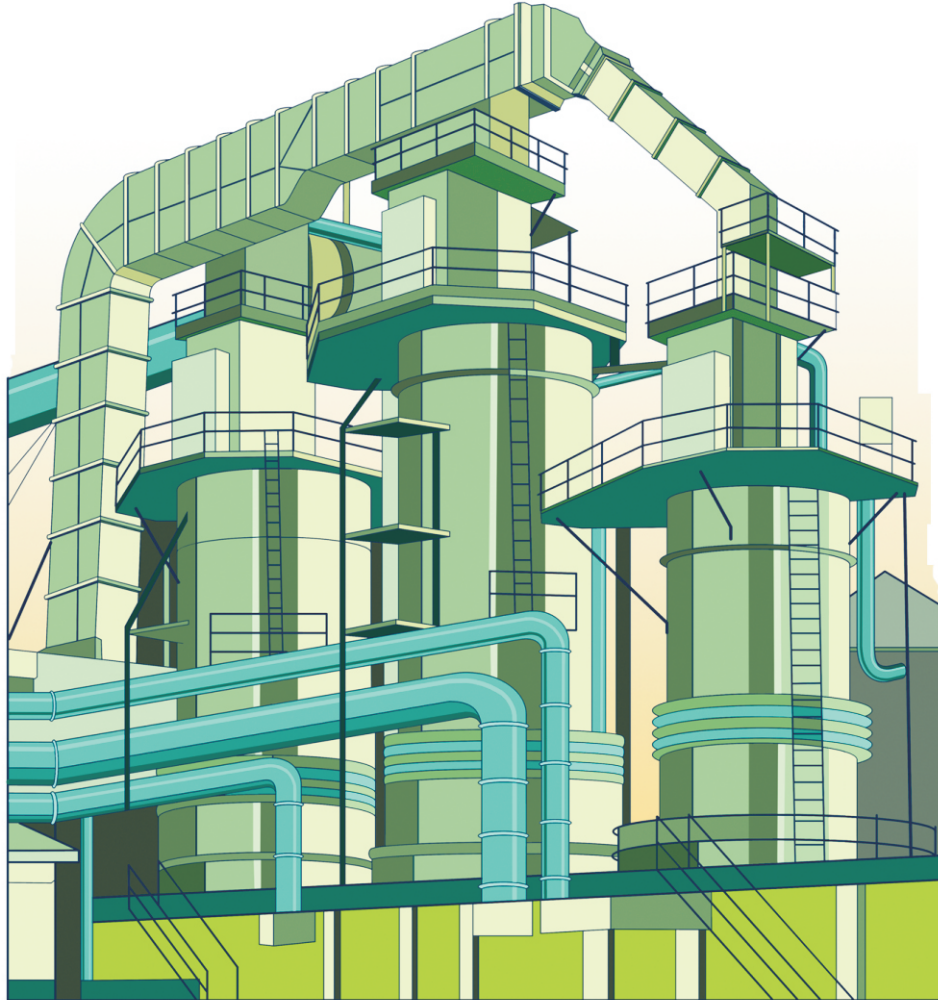




Factory Address: Agasti Energy Private Limited, F-28, Phase II,
Dombivli MIDC, Dombivli(E)



About Us :

Agasti Energy Pvt. Ltd. erstwhile Super Steam Boiler Engineers Ltd was founded in 1978 and is a renowned manufacturer of steam boilers.

With two manufacturing facilities in Maharashtra, we have been designing, manufacturing, engineering and servicing gas, oil, coal, solid waste, and biomass & hybrid fuel-fired steam & hot water boilers. The group stewardship made steady progress in modification of boilers for higher capacity & efficiency and played a significant role in the boiler industry.

The AGASTI product line includes boilers with capacity of 0-200 tonnes: Packaged Boilers, Baby Boilers, Hybrid Boilers, Water Tube Boilers, Waste Heat Recovery Boilers and Fluidized Bed Boilers having applications in Sugar Factory, Power Plants, Breweries, Distilleries, Textile, Dairy, Fertilizers, Hospitals, Military & all commercial / industrial operations.

We also cater to customized requirements of engineered packaged boilers & boiler systems, biomass boiler systems, boiler controls & accessories.

Team at Agasti :

At Agasti, we have been able to maintain excellent sales and service standards through a team of highly qualified engineers who have served prestigious organizations in the past with a vast experience.

Our strength lies in the fact that we are an organization managed by Engineers having extensive experience in the electrical field. All our team members are highly experienced and well qualified engineers, each one specializing in his respective field. Each team member undergoes extensive training to ensure high productivity and superior work quality.

