THERMAL

THERMAL PACKAGE BOILERS

VERTICAL TUBELESS BOILERS

DESIGN CODE: AS1228, ASME Sec. 1

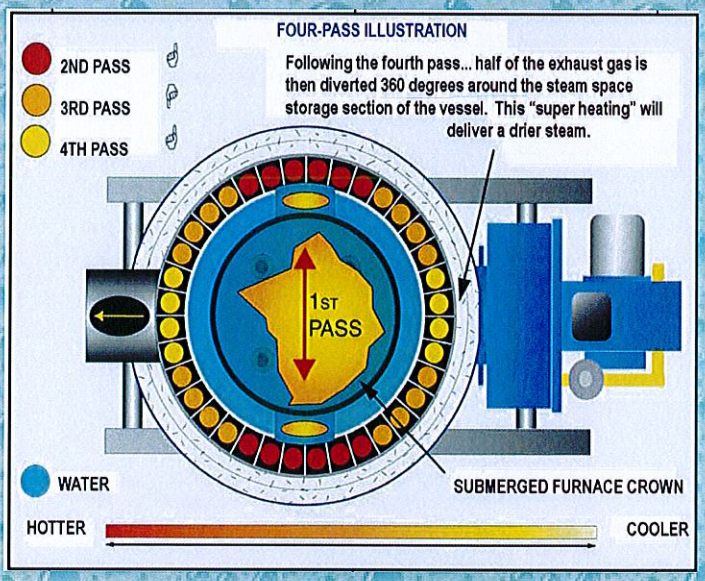
Capacities from 100 to 500kW

Largest Steam Space In Its Class

SPECIFICATION FEATURES

THERMAL PERFORMANCE SERIES BOILERS LEADING THROUGH INNOVATION...

Our tubeless vertical steam water boilers provide exceptionally high efficiencies, lower fuel costs, and extremely rugged construction. The compact, space saving vertical shock-proof design has no tubes to loosen or burn out. The TLS Series Vertical Tubeless Boiler allows convenient access to burner and solid-state and control box for trouble free operation. Factory assembled and fully automatic the TLS tubeless boiler is supplied with quality components for reliable and trouble free operation.



First– Pass in furnace pipe.

Second– Pass follows path through fins along outside of shell.

Third– Pass follows path through fins along outside of shell.

Fourth– Pass follows path through fins along outside of shell, then merges together to exit exhaust stack.

⇦ Illustration shows the progression of four gas paths around the circumference of the boiler shell.

SIMPLE INSTALLATION

- Unit is skid mounted for easy handling.
- Factory wired with wiring schematic included in the manual.
- Efficient and space saving layout.

INSPECTION ACCESS

- The waterside opening are located in the most effective positions. The lower handholes offer far better access for both cleanout and inspection.
- These more functional locations avoid the obstructing handholes "tunnels" used by our competitors.
- The top opening offers a strategic view of the furnace crown sheet.

DURABILITY

- Fire does not pass under the bottom mud ring, eliminating the blistering that occurs with other designs.
- Cooler furnace gases are located at the bottom of the vessel where scale is most likely to occur. Baking of scale is alleviated.
- All steel construction—no boiler tube.

FOUR - PASS DESIGN

- The gases leaving the furnace are split four ways and travel through four individual serpentine fin passages to the stack outlet.
- Each quarter of the heat travels its own four -pass path. (see illustration)
- Heat transfers evenly to the fins and boiler shell, eliminating the metal stress due to uneven heat transfer common in other designs.

MORE STEAM STORAGE

- Capacity to handle swing and spike loads - quick recovery, quick response.
- The larger steam - release surface is calmer, reducing carry over of un-evaporated water.
- The resulting drier steam also reduces system scaling.
- In addition, dry steam helps to eliminate unnecessary extra condensate. Energy and fuel are saved. Longer life results.

