## **Radiant Tube Heaters**

Infrared Heat for Greater Energy Efficiency and Superior Poultry Feed Conversion Ratios



**Building Radiant Heaters Since 1957** 





#### More Heat Where You Want It

Radiant Tube Heaters from Heatstar AG® deliver low-intensity, gentle heat directly toward floor-level objects. These objects, in turn, heat the surrounding air. The tube heaters can be installed high above the floor, where they reflect heat to a large area, reducing cold spots and inconsistent heating.

# JET<sup>™</sup> Series Radiant Tube Heaters

JET™ Radiant Tube Heaters provide superior heating efficiency, improved bird performance and operational advantages. The JET25™ Model covers 25-60% more floor area directly below the heaters than 10′ and 20′ competitive models\* Additionally, the JET25™ Heater burns at 100,000 BTUs, delivering 25% more output per heater than competitive units burning at 80,000 BTUs.

The result – fewer heaters are needed to heat the same area. And, when fewer heaters are used, other costs also go down. Additionally, whether you choose the JET25™ or the JET20™ Heater, workers can perform in-house maintenance with the side door open, even while the burner is running.

- Heat is transferred efficiently and evenly to the floor, requiring fewer heaters and fewer BTUs per square foot (square meter).
- Aluminized tubing used in the first 10 feet (3.05 meters) of each heater resists corrosion.
- JET™ Heaters dry floor shavings and reduce hot and cold spots.
- Burner is 100% factory-tested.
- Gasket-lined burner box keeps out dust.
- Easy-access hinged panel simplifies maintenance.
- Power and gas operation lights are on the burner box for easy visibility.
- Connects easily to control systems such as Chore-Time's CHORE-TRONICS® 3 Controller.

## **Unique JET™ Flame**

JET™ Heaters use a burner with a 10 foot (3.05 meter) jet-like flame combined with a unique 25 foot (7.62 meter) or 20 foot (6.10 meter) tube system to provide strong, even heat across the poultry house floor.



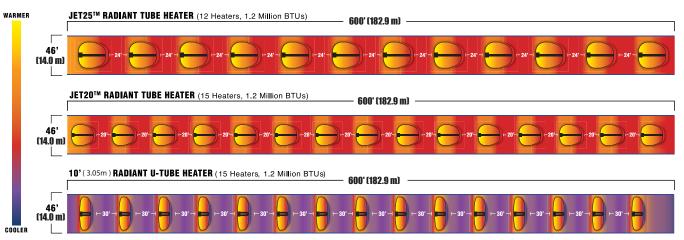
With the power of the JET™ Flame, poultry operations may be able to install fewer BTUs per square foot (or meter).

#### Rapid, Even Heat Transfer

JET™ Series Tube Sets feature a straight-line system with two diameters of tubes that use positive pressure to move and radiate heat evenly along the full length. Warm air is expelled from the end of the tube to fill in the gap between heaters.



Heater	Tube Length	Tube Diameters		
JET25™	25 feet (7.62 m)	3.5 in (89 mm)	4.0 in (102 mm)	
JET20™	20 feet (6.10 m)	3.0 in (76 mm)	3.5 in (89 mm)	

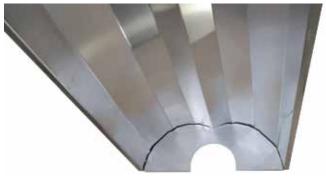


 $JET^{TM}$  Heaters provide even heat along the full length of the house. 10' U-Tube heaters installed using equal BTU's/chamber require approximately 50% larger unheated gaps between heaters compared to most  $JET^{TM}$  layouts. The result is cold spots and uneven floor temperatures.

<sup>\*</sup>Based on Heatstar AG® case study, results may vary depending on house conditions.

#### 8-Angle Aluminum Reflector

The aluminum reflector on JET™ Heaters forms a stepped arc using eight different angles to reflect heat from the top of the tube and direct it down to the floor in a wide pattern. A single set of JET™ eaters installed down the middle of a house can heat up to 50 feet (15.24 meters) in width.



Eight angles in the reflector direct heat up to 50 feet (15.24 meters) in width.