Through the passage of success, it is obvious that we can put together a team of Specialists, Engineers and skilled manpower along with all the requisite equipment. We, therefore, are in a position to take real good care of your projects with top quality work.





Agasti and Quality :

Agasti Energy Pvt Ltd complies right from design stage to testing, from material procurement to the delivery of the final product with the National Standards, Quality Management System of ISO and mandatory Indian Boiler Regulations.

At Agasti, we strive hard to deliver the Products on time to meet the expectations of the Customer. We are committed to look after the interest of the customer and our objective is to continuously improve and maximize the plant performance.

Quality Assurance at Agasti, starts from the control in each stage of production from raw material procurement, in-process checks and final testing. Every department entrusted with the above tasks, meticulously follow the Quality Plans conceived by the Quality Assurance team.



Services Offered :

We also offer design-build, engineering, procurement and construction services for sugar plants and distilleries.

Pressure Reducing cum De-Superheating Station suitable up to 60 TPH & pressure from 63 Kg/cm² to low pressure at Temperature range 140°C to 500°C.

Services Offered :

Fabricated steam separator/Strainer, De-super heater vessel.

Steam distributing heater, Boiler headers.

Super heater, New Economiser & Elements, Boiler bend tubes, Air preheater etc.

Boiler Drum Internal primary & secondary separators for steam dryness.

Hot water boilers, Heat Exchangers, Evaporators, H.P. Heaters, Accumulator, Deaerator Unit.

Forged fittings like flanges/Elbows, reducers etc as per Ansi/DIN/IBR status.

Conversion of your boiler on solid fuel/FBC Bed/ Pulsating Grate etc.

Fuel Handling system, Fuel spreaders/Regulators, Bell breaker etc.

Multi cyclone dust collector, Air lock valves.

Stop valves, Soot blow valves, Feed check valves, Safety Valves, Mobery Level controller, Level gauges etc.

Boiler instrumentation, Three element level controller, Multi point draft/ Temp. recorders safety etc.

Flanges/Elbow/Reducers & Forged Fittings.

Boiler Drum Internal/Separator.

Furnace Fbc/Pulsating/Dumping/Fixed.

Fuel Handling System/Screw, Plate, Chain Conveyor.

Pressure Vessel/Storage Tank.

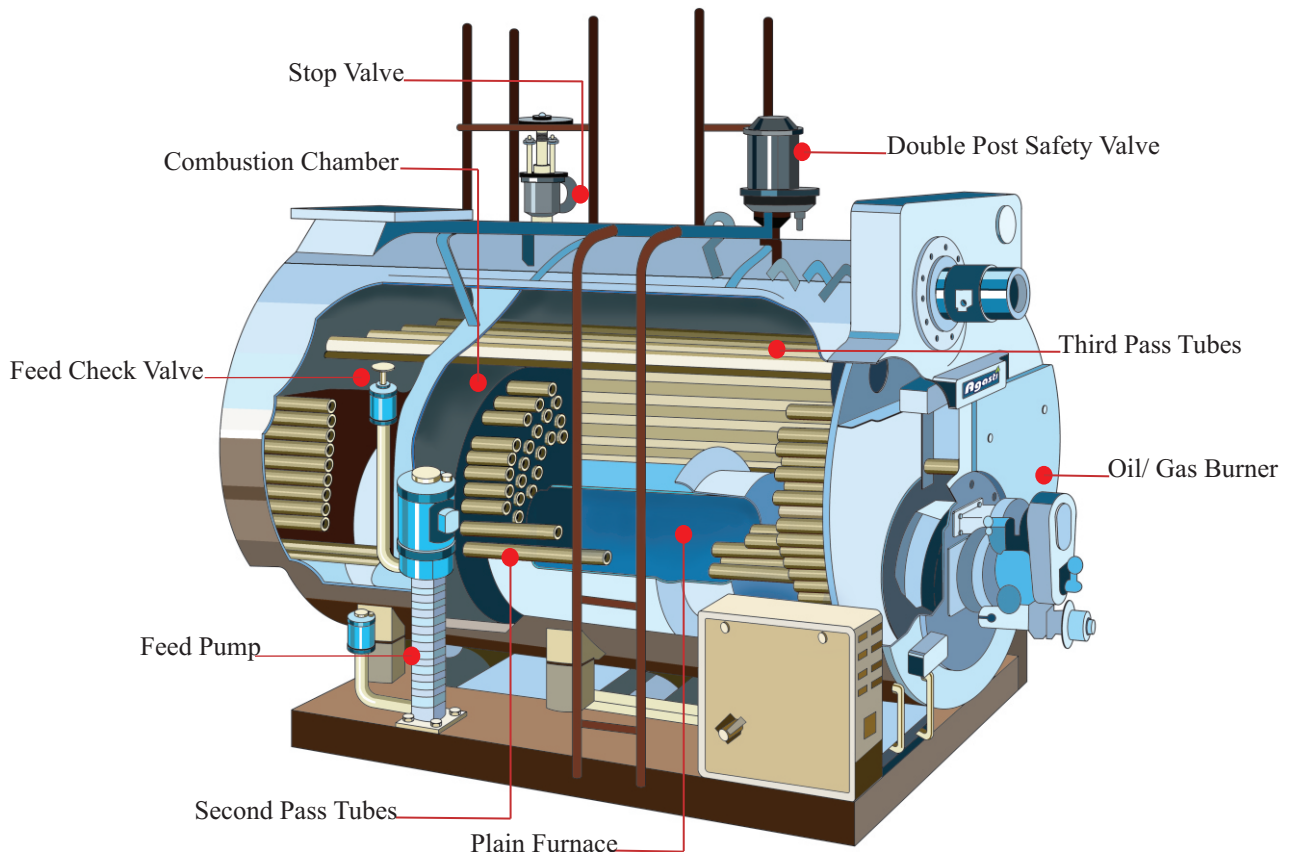
Heat Exchangers, Evaporators.