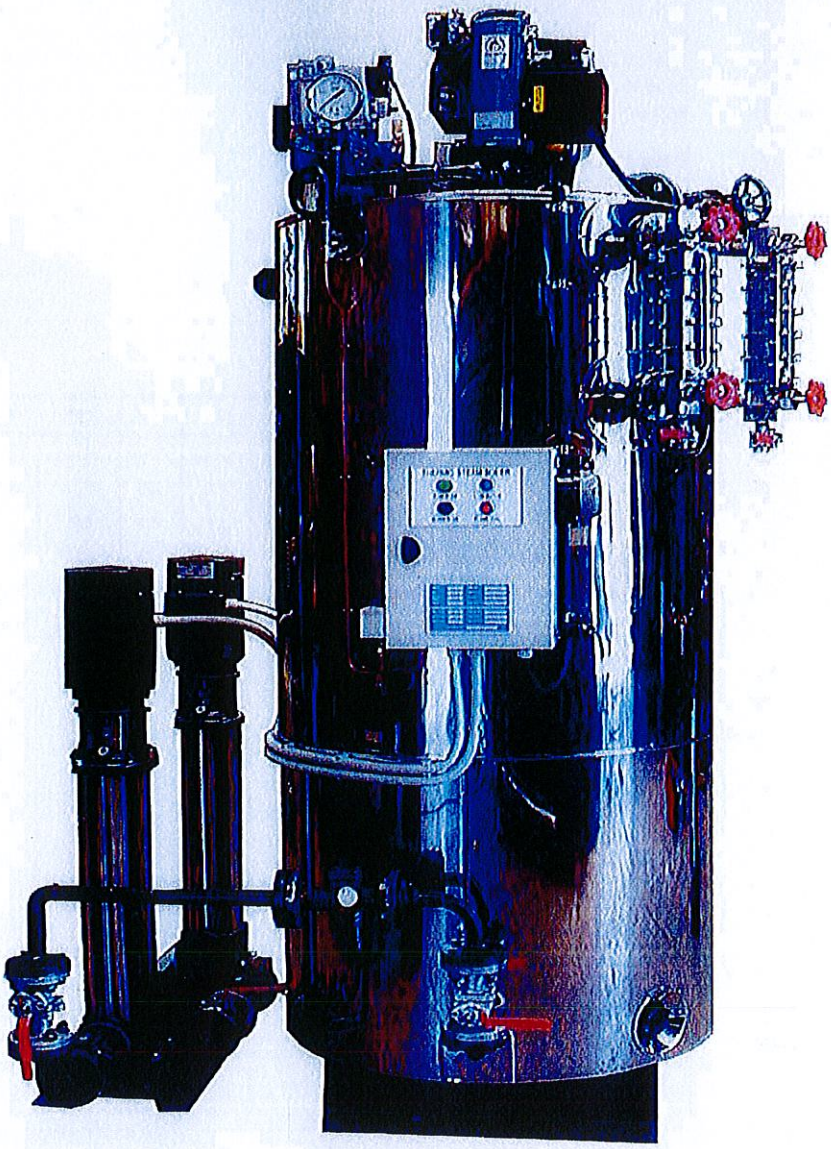
OPTIONS AND ALTERNATIVES

- We specialize in customizing your boiler. The equipped to suit a wide variety of installations and specifications. We will help direct you to the most cost effective models and features.

THERMIC PACKAGE BOILERS

THERMIC

VERTICAL STEAM BOILERS
WATER TUBE DESIGN



SPECIFICATION FEATURES

VERTICAL STEAM BOILERS
WATER TUBE DESIGN

The Thermic Boiler is of a vertical water tube design. This design with generous heating surface allows for a compact design approximately 30% smaller than our competitors.

Compact Design - Smallest Floor Space
Due to the vertical firing the THERMIC TS Series is one of the most compact boilers, requiring less installation space.
Since no special boiler room is needed, it can be mounted even at a corner of a workshop.

High Efficiency - For Lower Running Costs
Independent tests of operating efficiency as high as 83%. This a full 3% higher than most others on the market. Especially in terms of the energy costs, you will certainly be satisfied with its features. Backed by a characteristic of high and uniform quality and a reasonable price.

Easy to Operate - Minimal Training and Maintenance
All THERMIC boilers are fully automatic and require minimal maintenance. All the switches and meters used for daily operation are mounted on the boiler front side.
THERMIC TS boiler is easily to use.

Steam Generated in 10-15 Minutes
All THERMIC TS series generates steam at the prescribed pressure in minutes after starting the operation. Quick steam generation allows users to set work at any time.

No Operator Certificates– Anyone can Operates
All models comply to AS2593, this mean no operator certificates*.

A.S.M.E. Models available

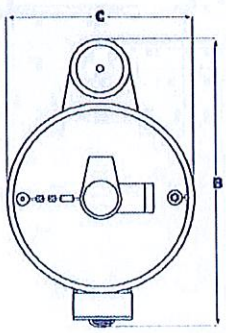
Quiet Operation
By using highly efficient forced draught burner the boiler is whisper quiet which allows the boiler to be operated in close proximity of people working.

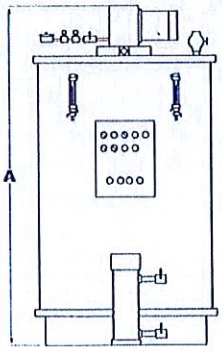
Firing Equipment
- Matching over-fire forced draft pressure jet burner to suit nominated system
- Natural Gas/L.P.G./Diesel Oil/Duel Fuel.

