



## INNOVATION THAT DELIVERS RETURN ON INVESTMENT

 BURNERS &  TECHNOLOGY\*\*

- ELIMINATE "OVERHEAT ZONES" UNDER FIRST 8' OF TUBE
- SHORTEN COLD GAPS BETWEEN HEATERS UP TO 53%
- PROVIDE HIGHER LAST TUBE TEMPERATURES FOR EVEN HEATING
- UP TO 55' WIDE, SINGLE ROW HEATING
- SYMMETRICAL FLOOR HEAT WHEN INSTALLED OFF-CENTER



**OPTIMIZER™ & JET25™ TECHNOLOGY**  
*A New Angle on Cash Flow™*

\*\*PATENT PENDING

# Two Design Innovations from HeatStar AG® Yield Five Major Benefits in Broiler House Installations

1

JET25™ Burners throw flame 2X further down the tubes compared to U-Tube designs. Longer flame = more even tube temperatures (Reference Graphic A).

**ADVANTAGE:**

Last tube temperatures are up to 50% warmer, casting more even floor heat patterns. Note the dramatically increased energy transfer to the floor in the chamber using JET25™ & Optimizer™ (Reference the yellow ovals on Graphic D).

2

New, Patent Pending OPTIMIZER™ Reflector is breakthrough heating technology. The asymmetric design includes 12 new angles of reflection compared to 4 angles on competitive designs (Reference the designs in Graphic B).

**ADVANTAGE:**

A) Optimizer™'s 12 angles of reflection distribute energy more broadly, virtually eliminating the "OVERHEAT ZONE." The Overheat Zone is found under most tube heaters directly below the first tube. The more even Optimizer™ heat pattern in this zone reduces the risk of bird dehydration (Reference the red circled areas in the floor energy patterns in Graphic D).

B) The 25' JET25™ Heater with Optimizer™ delivers up to 60% more direct radiant energy to the floor below the heater. (Reference the yellow circled areas in the energy patterns in Graphic D).

3

JET25™ with Optimizer™ Reflectors can heat up to 55' wide broiler houses with one row of heaters, dramatically decreasing the number of heaters required.

**ADVANTAGE:**

This lowers equipment & installation COST by up to 33%. This paves a path to reducing the required amount of BTU/ft². (Reference Graphic C).

4

Many construction designs prevent the ability to install heaters along the center of the ceiling. Off-center heater installations, produce uneven floor heat patterns when using standard reflectors.

**ADVANTAGE:**

Optimizer's™ asymmetric design provides symmetrical floor heat patterns, even when heaters cannot be installed in the ceiling centerline. (Reference Graphics C & D).

5

Short gaps between heaters in a single row provide more direct radiant energy to the floor when compared to staggered, double rows of short heaters.

**ADVANTAGE:**

The result is a consistently warm heat pattern. (Reference Graphics C & D).

Data measured in Watts/m². Watts/m² is used because it measures the amount of direct radiant energy reaching the floor from heaters, regardless of ambient or outdoor temperatures.

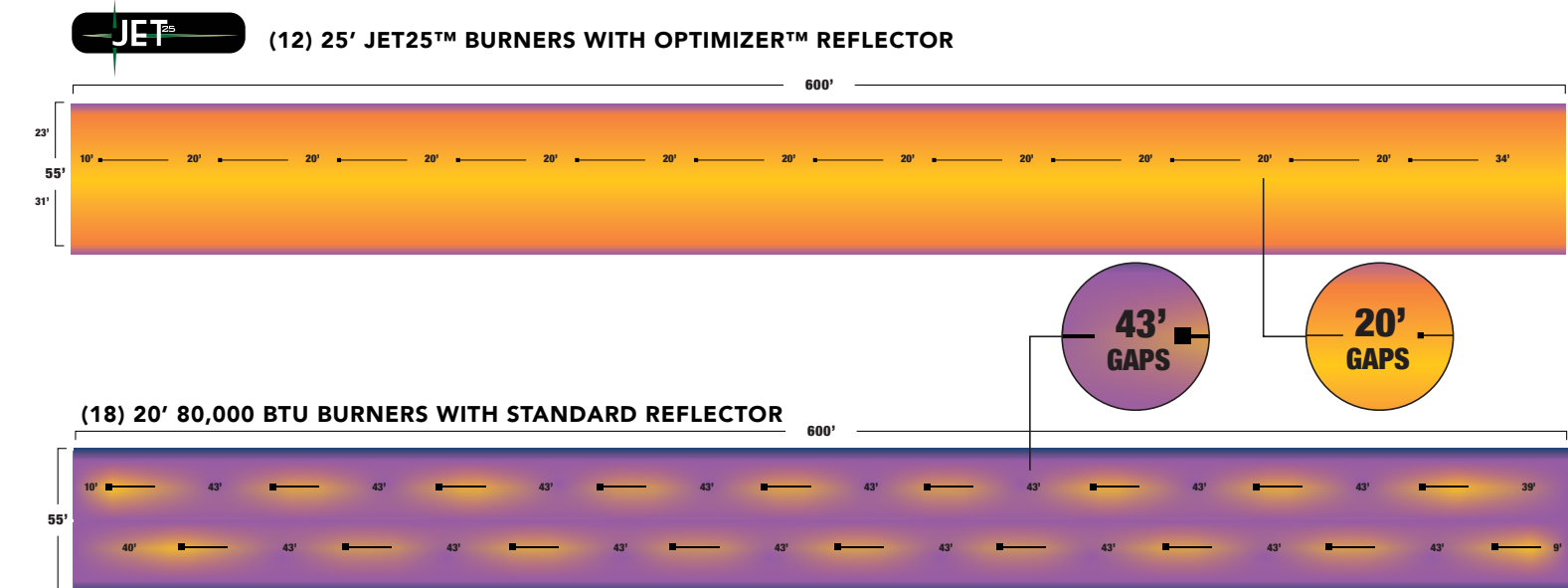
GRAPHIC: A



GRAPHIC: B



GRAPHIC: C



GRAPHIC: D

