

ZONEGUARD



Tankless.

Scale prevention
for water heating.

IN-LINE WATER CRYSTALLIZER

Purpose
engineered.



THE TANKLESS SERIES

Heat is the job. Scale is the problem.

Hard-water minerals can form hard scale on the internal surfaces that transfer heat to water.

ZoneGuard Tankless is designed to prevent that build-up.

TANKLESS HEAT EXCHANGER + BURNER / ENGINEERING VISUALIZATION

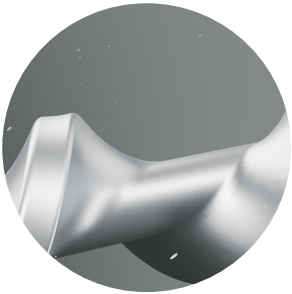
Protect the surfaces that matter.

Dedicated scale prevention for tankless water heaters and hot-water systems.

Continuous in-line protection for heat exchangers and downstream components.

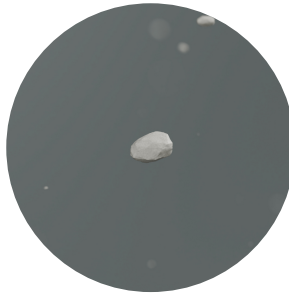
Change the form. Protect the surface.

INTERNAL CORE IN WATER / SCHEMATIC ENGINEERING VISUALIZATION



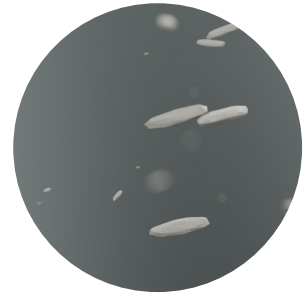
01 Contact

Dissolved hardness minerals enter with the water and encounter the internal core.



02 Crystallize

Catalytic crystallization transforms hardness minerals into stable microscopic crystals.



03 Suspend

Crystals remain suspended in the water rather than forming hard scale on internal surfaces.

Protection. Without the routine.

Permanent in-line scale protection.
No chemicals or treatment media
added to the water.

No salt.

Salt-free operation.

No power.

No electrical supply required.

No replacement media.

No consumable media to replace.

No maintenance.

Continuous, maintenance-free operation.

INTERNAL CORE / MATERIAL DETAIL



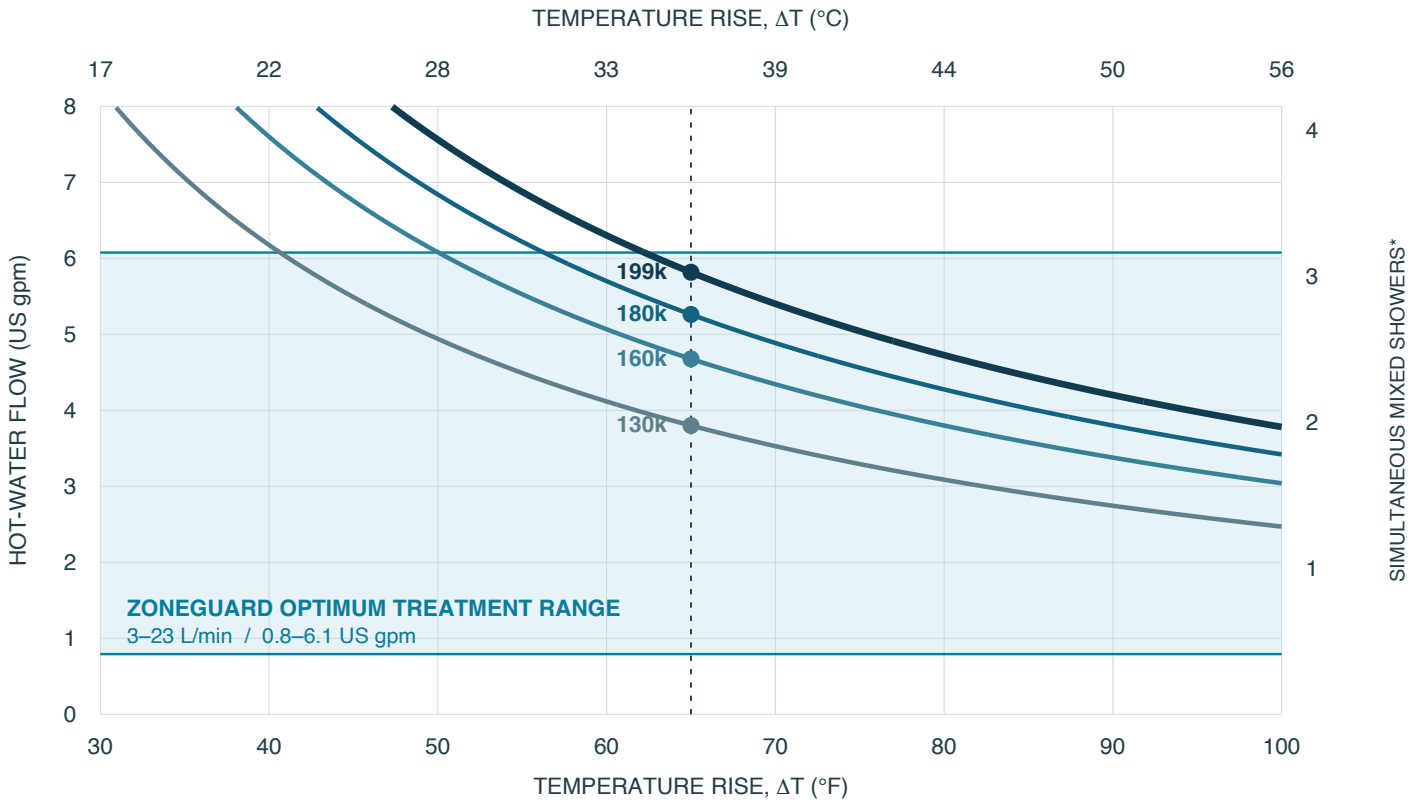
Designed around demand.