TECHNICAL DATA

MODEL	TS5	TS10	TS15	TS20	TS30	TS50	TS60	TS100	TS150
CAPACITY (KW/HP)	50/5	100/10	150/15	200/20	300/30	500/50	600/60	1000/100	1500/150
EVAPORATION KG/HR f & a 100°C	80	160	240	300	500	800	1000	1500	2300
HEATING SURFACE M²	2.18	4.4	6.5	8.95	12.9	21.32	27.72	42.64	62.5
FUEL USAGE NATURAL GAS M³/HOUR	5.7	11.4	17.1	22.8	34.2	57.0	74.1	114.0	171.0
LPG LT/HOUR	8.2	16.54	24.8	33.88	50.83	84.7	110.13	169.4	254.2
DIESEL OIL LT/HOUR	4.6	9.58	14	19.15	28.73	47.88	62.24	95.76	143.64
OVERALL HEIGHT (MM) A	1200	1950	2390	1850	2350	2450	2450	2750	3550
OVERALL WIDTH (MM) C	500	600	850	800	900	1200	1300	1300	1300
OVERALL LENGTH (MM) B	700	1000	1000	1200	1400	1700	1750	1800	1800
MAIN STEAM OUTLET	15	20	25	25	25	40	40	50	80
FEEDWATER INLET	15	15	20	20	20	20	25	25	32
SAFETY VALVE	20	20	20	25	25	25	25	25	25
BLOWDOWN VALVE	20	20	20	25	25	25	25	25	25
FLUE DIAMETER (MM) Ø	125	150	200	200	250	250	300	350	400

DIMENSIONS(MM)





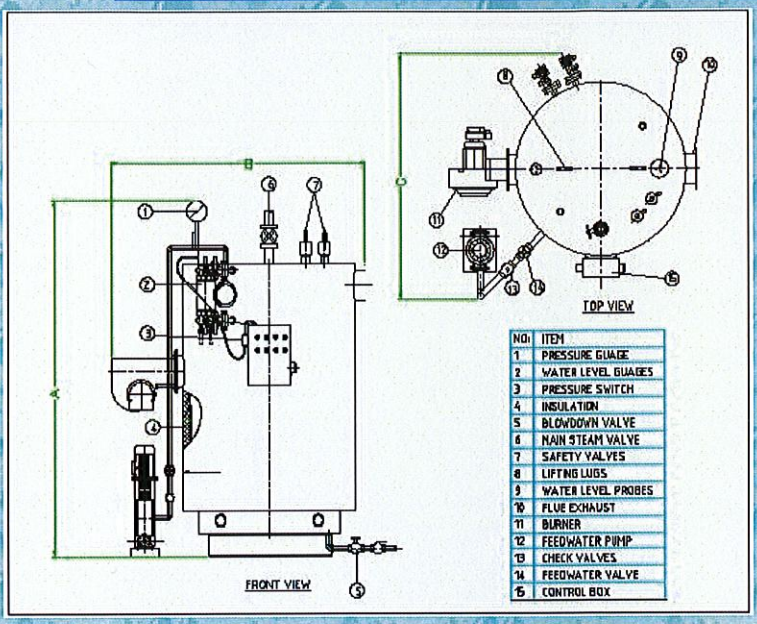
Optional Features - Available on Application
- Temperature Indication (Feedwater)
- Flue Gas Temperature Indication
- Modulation Control
- Low Water (Feedwater)
- High or Low Gas
- Time Clock

24 Hours per Day Service - Faster Response, Reliable Service System
THERMIC Boilers pride themselves on quality service throughout Australia and many other countries using qualified, efficient and cautious service personnel. Well experienced service people trained at our own factory stationed throughout Australia.

(CHECK WITH LOCAL AUTHORITIES IN COUNTRIES OTHER THAN AUSTRALIA)
We reserve the right to alter specification without prior notice.

SPECIFICATION FEATURES

THERMAL PERFORMANCE SERIES BOILERS
LEADING THROUGH INNOVATION...



TECHNICAL DATA

MODEL	TLS10	TL20	TLS30	TLS40	TLS50
CAPACITY (KW/HP)	100/10	200/20	300/30	400/40	500/50
EVAPORATION KG/HR f & a 100ºC	160	300	500	625	750
HEATING SURFACE M²	7.2	9.9	14.9	19.2	23.5
FIRING RATE - NATURAL GAS M³/HOUR	11.2	22.5	33.9	45.0	73.5
FIRING RATE - LPG LT/HOUR	14.6	29.5	44.4	59.1	73.5
FIRING RATE - DIESEL OIL LT/HOUR	10	20	30	40	50
MAIN STEAM OUTLET (MM)	15	20	25	25	40
FEEDWATER INLET (MM)	15	15	20	20	20
SAFETY VALVE (MM)	20	20	20	25	25
BLOWDOWN VALVE (MM)	20	20	20	25	25
FLUE DIAMETER (MM) Ø	125	150	200	200	250
OVERALL HEIGHT (MM) A	1900	2500	2700	2950	2950
OVERALL WIDTH (MM) C	1150	1450	1600	1800	1850
OVERALL LENGTH (MM) B	1350	1650	1750	2200	2300
SHIPPING WEIGHT (DRY) KGS	750	980	1200	2200	3200
WATER CONTENT - STEAM SERIES (WC) LITRES	182	204	267	462	595

