





Multiheat HW unit Dry heat from a unique air distribution unit. Just perfect!

Multiheat hot water units for heating of poultry buildings

To obtain the best results in poultry buildings, an optimum climatic environment is essential for the health and productivity of the birds. Temperature, humidity and C02 are the main factors influencing these results. Therefore, a perfect heating and ventilation system is necessary.

Here, the Multiheat HW unit is the solution!

The Multiheat HW unit consists of a high efficiency heat exchanger, axial fan and a unique designed distribution device. Hot water is supplied from an external boiler and passes the heat exchanger. The fan sucks the air from inside the building through the heat exchanger and pushes the warm air equally through the 6 air

outlets in a horizontal flow over the birds. The amount of air and the directions can be adjusted by the optional flaps inside each air outlet. The units are hanging in the middle of the house whereby an ideal distribution is guaranteed to all corners in the building.

Recirculation duct

Warm air reaches the sidewalls and rises to the ceiling, where it returns to the HW unit for a natural circulation of warm air. This can be improved by installing an inflow rectangular duct placed on top of the unit.

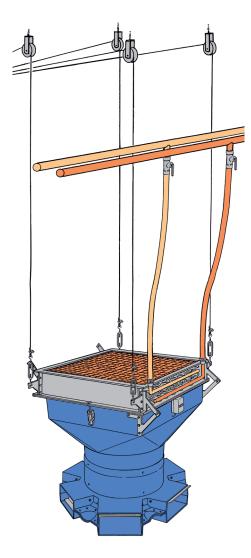
Advantages

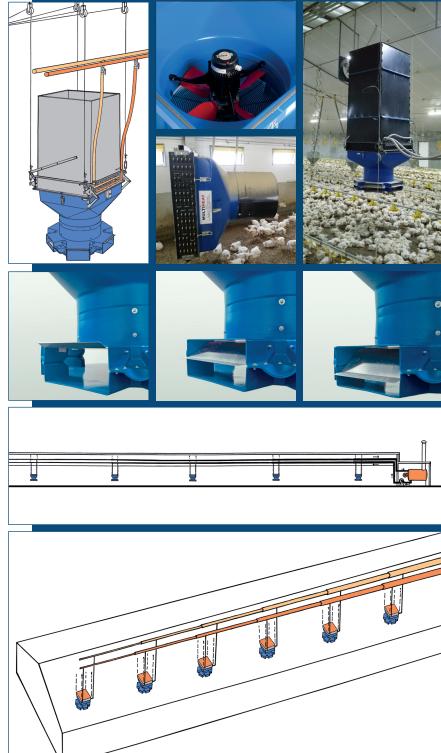
- No CO₂ production
- Perfect distribution of the heat (≤33°F)
- · Dry litter, less leg problems
- Reduction of Ammonia

- Less energy costs
- Nonhazardous, no open flame
- · Improvement of animal health
- · Less ventilation needed
- · Easy cleaning
- Durable ABS material
- · Available up to 375000 Btu
- · Possible to use as a cooler

Optional adjustable flaps in air outlets

The body of the unit is made of durable ABS high heat resistance material. The 6 air outlets are designed in such a way that air is optimally distributed, and optional built-in stainless steel flaps can be adjusted to influence the throw or to even close one outlet. The air can be distributed up to 50 ft, subsequently for 100 ft wide houses.





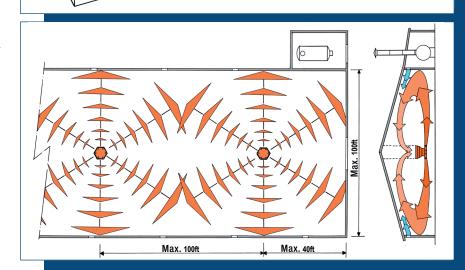
A simple click system makes it easy to clean the unit without dismantling. No high pressure cleaner is needed, just a normal water flow.

High efficiency fans are available in 1-phase or 3-phase versions and are controllable by means of frequency drives.

As no $\mathrm{CO_2}$ or humidity is produced by the heaters and no oxygen is needed for burning, the ventilation rate is considerable lower. Most of the time there is no minimum ventilation needed during the first 5 days of life, which significantly decreases the energy costs.