5.8

US gpm
hot-water flow

199k BTU/h heater input
55°F inlet → 120°F outlet
95% thermal efficiency

65°F RISE / APPROXIMATELY 3.0 MIXED SHOWERS*



HEATER INPUT	US gpm	L/min	SHOWERS*	RANGE
130k BTU/h	3.8	14.4	2.0	Optimum
160k BTU/h	4.7	17.7	2.4	Optimum
180k BTU/h	5.3	19.9	2.7	Optimum
199k BTU/h	5.8	22.0	3.0	Optimum

*2.5 US gpm showers mixed at 105°F; 55°F inlet; 120°F heater outlet. Hot water per shower: 1.92 US gpm.
Engineering reference at 95% efficiency; high-efficiency condensing heater scenario.
Actual performance varies by manufacturer, model and conditions. Curves are not scale-efficacy test results.

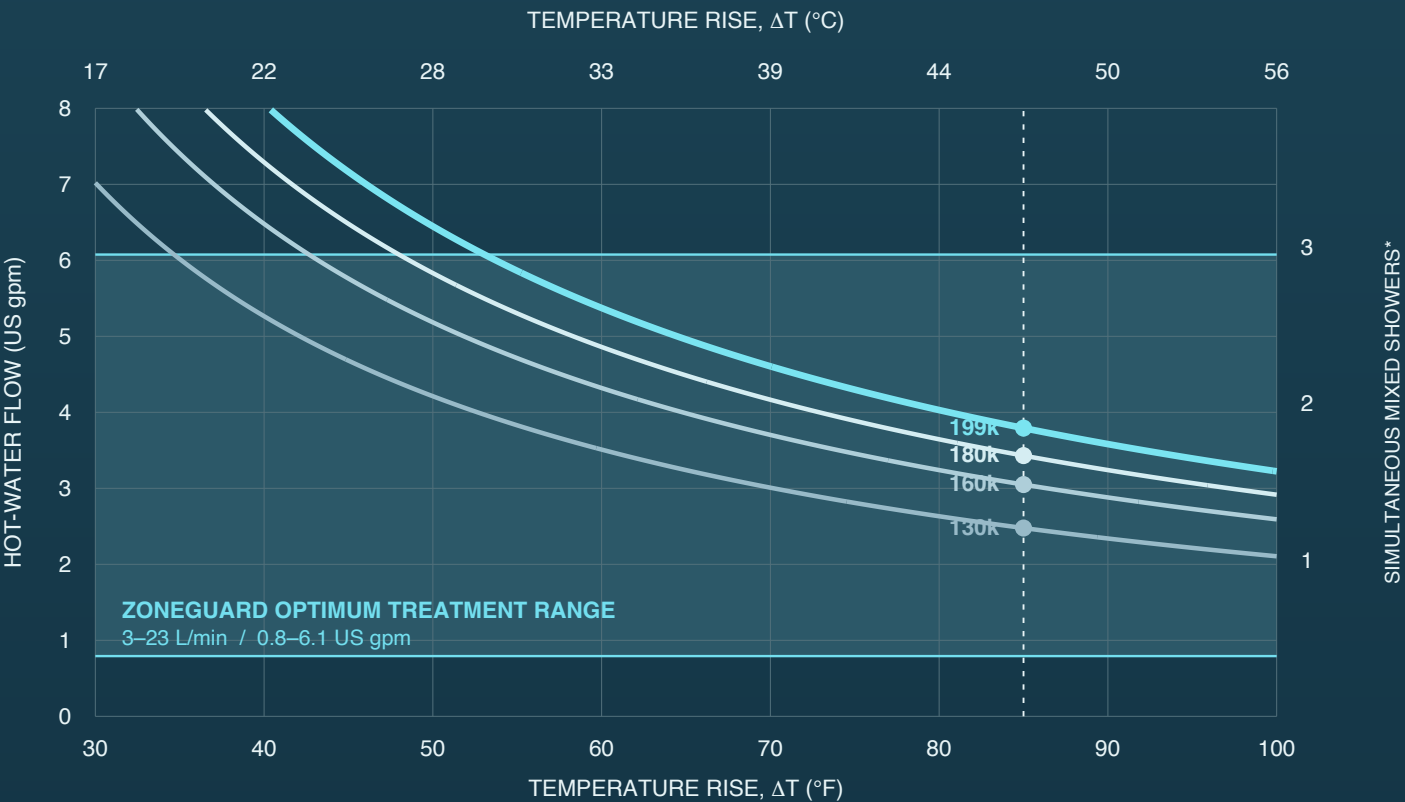
Cold inlet. Clear reference.