Auto Instrumentation for Boilers Etc.





Packaged Boilers : Type- A (Oil /Gas Fired Three Pass Wet Back Combustion Chamber Smoke Tube Boiler)



Product features:

One of the most commercial boilers for small and light applications are the Packaged Boilers. The term "package" boiler evolved from the practice of delivering boiler units to site already fitted with insulation, electrical panels, valves and gauges. This was in contrast to earlier practice where little more than the pressure vessel was delivered and the ancillary components were fitted on-site.

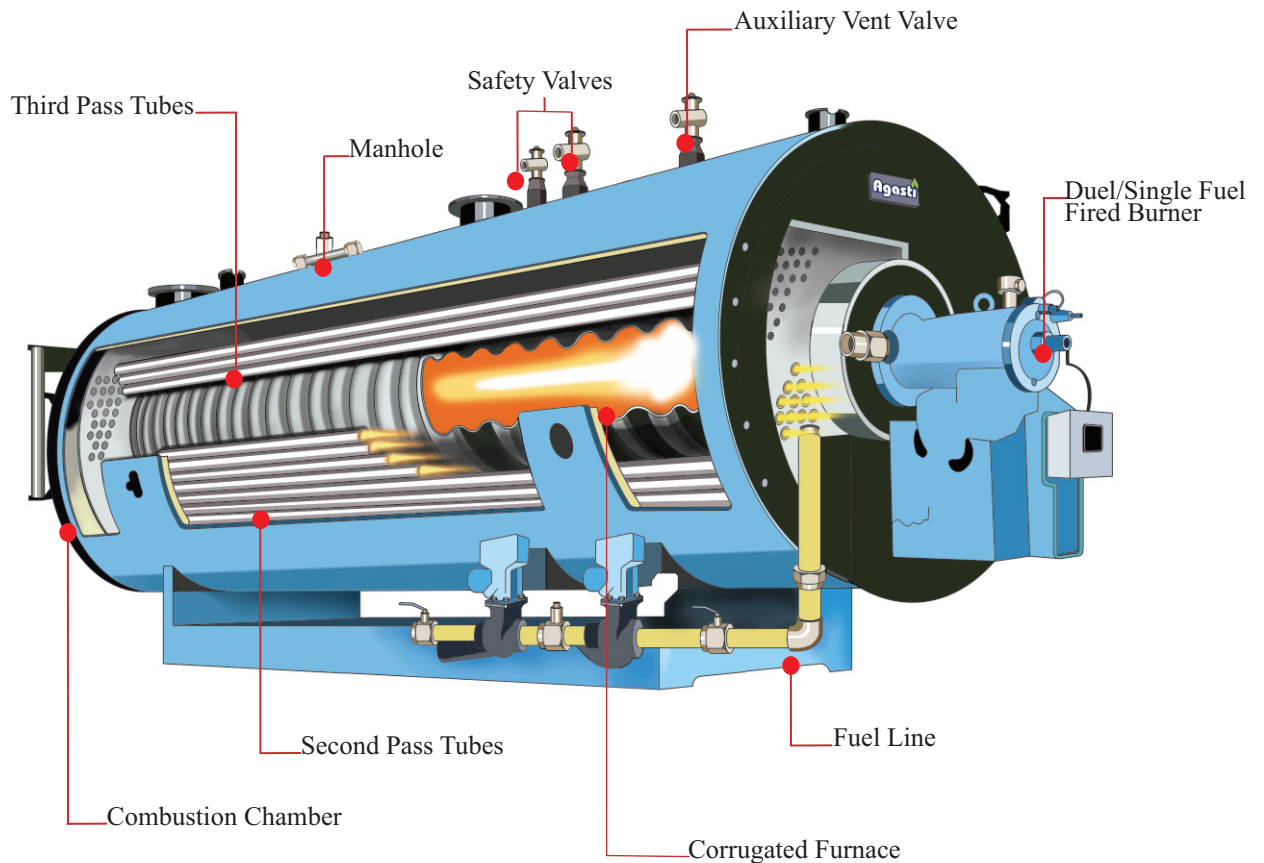
Operation parameters:

Max. Capacity: Up to 10 Tons

Max. Pressure: 45 kg/cm²



Packaged Boilers : Type- B (Oil /Gas Fired Three Pass Wet Back Combustion Chamber Smoke Tube Boiler)



Product features:

One of the most commercial boilers for small and light applications are the Packaged Boilers. The term "package" boiler evolved from the practice of delivering boiler units to site already fitted with insulation, electrical panels, valves and gauges. This was in contrast to earlier practice where little more than the pressure vessel was delivered and the ancillary components were fitted on-site.

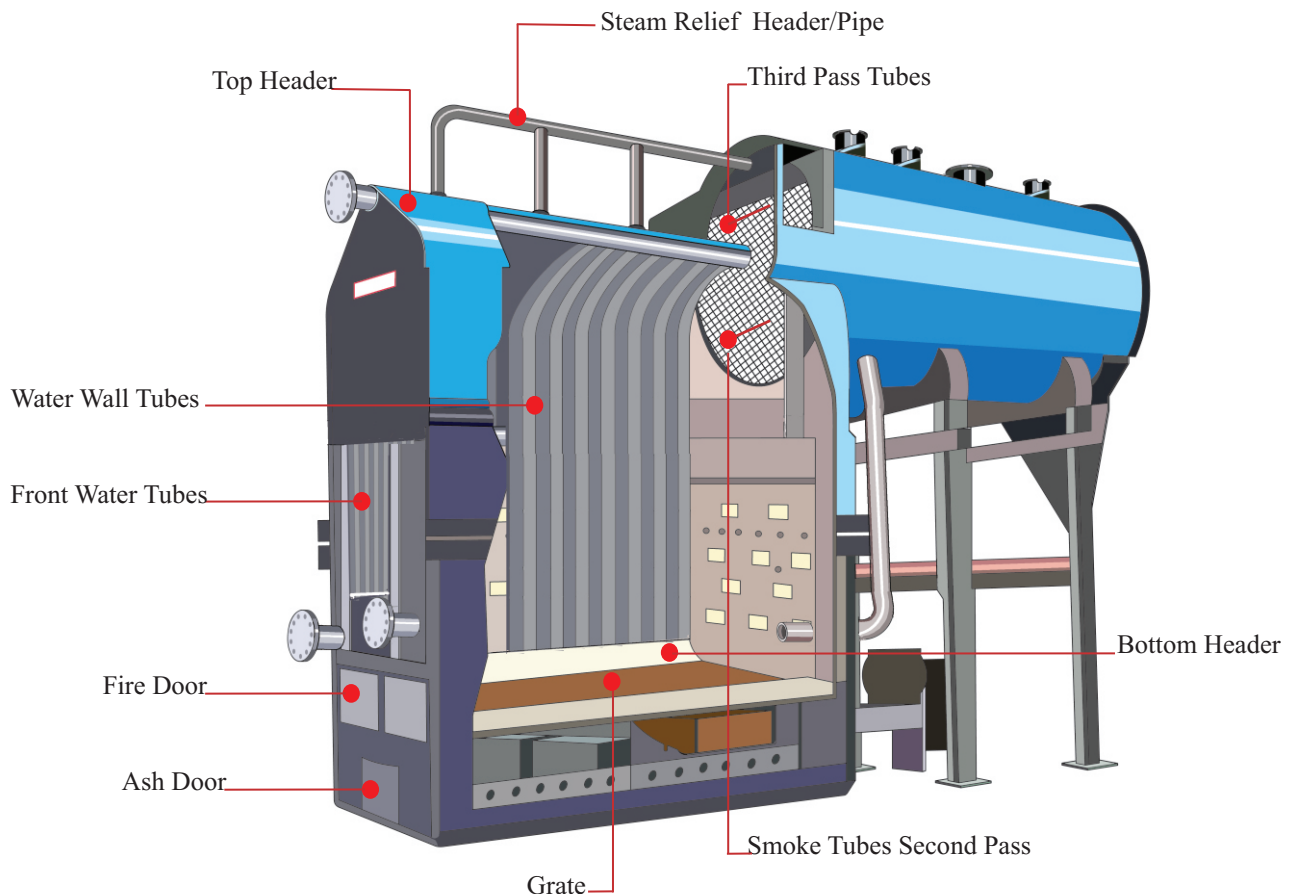
Operation parameters:

