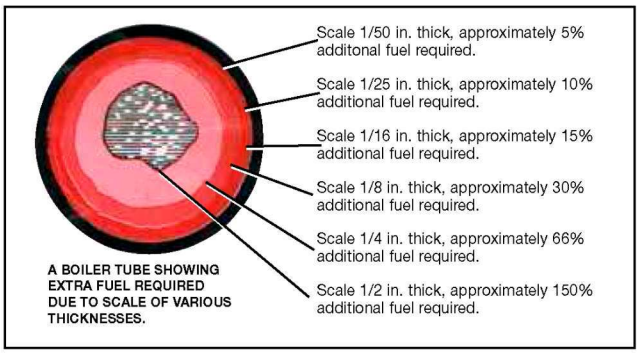
Tube Cleaners Introduction

Clean tubes mean lower fuel costs.

All piping, heat exchangers, condensers, chillers, and boiler tubes accumulate scale over various periods of use. This scale decreases flow and retards heat transfer. This consequently increases fuel consumption which lowers overall efficiency.

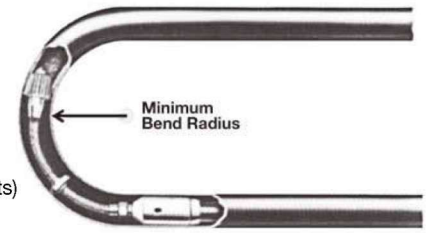


A BOILER TUBE SHOWING EXTRA FUEL REQUIRED DUE TO SCALE OF VARIOUS THICKNESSES.

1/2 inch scale in 6 inch pipe, 1000 feet long, has a transfer capacity loss of 150 gallons per minute.

For selecting the proper Airetool tube cleaner components the following information is required:

- Tube ID
- Tube length
- Type of deposit
- Thickness of deposit
- Straight or curved tube
- If curved, the minimum bend radius (see charts)



Rigid shaft cleaning systems for straight tubes in heat exchangers and condensers are shown on pages 85-89.

Flexible shaft cleaning systems for straight and curves tubes in condensers, chillers, evaporators and other tubular heat transfer apparatus are shown on pages 90-91.

Refer to the overview of motors and cleaning heads based on tube scale thickness and composition on pages 92 (straight tubes) and 93 (curved tubes), then use the selection guide on pages 94-97 that match boiler tube cleaning motors and heads together.

Note: Operating hoses are not included with boiler tube cleaners. It is always recommended to use an in-line lubricator and foot valve when operating the Airetool boiler tube cleaners. See page 117 for more information on these accessories.

Boiler tube cleaner applications include:

- Oil field drill pipe renewal
- Natural gas line renewal
- Aluminum smelter siphon tube cleaning
- Catalyst cleaners
- Process line cleaning
- Sugar Refinery Transfer line cleaning