3.8

US gpm hot-water flow

199k BTU/h / 35°F inlet → 120°F outlet / 81% efficiency

85°F RISE / APPROXIMATELY 1.8 MIXED SHOWERS*



HEATER INPUT	US gpm	L/min	SHOWERS*	RANGE
130k BTU/h	2.5	9.4	1.2	Optimum
160k BTU/h	3.0	11.5	1.5	Optimum
180k BTU/h	3.4	13.0	1.7	Optimum
199k BTU/h	3.8	14.4	1.8	Optimum

*2.5 US gpm showers mixed at 105°F; 35°F inlet; 120°F heater outlet. Hot water per shower: 2.06 US gpm.
Engineering reference at 81% efficiency; non-condensing gas heater scenario.
Actual performance varies by manufacturer, model and conditions. Curves are not scale-efficacy test results.

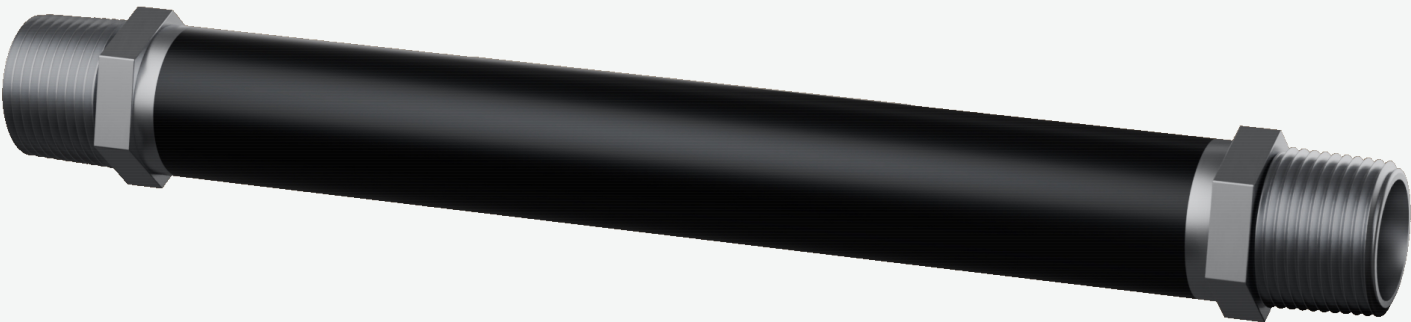
The Tankless operating envelope.