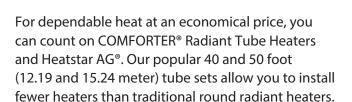
### **Smaller Cold Spots**

With traditional 40 foot (12.19 meter) and 50 foot (15.24 meter) tube heaters, floor temperatures decline rapidly along the tube length, producing arrowhead-shaped floor heat patterns. The result is hot spots near the burner and large cold spots flanking the last tube sections and the gaps between heaters. Heatstar AG® solved this limitation with the exclusive design of the JET™ Series Heaters.

#### **Moving Up the Charts**

JET™ Series Heaters have been shown to improve both feed efficiency and bird performance. When changing from a 40 or 50 foot (12.19 or 15.24 meter) traditional tube heater to a JET25™ Tube Heater, some customers improved their feed conversion ratios with the potential to increase their contract bonus payments.

# COMFORTER® Radiant Tube Heaters



- Two-year warranty on tubes; one-year warranty on burner box\*\*
- Gasket sealed burner box for less maintenance Direct spark ignition for reliable operation CSA certified



- Power / gas operation lights are visible on bottom of burner box
- 10 to 60 foot (3.05 to 18.29 meter) tube lengths
- Aluminized tubing used in first 10 feet (3.05 meters) to resist corrosion
- Installation hardware included with tube sets
- Stainless steel couplers
- Chrome-plated hanging brackets
- Connects easily to control systems such as Chore-Time's CHORE-TRONICS® 3 Controller.

<sup>\*\*</sup>See written warranty for complete warranty details.



#### JET™ Series Tube Heaters

JET™ Heater Burner Boxes (Single-Stage)

Item Number	Model Number	Description	Fuel Type
F102080AG	JET20NG	JET 80,000 BTU/HR (20,173 kcal/hr)	Natural Gas
F102085AG	JET20LP	JET 80,000 BTU/HR (20,173 kcal/hr)	Liquid Propane
F102090AG	JET25NG	JET 100,000 BTU/HR (25,216 kcal/hr)	Natural Gas
F102095AG	JET25LP	JET 100,000 BTU/HR (25,216 kcal/hr)	Liquid Propane

JET™ Tube Sets (Includes Tubes, Reflectors, Hangers, Couplers, Tube Vent Cap, Drip Line, Flex Gas Supply Line, Gas Shut-Off Valve, Gas Nipple, Chains and Turbulator)

Item Number	Model Number	Description	Fuel Type
F106020	JET20TB	20 ft. (6.10 m) Tube Set, 3-3.5 in. (76-89 mm) Diamete	er
F106025	JET25TB	25 ft. (7.62 m) Tube Set, 3.5-4 in. (89-102 mm) Diame	ter

JET™ Accessories (Custom LP/NG gas hoses and water hoses available.)

JET™ Specifications

Electrical – 120 volt-60 Hz; Starting Current – 5.0 amps; Running Current – 1.0 amps

Combustion Chamber / Heat Exchanger

JET 25: 3.5 in. (89 mm) aluminized 16 gauge (1.3 mm) first 10 ft. (3.05 m) – 4 in. (102 mm) hot rolled steel 16 gauge (1.3 mm) last 15 ft. (4.57 m)

JET 20: 3 in. (76 mm) aluminized 16 gauge (1.3 mm) first 10 ft. (3.05 m) – 3.5 in. (89 mm) hot rolled steel 16 gauge (1.3 mm) last 10 ft. (3.05 m)

Flue Connection – Vent Cap (supplied)

#### COMFORTER® Series Tube Heaters

COMFORTER® Heater Burner Boxes (Single-Stage)

Item Number	Model Number	BTU/HR	Fuel Type
F102654AG	Comforter® 100 NG	100,000	Natural Gas
F102655AG	Comforter® 100 LP	100,000	Liquid Propane
F102656AG	Comforter® 125 NG	125,000	Natural Gas
F102657AG	Comforter® 125 LP	125,000	Liquid Propane
F102658AG	Comforter® 150 NG	150,000	Natural
F102659AG	Comforter® 150 LP	150,000	Liquid Propane

Special Order Available:

BTU sizes 40K, 60K and 80K (10,086; 15,129 and 20,173 kcal); Two-Stage Burners or Hot Surface Ignition