Max. Capacity: Up to 10 Tons

Max. Pressure: 45 kg/cm²



Composite Boilers : (Solid Fuel Fired Smoke Tube Boiler with External Water Wall Furnace)



Product features:

With diesel machinery the amount of heat carried away by the exhaust gases varies between 20 to 25 per cent of the total heat energy supplied to the engine. Recovery of some of this heat loss to the extent of 30 to 50 percent is possible by means of an exhaust gas boiler or water heater. The amount of heat recovered from the exhaust gases depends upon various factors, some of which are, Steam pressure, temperature, evaporative rate required, exhaust gas inlet temperature, mass flow of exhaust gas, condition of gas exchange surfaces, etc.

Composite boilers are often used in conjunction with Diesel machinery, since if the exhaust gas from the engine is low in temperature due to slow running of the engine and reduced power output; the pressure of the steam can be maintained by means of an oil fired furnace. Steam supply can also be maintained by these types of boilers when the engine is not in operation.

Operation parameters:

Max. Capacity: 30 Tons
Max. Pressure: 68 kg/cm²



Fluidised Bed Boilers :

Product features:

The major portion of the coal available in India is of low quality, high ash content and low calorific value. The traditional grate fuel firing systems have got limitations and are techno-economically unviable to meet the challenges of future. Fluidized bed combustion has emerged as a viable alternative and has significant advantages over conventional firing system and offers multiple benefits – compact boiler design, fuel flexibility, higher combustion efficiency and reduced emission of noxious pollutants such as SO_x and NO_x. The fuels burnt in these boilers include coal, washery rejects, rice husk, bagasse & other agricultural wastes. The fluidized bed boilers have a wide capacity range.

At AGASTI we manufacture all three following types of fluidized bed boilers:

1. Atmospheric classic Fluidised Bed Combustion System (AFBC)
2. Atmospheric circulating Fluidised Bed Combustion system (CFBC)
3. Pressurised Fluidised Bed Combustion System (PFBC).

APPLICATIONS:

Sugar Industry, Cement Industry, Pharma Companies, etc.

MAX. CAPACITY: 250 Tons

MAX. PRESSURE: 135 Kg/cm²

Waste Heat Recovery Boilers :

Product features:

Waste heat is heat, which is generated in a process by way of fuel combustion or chemical reaction, and then “dumped” into the environment even though it could still be reused for some useful and economic purpose. The essential quality of heat is not the amount but rather its “value”. The strategy of how to recover this heat depends in part on the temperature of the waste heat gases and the economics involved.

Large quantity of hot flue gases is generated from Boilers. If some of this waste heat could be recovered, a considerable amount of primary fuel could be saved. The energy lost in waste gases cannot be fully recovered. However, much of the heat could be recovered and loss minimized by adopting following measures as outlined in this chapter.

Through expertise and experience, we at AGASTI have developed and offer comprehensive Waste Heat Recovery solutions for various industries and segments.

