

**2007 Fulton Thermal Corporation Natural Gas Fired Steam Boiler – 50 HP**

**Mfg: Fulton Thermal Corporation**

**Model: ICS 50**

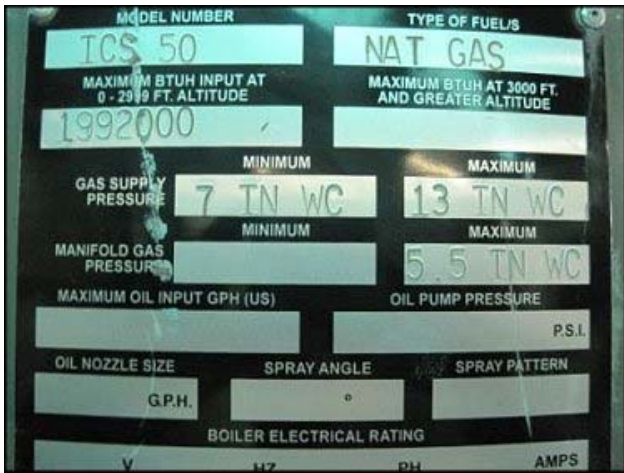
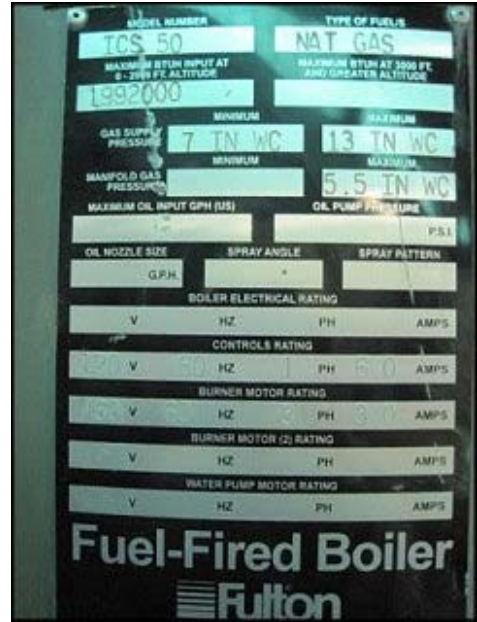
**Stock No: ADSP501.7**

**Serial No:**

2007 Fulton Thermal Corporation Natural Gas Fired Steam Boiler. Model: ICS 50. National Board: 104995. Rated at 50 hp with steam output of 1725 lbs./hr. Maximum input: 1992000 BTU/hr. MWP: 15 psi. Heating surface area: 150 sq. ft. ACME Transformer. Catalog no. T 2-53009-S. Primary volts: 240x480V, secondary volts: 120/240V, 0.75KVA 50/60 Hz, 1 phase. Features a vertical, tubeless design and top-mounted, down-fired, power burner that fires down the full length of the furnace sending a flame of cyclonic action down the center furnace chamber. Convection fins help to transmit remaining heat they encounter from upward moving hot gases on to the outer side of the water vessel as those gases move towards exhaust ports. The result is uniform heat distribution for maximum efficiency. A unique fast-moving, fuel and air “premix” design also ensures decreased residence time of reactants within the flame zone, thus reducing emissions. Overall dimensions: 5 ft. 7 in. L x 4 ft. 7 in. W x 8 ft. 8 in. H.







**Recommended Water Qualities**

Following are recommendations for feedwater quality. Contact your local water treatment professional for testing and treatment recommendations. It is very important that a strict water management program be followed.

**Feedwater:**

Dissolved Oxygen	.....	less than 0.05 ppm
pH Value	.....	9 to 11 (tested at room temperature)
Hardness	.....	less than 70 ppm in the form of $\text{CaCO}_3$
Oil	.....	none
Suspended Solids	.....	none
Organic Matter	.....	less than 5 ppm
Chloride	.....	less than 50 ppm
Total Dissolved Solids	.....	less than 300 ppm

**Boiler Water:**

Phosphate	.....	30 to 50 ppm in the form of $\text{PO}_4$
Alkalinity	.....	less than 300 ppm as $\text{CaCO}_3$
Chloride	.....	less than 500 ppm
pH Value	.....	9 to 11 (tested at room temperature)
Total Dissolved Solids	.....	400-2,000 ppm
Iron	.....	1 ppm maximum
Silica	.....	180 ppm max. in the form of $\text{SiO}_2$
Hardness	.....	less than 50 ppm
Dissolved Oxygen	.....	none

ppm = parts per million.  $\text{CaCO}_3$  = Calcium Carbonate.  $\text{PO}_4$  = Phosphate.  
 $\text{SiO}_2$  = silicon dioxide  
 \* 1 Grain Hardness = 17.118 ppm - Therefore: 70 ppm = 4.10 grains hardness

It is critical that the boiler pH be alkaline (9-11) whenever water is in the boiler. Solids that enter in with the feed water concentrate in the boiler. Daily boiler blowdown is recommended to help prevent the formation of deposits. Consult instruction manual for proper blowdown procedure.

**ACME TRANSFORMER**  
 LUMBERTON, NORTH CAROLINA

**GENERAL PURPOSE TRANSFORMER**

CATALOG NO. T 2-53009-S      STYLE SR

PRIMARY VOLTS 240 X 480      WT. 15 LBS  
 SECONDARY VOLTS 120 / 240      WINDING RISE: 100°C  
 0.75 KVA 50/60 HZ 1 PHASE

% IMPEDANCE AT DEG C      INSTRUCTIONS A1

MINIMUM FIELD MOUNTED CLEARANCE: 800 X 800mm VERTICAL 400mm

ENCLOSURE TYPE 3R OUTDOOR  
 INSULATION SYSTEM X-3221-M      CLASS 165

WIRING INFORMATION ON INSIDE COVER

ACME ELECTRIC CORPORATION  
 POWER DISTRIBUTION PRODUCTS DIVISION  
 LUMBERTON, N.C.      MADE IN MEXICO

**Semi Annually**

Remove All Handholes Then  
 Thoroughly Clean Water  
 Side and Bottom of Boiler  
 Special Tee Handle Wrench  
 Available From Factory

**Boiler Stamping**

**Boiler and  
 Water Column  
 Should be  
 Blown Down  
 Every Day**

**NOTE:** After a new Fulton Boiler has been in operation for several months, pieces of burned metal fragments will be found in the turn around space in the bottom of the boiler. These may be observed when you open the clean out door. These pieces of metal are merely the remains of a light gauge metal form which has been used for forming the boiler installation during manufacture. This is perfectly normal condition with the Fulton Boiler. The burning away of this form does not in any way affect the efficiency or life of the unit.

**Clean Out  
 to Flue Passes**  
 Reseal with  
 Furnace Cement

↓