

Steam Boiler

Internal Cleaning of Water Tube Boilers

WHY SHOULD I USE TRAC'S DESCALER CONCENTRATE™?

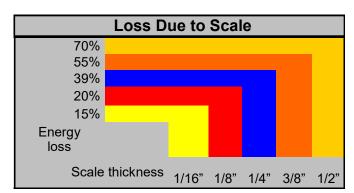
• Scale deposits in steam boilers can dramatically reduce heat transfer. The thermal loss from deposits as small as 1/32" can increase fuel consumption by 8.5%. Although there are many descalers on the market today, most are Hydrochloric Acid based and can easily attack the tubes during cleaning. Only *TRAC's Descaler Concentrate*™ can safely remove scale, rust and lime build-up from deep within the boiler. *TRAC's Descaler Concentrate*™ is 100% biodegradable, non-toxic, safe to both user and the boiler.

HOW MUCH TRAC'S DESCALER™ DO I NEED?

• To determine how much *Trac's Descaler Concentrate*™ is needed, multiply the appropriate percentage (from the table below) by the system's water capacity.

Build Up	Description	%
Light to Medium Scale	Deposits are light in color and spaced out.	2.5% to 5%
Heavy Scale	Mineral deposits are thick and found throughout the system.	5% to 10%





WHEN TO USE TRAC'S DESCALER CONCENTRATE™?

- When you notice an increase in fuel operating cost.
- When your annual inspection uncovers scale built up on the tubes.
- When you notice scale build up at the bottom of the boiler.

WARNING

- A hot boiler will increase the aggressiveness of the solution. In this instance, lower the solutions circulating times.
- It is recommended to have defoamer on hand as many boilers contain calcium build up from the salts used in treating water hardness. Standard

CLEANING INSTRUCTIONS:

- Determine the boiler's total water capacity.
- Isolate the boiler from the circulation system and test each valve to verify proper functioning.
- Locate the lowest inlet point and highest outlet point. Connect the supply side of the circulation equipment to the lowest point, and the highest point to the return side of the circulation equipment.
- Fill the boiler with water until water returns to the tank, keeping the circulating tank at a low level.
- Add the predetermined quantity of *Trac's Descaler Concentrate*[™] to the recirculating tank.
- Once the system is saturated with the mixed solution, close the return valve and let soak for at least one hour.
- Recirculate for 6 to 16hours, checking pH hourly.
- Once pH reaches a stable level for more than 1 hour, cleaning should be complete. If pH reaches 2.5, adding more *Trac's Descaler Concentrate*™ will reactivate it.
- After circulation time is completed, drain the solution and flush the system with fresh water. Be sure to open the boiler and manually remove any residue left behind during cleaning.

WHAT DO I NEED TO USE TRAC'S DESCALER CONCENTRATE™?

- All that is needed is a recirculating tank, corrosion proof centrifugal pump, hoses and fittings.
- Please note that most of these items are available at your local hardware or pool supply store.