Max capacity: 200 Tons

Max pressure: 108 kg per cm²





BOILER SAFETIES



NEVER :

- ❑ NEVER fail to anticipate emergencies. Do not wait until something happens to start thinking.
- ❑ NEVER start work in a strange plant without tracing every pipeline and learning the location and purpose of every valve. Know your job.
- ❑ NEVER allow sediment to accumulate in gauge glass or water-column connections. A false water level may fool you and make you sorry.
- ❑ NEVER give verbal orders for important operations or report such operations verbally with no record. Have something to back you up when needed.
- ❑ NEVER light a fire under a boiler without a double check on the water level. Many boilers have been ruined and many jobs lost this way.
- ❑ NEVER light a fire under a boiler without checking all valves. Never take a chance.
- ❑ NEVER open a valve under pressure quickly. The sudden change in pressure, or resulting water hammer may cause piping failure.
- ❑ NEVER cut a boiler in on the line unless its pressure is within a few pounds of header pressure. Sudden stressing of a boiler under pressure is dangerous.
- ❑ NEVER bring a boiler up to pressure without trying the safety valve. A boiler with its safety valve stuck is nearly as safe as playing with dynamite.
- ❑ NEVER take it for granted that the safety valves are in proper condition. The power plant is no place for guesswork.



ALWAYS :

- ✅ ALWAYS study every conceivable emergency and know exactly what moves to make.
- ✅ ALWAYS proceed to proper valves or switches rapidly but without confusion in time of emergency. You can think better walking than running.
- ✅ ALWAYS blow out each gauge-glass and water column connection at least once a day. Forming good habits may mean longer life for you.
- ✅ ALWAYS accompany orders for important operations with a written memorandum. Use a logbook to record every important fact or unusual occurrence.
- ✅ ALWAYS have at least one gauge of water before lighting off. The level should be checked with the gauge cocks. You will not be fired for being too careful.
- ✅ ALWAYS be sure blow down valves are closed and proper vents, water-column valves, and pressure-gauge cock are open.
- ✅ ALWAYS use the bypass if one is provided. Crack the valve from its seat slightly and await pressure equalization. Then open it slowly.
- ✅ ALWAYS watch the steam gauge closely and be prepared to cut the boiler in, opening the stop valve only when the pressures are nearly equal.
- ✅ ALWAYS lift the valve from its seat by the hand lever when the pressure reaches about three quarters of popping pressure.
- ✅ ALWAYS raise the valve from its seat with the lifting level periodically while the boiler is under pressure. Test by raising to popping pressure at least once per year.



BOILER SAFETIES



NEVER :



ALWAYS :

- | | |
|--|---|
| ☒ NEVER increase the setting of a safety valve without authority. Serious accidents have occurred from failure to observe this rule. | ☒ ALWAYS consult an authorized boiler inspector and accept his or her recommendations before increasing the safety-valve pressure setting. |
| ☒ NEVER change adjustments of a safety valve more than 10 percent. Proper operation depends on the proper spring. | ☒ ALWAYS have the valve fitted with a new spring and re-stamped by the manufacture for changes over 10 percent. |
| ☒ NEVER tighten a nut, bolt, or pipe thread under steam or air pressure. Many have died doing this. | ☒ ALWAYS play safe on this rule. The one that is going to break does not have a special warning sign. |
| ☒ NEVER strike any object under steam or air. | ☒ ALWAYS play safe on this rule. You cannot tell pressure. Avoiding this can be brutal. |
| ☒ NEVER allow unauthorized persons to tamper with any steam-plant equipment. If they do not injure themselves, they may cause injury to you. | ☒ ALWAYS keep out loiterers and place plant operation in the hands of qualified persons. A boiler room is not a place for a club meeting. |
| ☒ NEVER leave an open blow down valve unattended when a boiler is under pressure or has a fire in it. Play safe; memory can fail. | ☒ ALWAYS check the water level before blowing down and have a second person watch the water gauge level while you blow down the boiler. Close the blow down valve, and then recheck the water level. You will avoid dry-firing the boiler this way. |
| ☒ NEVER allow anyone to enter a drum of a boiler without following applicable regulatory rules for entering a confined space. | ☒ ALWAYS make sure the boiler is cool to enter, has enough oxygen per applicable regulatory rules, has a sign by the entrance stating "Worker Inside", has an emergency person at the entrance, and that all valves going to and from the boiler are locked and closed. |
| ☒ NEVER allow major repairs to a boiler without authorization. If you do not break a law, you may break your neck. | ☒ ALWAYS consult an authorized boiler inspector before proceeding with boiler repairs. |
| ☒ NEVER try to light a second burner from the flames of the first on-line burner. You might be inviting a serious puff back. | ☒ ALWAYS follow the starting sequence of the manufacturer on multi-burner boilers, including ignition and main flame proving by installed burner controls, and you will avoid a furnace explosion. |
| ☒ NEVER attempt to light a burner without venting the furnace until clear. Burns are painful. | ☒ ALWAYS allow draft to clear furnace of gas and dust for prescribed purge period. Change draft conditions slowly. |



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