- *DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE, CERTIFIED DRAWING AVAILABLE UPON REQUEST.*
- *CHECK WITH LOCAL AUTHORITIES IN COUNTRIES OTHER THAN AUSTRALIA.*

We reserve the right to alter specification without prior notice.

UDS

UDS universaldrycleaningsolutions

SPECIFICATION FEATURES

THERMAL PERFORMANCE SERIES BOILERS
LEADING THROUGH INNOVATION...

TURBULENT FLAME

- Heat is forced down, with the fire whirling and spinning against its natural flow. This pattern enhances recirculation, mixing and heat transfer, driving more energy into the water for - greater fuel-to-steam efficiency.

"EYE HIGH" BURNER

- No step ladder is needed to service.
- No bending over or sitting on the floor.
- The air intake is located in the center of the unit so dust is not pulled from the floor.

EASIER SERVICE

- Access opening above feed water inlet for easy cleaning.
- Thoughtfully engineered with the owner in mind.
- Not heavy doors or covers to complicate service procedures.

RELIABILITY

- The furnace crown is water cooled, eliminating refractory breakdown inherent in units of inferior design.
- No fire tubes, water coils or "in the fire" mud rings to burnout.

SAFETY

- Electrical components are located away from the floor, helping eliminate the possibility of water coming in contact with electricity.
- TLS boilers built to AS1228:2006,
- TLS boilers built to ASME Section 1, High Pressure Boiler Code.
- Manufactured under ISO:9000 Quality System

AVAILABLE ACCESSORIES

- TLS series available in a complete package with an optional compact skid-mounted feedwater system for a finished wired and piped, ready to fire.
- Chimney are also available in mild steel or stainless steel.
- Blowdown are also available
- Chemical Dosing system are also available.

CUT AWAY VIEW

Electrical components are located away from the floor, helping eliminate the possibility of water coming in contact with controls or main panel.

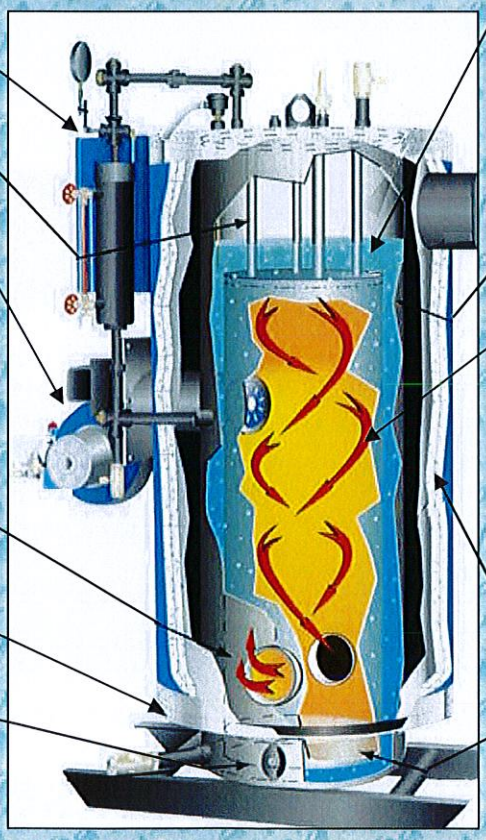
Ridged (stay rod) construction insures highest quality with added heater transfer.

"Eye High" Burner.. No ladder required when firing or inspecting the unit.

Furnace Port - Gases exit via twin ports in lower section of furnace to travel along four individual serpentine fin passages encasing the outer furnace shell. This maze is configured to extract every megajoules of spent energy possible before exhausting to the stack outlet.

Bottom fireside access covers

The waterside opening are located in the most effective position. The lower hand-holes offer far better access for both cleaning and inspections



Over 100% more steam space than any vertical design on the market. More capacity to handle swing loads, quick recovery with quick response.

Pressure Vessel Shell

Heat is forced down, with the flame whirling and spinning against its natural flow. This pattern enhances recirculation, mixing and heat transfer. Driving more energy into the water for greater fuel to steam efficiency.

Inner heat shroud

No cast refractory floor fire does not pass under the bottom mud ring, eliminating the billstering that occurs with other designs.