# **BOILER MAINTENANCE GUIDE**

For The Operation And Care Of Low Pressure Steel Heating Boilers

# To The Operator

The following suggestions are made to assist you in the care and maintenance of your new Rockmills Boiler and they are intended only as a guide or reminder to do the simple things that will keep your boiler clean and allow your fuel burning equipment to operate at it's peak efficiency.

This guide is to be used for normal operating conditions only.

# **Start Out Right**

Your new boiler should be washed out until it is free from oil, pipe joint compound and all foreign material. This is usually done by the heating contractor. However, if the old boiler had been treated with a boiler sealing compound some of the compound usually circulates through the system and after a few days of firing this may start to drain back to the new boiler. If so, additional cleaning will be required.

# **Important**

Whenever the boiler has been filled with fresh water (which contains oxygen), it should be fired and brought to steaming temperature in order to prevent the formation of air bubbles (air bubbles cause corrosion).

DO NOT allow fresh water to remain in the boiler without being heated.

DO NOT add large quantities of cold water to a hot boiler.

Maintain the proper water level in the boiler at all times. If it becomes necessary to add excessive amounts of make up water manually or if the automatic water feeder is operating excessively find the cause of the loss of water such as leaking connections, missing or defective valves, buried and leaking return lines, etc.

#### **Boiler Water Treatment**

If the boiler is not being treated by an outside contractor and you are adding the chemicals, add the proper amount recommended by the chemical supplier at the specified time.

Too little chemical is of no value and too much can create priming or foaming.

This results in the steam mains and returns becoming loaded with water.

#### Water Column

In order to prevent sediment from accumulating in gage glass and connecting lines and giving a false reading, the gage cock at the bottom of the gage glass, and the blow down valve at the bottom of the water column should be opened weekly to flush out any sediment.

This is done with NO PRESSURE in the boiler.

#### Low Water Cut-Off

Your installer will show you how to blow out the low water cut-off. If the water level in the glass drops below the low water cut-off line and the burner still operates, the cut-off is not working.

The blow down valve in the bottom of the boiler is used every 3-4 weeks only to check the amount of sediment that may accumulate in the boiler. As a rule draining a gallon or so will be sufficient. Never drain any more than necessary.

#### **Water Side**

- 1. Check water level daily.
- 2. Do not add large quantities of cold water to a hot boiler.
- 3. Blow down water level control frequently to prevent sediment from accumulating.
- 4. Do not fill boiler with fresh water and allow it to stand without bringing the water to steaming temperature.
- 5. Make sure that all piping, valves, nipples, plugs, etc. are all free from leaks no matter how small.

#### Fire Side

- 1. Clean tubes whenever soot, scale or any residue accumulates.
- 2. Never allow soot or scale to remain in boiler when boiler is out of service especially if boiler room is damp. (The sulfur content in the oil can become sulfuric acid and will pit and corrode all heating surfaces.)
- 3. Maintain a smoke-free fire smoke makes soot, air pollution complaints and work for you.

Read this from time to time – as a reminder that good maintenance will make your job easier in the long run.

# **Rockmills Steel Products Corp.**

#### Pioneers in Field Erected Full Wet-Back Scotch Marine Boilers

\_\_\_\_\_

**59-12 54<sup>th</sup> Street, Maspeth, New York 11378** Tel: (718) 366-8300 Fax: (516) 487-3697 Check Us Out On The Web:

# WWW. ROCKMILLSBOILERS.COM