Cooling

Especially during hot weather periods, the units can be used in the oppsite way for cooling. Cold water cools down the air temperature.





| Technical specifications Multiheat heaters | | | (All types also available in 3 phase) | | |
|---|-------------------|-----------------------------|---------------------------------------|-------------------------------|-------------------------------|
| | | Multiheat 20/30 | Multiheat 50/75 | Multiheat 60/95 | Multiheat 70/110 |
| Air displacement | | 2.000 cfm | 6.120 cfm | 6.120 cfm | 6.120 cfm |
| Fan | | 230V / 2.3A / 1 phase | 230V / 3.0A / 1 phase | 230V / 3.0A / 1 phase | 230V / 3.0A / 1 phase |
| | | 320 W / 2800 rpm / 60Hz | 630 W / 900 rpm / 60 Hz | 630 W / 900 rpm / 60 Hz | 630 W / 900 rpm / 60 Hz |
| Measurements L x W x H | | 33" x 21" x 34" | 44" x 42" x 36" | 44"x 42"x 37" | 44"x 42"x 39" |
| Water connection | | G 3/4" | G 1" | G 5/4" | G 5/4" |
| Weight incl. water | | 71 lb | 181 lb | 190 lb | 198 lb |
| | | | | | |
| | Ambient temp. at: | | | | |
| Performance at 194°F supply water tempe- rature, and 158°F re- turn water tempera- ture | 68°F | 95564 Btu-5.7 gpm 80″WC | 255975 Btu-14.2 gpm 149"WC | 317409 Btu-18.5 gpm 141"WC | 378843 Btu-21.6 gpm 153"WC |
| | 86°F | 78499 Btu-4.4 gpm 56"WC | 208193 Btu-11.9 gpm 104"WC | 262801 Btu-15.0 gpm 96"WC | 310583 Btu-17.6gpm 108"WC |
| | 95°F | 68260 Btu-4.0 gpm 48"WC | 187715 Btu-10.6 gpm 84"WC | 232084 Btu-13.2 gpm 80"WC | 276453 Btu-15.9 gpm 88″WC |
| Performance at 176°F supply water tempe- rature, and 149°F re- turn water tempe- rature | 68°F | 85325 Btu-6.6 gpm 108"WC | 225258 Btu-17.2 gpm 201"WC | 280000 Btu-21.1 gpm 189"WC | 331061 Btu-25.1 gpm 205"WC |
| | 86°F | 68260 Btu-5.3 gpm 72"WC | 177476 Btu-13.7 gpm 132"WC | 221845 Btu-17.2 gpm 124"WC | 262801 Btu-20.3 gpm 141"WC |
| | 95°F | 58021 Btu-4.4 gpm 60"WC | 156998 Btu-11.9 gpm 104"WC | 194541 Btu-15.0 gpm 96"WC | 232084 Btu-17.6 gpm 108"WC |

Design Registration

The unique design of the unit with the air outlets and flaps are patented and registered.

Maintenance

Except for the heat exchanger, which is made of coated steel blinds, the body is made of ABS ammonia resistant material. The click system creates an easy cleaning of the unit without any disassembling. All parts are easy accessible and maintenance friendly.

| Technical specifications Multiheat heaters (All types also available in 3 phase) | | | | | | |
|--|-------------------|---------------------------------|---------------------------------|--|--|--|
| | | Multi heat 35/55 | Multiheat 40/70 | | | |
| Air displacement | | 4800 cfm | 4700 cfm | | | |
| Fan | | 230V /2,9A | 230V /2,9A | | | |
| | | 610W / 1400 rpm | 610 W / 1400 rpm | | | |
| Measurements L x W x | Н | 32"x 32"x 36" | 32"x 32"x 37" | | | |
| Water connection | | G 1" | G 1" | | | |
| Weight incl. water | | 106 lb | 112 lb | | | |
| | | | | | | |
| | Ambient temp. at: | | | | | |
| Performance at 194°F supply water tempe- | 68°F | 188000 Btu -10.6 gpm 137"WC | 239000 Btu - 13.6 gpm 133"WC | | | |
| rature, and 158°F return water tempera- | 86°F | 153500 Btu - 8.8 gpm 96"WC | 194000 Btu -11.0 gpm 92"WC | | | |
| ture | 95°F | 140000 Btu - 7.9 gpm 80"WC | 174000 Btu - 9.7 gpm 76"WC | | | |
| Performance at 176°F supply water tempe- | 68°F | 167194 Btu - 12.3 gpm 197"WC | 208140 Btu -15.9 gpm 180"WC | | | |
| rature, and 149°F re- turn water tempera- | 86°F | 133000 Btu - 10.1 gpm 157"WC | 157000 Btu -12.8 gpm 121"WC | | | |
| ture | 95°F | 116000 Btu - 8.8 gpm 96"WC | 147000 Btu -11.0 gpm 96"WC | | | |

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