COMFORTER® Tube Sets (Includes Tubes, Reflectors, Hangers, Couplers, Tube Vent Cap, Drip Line, Gas Hose, Gas Shut-Off Valve, Gas Nipple, and Turbulator)

Item Number	Use with Burner Box Model Numbers	Length	Mounting Clearance to Ceiling	Typical Mounting Height	Shipping Weight
F106401AG	Comforter <sup>™</sup> 100	30-ft. (9.14-m) Tube Set	12 in. (305 mm)	10-15 ft. (3.05-4.57 m)	130 lb. (59 kg)
F106406AG	Comforter <sup>™</sup> 125 or 100	40-ft. (12.19-m) Tube Set	12 in. (305 mm)	12-19 ft. (3.66-5.79 m)	150 lb. (68 kg)
F106407AG	Comforter™ 150	50-ft. (15.24-m) Tube Set	12 in. (305 mm)	12-19 ft. (3.66-5.79 m)	175 lb. (79.4 kg)

Special Order Available: Tube Sets in 10 ft., 20 ft. and 60 ft. (3.05, 6.10 and 18.29 m)

COMFORTER® Accessories (Custom LP/NG gas hoses and water hoses available.)

**COMFORTER®** Specifications

Starting Current – 5.0 amps; Running Current – 1.0 amps; Custom Order – 230 Volt-60Hz/50Hz

Combustion Chamber / Heat Exchanger

First Tube – 4 in. (102 mm) aluminized steel tubing, 16 gauge (1.3 mm)

Remaining Tube – 4 in. (102 mm) hot rolled steel, 16 gauge (1.3 mm)

Flue Connection – 4 in. (102 mm) O.D.



Accessories for JET™ & COMFORTER® Series		
Item Number	Description	
F106414	Converts All Units to U-Tube Configuration	
F111756	Air Intake Kit Includes Mini-Vent Cap, Vertical Support Pipe, Flex Tube, Two 4 in. (102 mm) Worm Gear Clamps	

Gas Regulators, Hoses, and Fittings		
Item Number	Description	
11679	800,000 BTU, TOP MOUNT, OUTDOOR REGULATOR - 1/2" FNPT x 3/4" FNPT - SET TO 11" WC	
11682	1,800,000 BTU, BACK MOUNT, OUTDOOR REGULATOR - 3/4" FNPT x 1" FNPT - SET TO 11" WC	
11683	800,000 BTU, TOP MOUNT, OUTDOOR REGULATOR - 3/4" FNPT x 3/4" FNPT - SET TO 11" WC	
11684	100,000 BTU, BACK MOUNT, INDOOR REGULATOR - 1/2" FNPT x 1/2" FNPT - SET TO 11" WC	
11685	1,300,000 BTU, TOP MOUNT, OUTDOOR REGULATOR - 3/4" FNPT x 3/4" FNPT - SET TO 11" WC	
11689	500,000 BTU, BACK MOUNT, OUTDOOR REGULATOR - 1/2" FNPT x 1/2" FNPT - SET TO 11" WC	
11692	325,000 BTU, BACK MOUNT 325-5-44-0053 INDOOR REGULATOR, - SET TO 11" WC	
F173864	100,000 BTU, 325-3 INDOOR REGULATOR KIT - 1/2" FNPT X 1/2" FNPT, w/FILTER	
F173865	325,000 BTU, 325-5 INDOOR REGULATOR KIT - 1/2" FNPT X 1/2" FNPT, w/FILTER	
964010-48	3/4" x 4' TRUZERO RUBBER HOSE w/3/4" MNPT x 3/4" JIC SWIVEL+MNPT ADAPTER	
73590	3/8"ID, x 10', RHA-6 ASSY, 1/2" MNPT x 1/2" MNPT	

#### Specifications for JET™ & COMFORTER® Series

Gas Connection – 1/2 in. (12.7 mm) NPT

Burner - Direct spark ignition electronic safety circuitry

Gas Supply – Natural Gas Min 4.6 in. WC; Max 14 in. WC; LP Gas Min 11 in. WC; Max 14 in. WC

Warranty – Limited 2-year warranty on all tubes; Limited 1-year warranty on burner boxes and other components

NOTICE: Always check local codes for permitted use. See owner's manual for proper installation and operation.