0.8–6.1

US gpm
3–23 L/min

OPTIMUM TREATMENT RANGE

3/4" MALE NPT CONNECTIONS



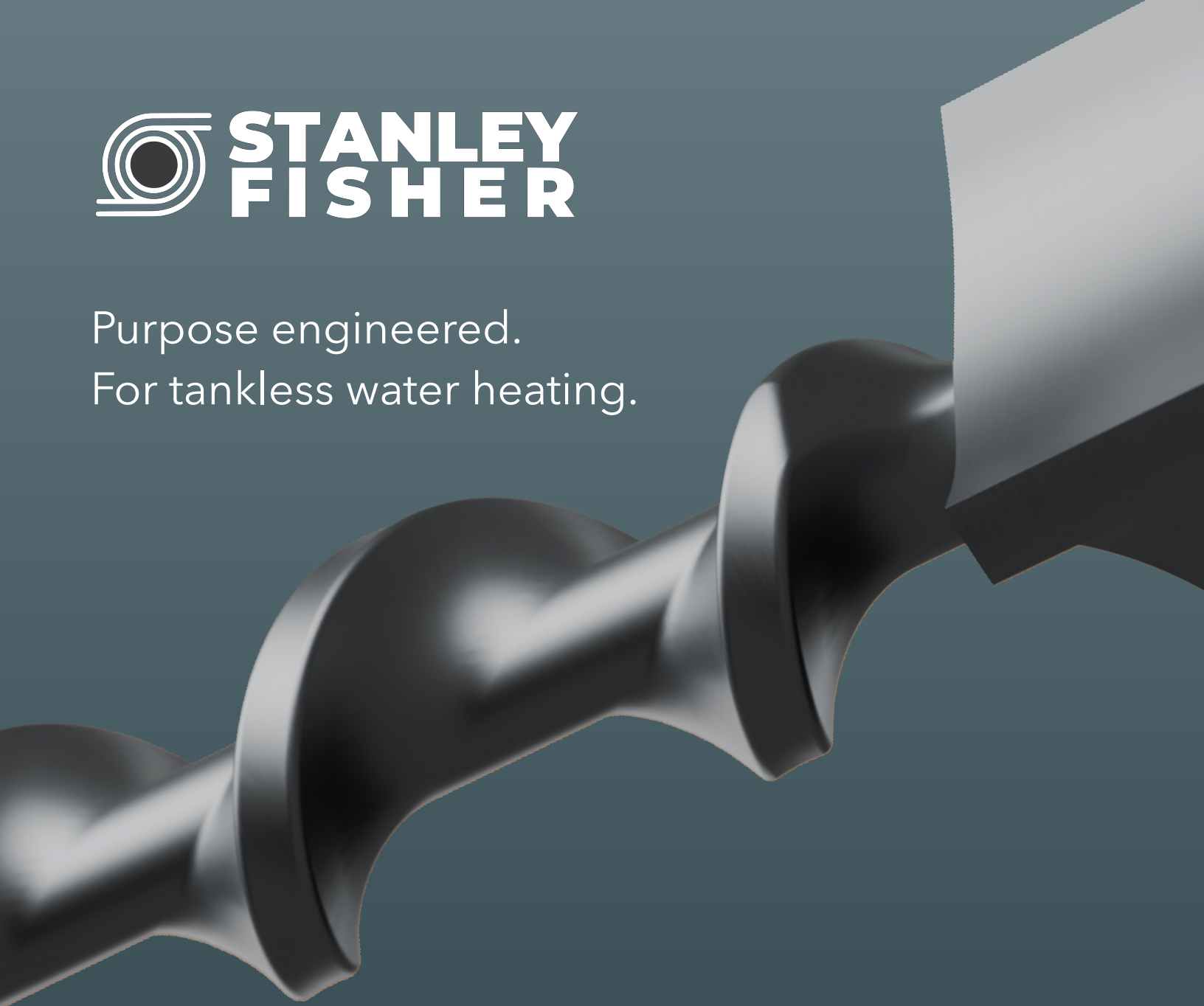
STAINLESS-STEEL HOUSING

Maximum pressure	145 psi
Maximum liquid temperature	185°F
Connection size	3/4" Male NPT
Housing material	Stainless steel

Lead-free construction designed for potable water systems.
Check flow, pressure and liquid temperature against these stated limits.



Purpose engineered.
For tankless water heating.



ZONEGUARD

www.stanleyfisher.com