 125H
Input Modulation (MBH)	13.5 to 51	23 to 84	29 to 106	20 to 125	33 to 145	29 to 106	20 to 125
AFUE	95%	94%	94%	95%	92.3%	94%	95%
DOE Heating Capacity (MBH)	46	75	94	111	129	94	111
Net AHRI Rating (MBH)	40	65	82	97	112	82	97
Fuel	NG & LP	NG & LP	NG & LP	NG & LP	NG & LP	NG & LP	NG & LP
DHW flow rate at 70 F Temp. Rise (GPM)	-	-	-	-	-	2.5	3.0
DHW minimum flow rate (GPM)	-	-	-	-	-	0.5	0.5
DHW maximum temp. (F[C])	-	-	-	-	-	149 (65)	149 (65)
Maximum CH output temp. (F[C])	-	-	-	-	-	194 (90)	194 (90)
Cabinet Height (Inch)	23 1/4	23 1/4	25 1/2	28	28	25 1/2	28
Cabinet Width (Inch)	17 3/4	17 3/4	17 3/4	17 3/4	17 3/4	17 3/4	17 3/4
Cabinet Depth (Inch)	9 1/2	9 1/2	9 1/2	9 1/2	9 1/2	9 1/2	9 1/2
Weight (Lbs)	66	66	73	80	80	73	80



10-year limited warranty, 1-year limited parts

Triangle Tube hereby warrants the Challenger Boiler, when properly registered with our factory at the time of purchase, to be free from defects in material or workmanship. Triangle Tube/Phase III will repair or, at its option, replace the component part under the conditions explained in shipping - assembly - installation, hereof.



Smaller footprint

The Challenger was designed to fit into the smallest of spaces.

Taking up less than 3ft, the Challenger can fit in a small storage area or utility closet. But with an attractive enclosure and whisper quiet operation, why hide it at all?





Powerful solutions for large residential and light commercial applications

KS 399T 500T 600T 750T 850T 100T 1200T

Keystone Condensing Boilers provide powerful solutions for large residential and light commercial applications with 5 models with inputs from 399 to 850 MBH.

These products feature a stainless steel heat exchanger with a thermal efficiency between 95 and 97%. Their compact design minimizes floor space while the cabinet provides easy access to all components.




keystone
BOILER



Maximum efficiency

FEATURES & BENEFITS FOR BOILER AND WATER HEATER MODELS



Up to 97% AFUE rating



Stainless-steel heat exchanger - ASME certified



Turndown ratio up to 10:1 with outdoor reset



10-year limited warranty, with 1-year parts warranty (Boiler models)



5-year limited warranty, with 1-year parts warranty (Hot water models)



Large touchscreen color display



PVC, PP, and SS Venting up to 100'



Cascade up to 8 Units for a capacity of 4,800 MBH



Large color touch screen display

Our Keystone Boilers and Water Heaters feature a large color touch screen display with electronic PID modulating control stages for up to eight boilers. The large user friendly control interface makes set-up easy, meaning home owners or commercial applications are set up and ready to go in no time.





High volume hot water with high energy efficiency

**KW 199T 285T 399T 500T 600T 750T
850T 100T 1200T**

Keystone Condensing Water Heaters produce high volume hot water with high energy efficiency.

These products feature a stainless steel heat exchanger with a thermal efficiency between 95 and 97%. Their compact design minimizes floor space while the cabinet provides easy access to all components.





SPECIFICATIONS & FEATURES

Boiler model	Fuel	Input MBH	Thermal Efficiency	DOE Heating Capacity	Turndown Ratio
KS 399 T	Natural Propane	80 - 399	96.5%	386	5:1
KS 500 T	Natural Propane	100 - 500	95%	475	5:1
KS 600 T	Natural Propane	120 - 600	96%	572	5:1
KS 750 T	Natural Propane	150 - 750	96.6%	724	5:1
KS 850 T	Natural Propane	170 - 850	95.7%	813	5:1
KS 1000 T	Natural Propane	100 - 1,000	94.2%	942	10:1
KS 1200 T	Natural Propane	120 - 1,200	94.8%	1120	10:1
Water heater model	Fuel	Input MBH	Thermal Efficiency	Output MBH	Turndown Ratio
KW 199 T	Natural Propane	40 - 199	97%	193	5:1
KW 285 T	Natural Propane	57 - 285	95%	271	5:1
KW 399 T	Natural Propane	80 - 399	96%	383	5:1
KW 500 T	Natural Propane	100 - 500	96%	480	5:1
KW 600 T	Natural Propane	120 - 600	97%	582	5:1
KW 750 T	Natural Propane	150 - 750	94%	705	5:1
KW 850 T	Natural Propane	170 - 850	96%	816	5:1
KW 1000 T	Natural Propane	100 - 1,000	95%	950	10:1
KW 1200 T	Natural Propane	120 - 1,200	95%	1140	10:1



