



MULTIHEAT

HW unit Dry heat from a unique air distribution unit





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 CO₂ 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 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.

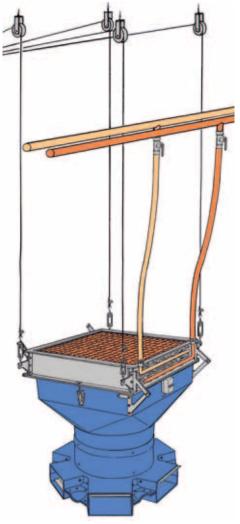
Advantages

- 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 cooler

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 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.

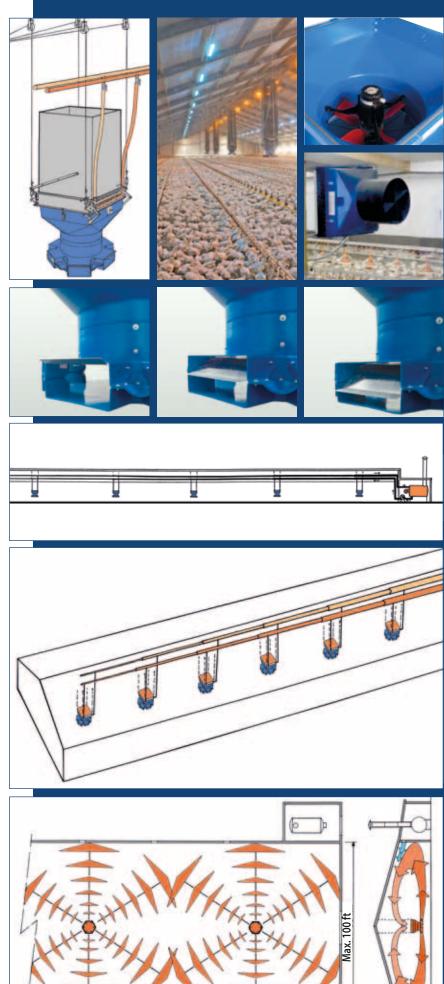
High efficiency fans are available in 1-phase or 3-phase versions and controllable by frequency drives.

As no CO₂ 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 decreases the energy costs significantly. With the duct on the unit recirculation of the air is guaranteed and provides an optimum climate for your birds.

All models can be used in a horizontal position and added with a cone installed along the sidewalls either with a wall bracket or in a frame . The large throw ensures a good distribution along the walls.

Cooling

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



Max. 100 ft

Max. 40 ft



Technical specifications Multiheat heaters

(All types also available in 1 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 60 Hz	630 W / 900 rpm 60 Hz	630 W / 900 rpm 60 Hz	630 W / 900 rpm 60 Hz
Measurement		8" x 42" x 36"	48" x 42" x 38"	48" x 42" x 39"	33″ x 21″ x 34
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 ⁰ F water temperature	68 ⁰ 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 ⁰ 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
Performance at 158 ^o F water temperature	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 ^o F water temperature	68 ⁰ 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 ⁰ 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
Performance at 149 ⁰ F water temperature	95 ⁰ 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

The Multiheat unit 20/30 has no adjustable flaps. The Multiheat units 50/75, 60/95 and 70/110 are standard with adjustable flaps.

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 1 phase)

		Multiheat 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
	Measurement	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 ⁰ F	68 ⁰ F	167194 Btu - 12,3 gpm	208140 Btu - 15,9 gpm
water temperature		197″WC	180″ WC
	86 ⁰ F	133000 Btu - 10,1 gpm 157″ WC	157000 Btu - 12,8 gpm 121"WC
Performance at 158 ⁰ F	95°F	116000 Btu - 8,8 gpm	147000 Btu - 11,0 gpm
water temperature		96″ WC	96″WC
Performance at 176 ⁰ F	68 ⁰ F	188000 Btu - 10,6 gpm	239000 Btu 13,6 gpm
water temperature		137" WC	133" WC
	86 ⁰ F	153500 Btu - 8,8 gpm 96″WC	194000 Btu - 11,0 gpm 92″WC
Performance at 149 ⁰ F	95 ⁰ F	140000 Btu - 7,9 gpm	174000 Btu - 9,7 gpm
water temperature		80" WC	76″WC

The Multiheat units 35/55 and 40/70 are standard without flaps. Adjustable flaps are available as an option.

Multiheat International B.V.

Factory : Harselaarseweg 71 3771 MA Barneveld The Netherlands Office : Transportweg 50 3371 MB Hardinxveld-Giessendam The Netherlands Phone : +31 342 712033 Info@multiheat-international.com www.multiheat-international.com