5-year (KW Models) and 10-year (KS Models) limited warranty

Triangle Tube hereby warrants the Keystone Condensing Boiler &/or Keystone Condensing Water Heater when properly registered with our factory at the time of purchase to be free from defects in material or workmanship. Triangle Tube will repair or, at its option, replace the component part under the conditions explained, hereof.



An ideal heating system for swimming pools, hot tubs & spas

TRIANGLE TUBE MAXI FLO

The Triangle Tube Maxi Flo heat exchanger, when combined with any boiler, makes for an ideal heating system for swimming pool, spa and hot tub application.

Available in 5 sizes, ranging from 95,000 to 400,000 BTW/hr thermal output which can accommodate any size pool or spa.



maxi flo
HEAT EXCHANGER



Available in stainless-steel and titanium



Made from robust materials

Titanium is chosen for the high resistance to corrosion and is suitable for pools and spas with aggressive water, salt water and when a salt chlorine is used.

FEATURES & BENEFITS



Available in five sizes from
95,000 to 400,000 BTU



Significant energy
savings



Built-in flow restrictor to
assure maximum heat
exchange



Light-weight and compact
in size, with a minimum
installation space



Constructed of high quality
corrosion resistant stainless
steel (AISI 316)



Designed to minimize
pressure loss in the heating
system



Limited residential lifetime
warranty





Become Triangle Tube trained in our state-of-the-art facilities

Triangle Tube Academy

Training seminars are held all year round at various locations throughout North America, including our state-of-the-art live fire room at the Triangle Tube headquarters in West Deptford, New Jersey.

Our facilities provide hands-on training led by our experienced and knowledgeable instructors.

A full calendar of locations and how to register can be found at www.triangletube.com



REAL WORLD APPLICATION

Lead technicians will give contractors the competitive edge with extensive training on real-world application.



EXCLUSIVE PRODUCT INSIGHT

Including classroom seminars and hands-on work, installers will gain comprehensive knowledge of Triangle Tube products.



LIVE FIRE LAB INSTALLATION FOCUS

Training in our live fire lab focuses on proper installation practices, system and pump sizing and troubleshooting.





Don't just take our word for it...



I enjoy installing Triangle Tube boilers and on-demand hot water systems because I know I'm working with a product that is well made and quality built.

The boilers are reliable with a well made heat exchanger. Triangle Tube also has great tech support when and if I need them. My customers are always satisfied and pleased with Triangle Tube."

PETE YUKNEVICH,
Pete's Plumbing
Pine Bush, NY



We not only put Triangle Tube Prestige boilers and Smart tanks in projects that we're working on - I also have them in my own home. I recently upgraded my hot water tank to a Triangle Tube. I removed a less efficient, larger tank, with one that has two heat exchangers. So far it has been flawless!

I chose Triangle Tube not only for all my projects that I have worked on, but for my own home."

BRENT FRANICH,
South Sound Hydronics
Tacoma, WA



The best part of working with Triangle Tube is the unrivaled technical support.

People hire me not just based on the price but based on the guarantee they're going to get! I can't offer that guarantee with any other product so that's another reason why I use Triangle Tube."

JEFF WHITNEY,
JR Whitney Plumbing Company
Colorado Springs, CO



We've always used Triangle Tube's boilers because the fire tube boiler is a good design. We've tried a few other boilers that have issues with venting at high altitude and tuning them is difficult, so we just stick with Triangle Tube.

My favorite feature on the newest units are the fact that you can change the pumps and customize them to change the relays - that's really nice."

**CHRIS CHERRY,
Plumb Tec
Winter Park, CO**

www.triangletube.com



**We want to see
your installs!**

Show off your installation.
Send us your pictures at
info@triangletube.com



Brand loyalty, customer satisfaction

When you install a Triangle Tube product, you can trust that you have chosen products built with a focus on quality and reliability.

Your customers can be sure you've delivered total comfort and peace of mind with heating and hot water products they can rely on.







Customer Service

856 - 228 - 8881 ext:150

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customerservices@triangletube.com

warranty@triangletube.com

Corporate Office

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sales@triangletube.com

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Triangle Tube reserves the right to make
product changes or improvements.

2019-24 Range Guide