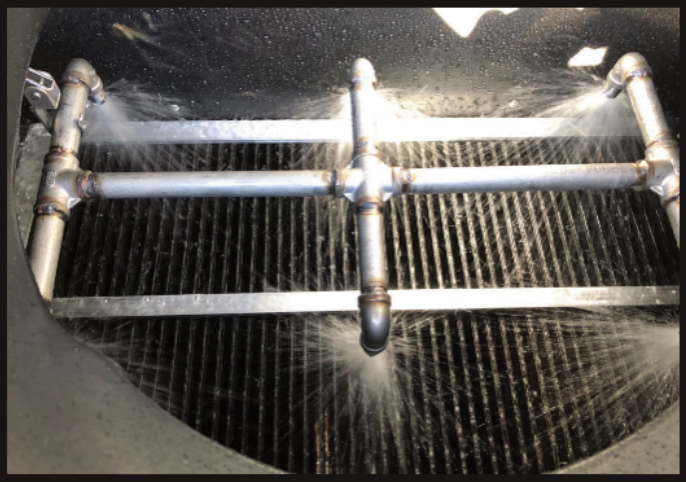
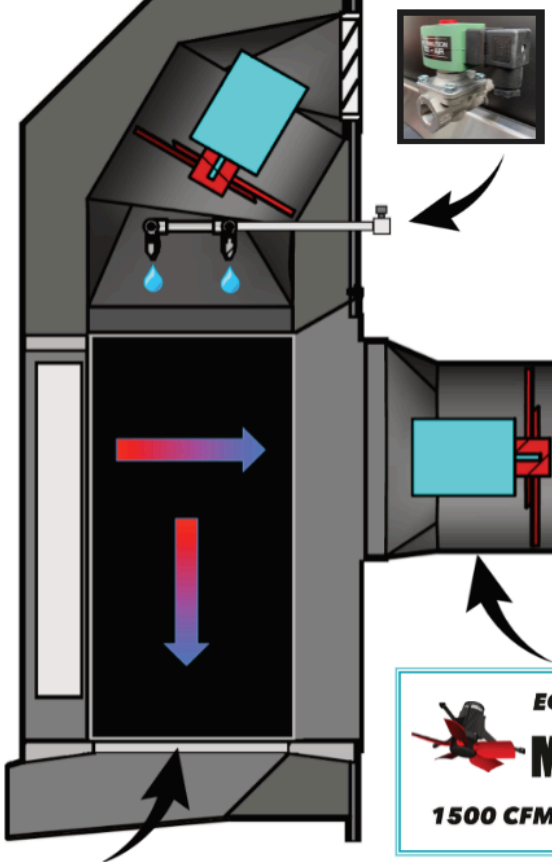
AVI ➡ AIR

Heat Exchanger

Avi35

Automated washing system





- Up to 50% fuel savings
- Lowers relative humidity
- CO_2 and ammonia reduction
- Improves litter and air quality

" Lower energy consumption is only half of the benefits. Better air quality, dryer litter, basically healthier and consistent environment is a real plus. "

Jean Ranger, St-Isidore, Ontario

www.distributionavi-air.com

AVI AIR Heat Exchanger

Avi35

Avi28 Controller

- Can manage up to 5 heat exchangers
- programmed washing cycles
- Intelligent defrost logic
- heating, water meter, timer relays
- 0-10 volt, humidity and temperature input signals
- Maximus and Genius controller compatible

Psychrometic output and efficiency of the Avi35

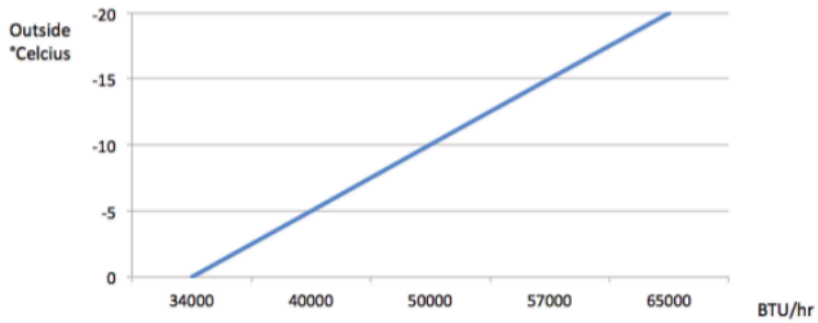
Min output	375 CFM
Max output	1500 CFM
Max sensible temperature recovery at 375 CFM	71%
Avi35 total heat flow in BTU/hr	1,88 x CFM x Δ°C

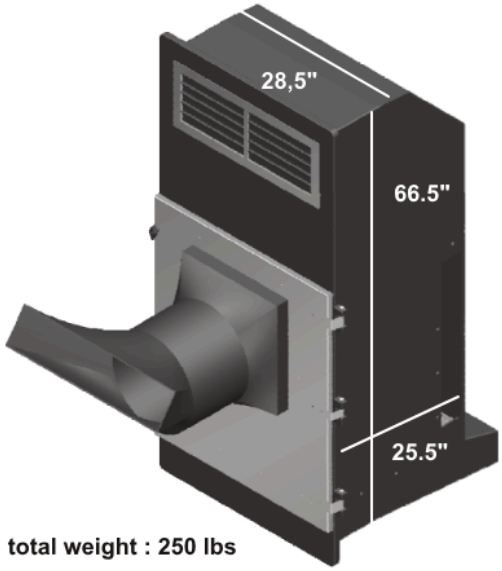
Temperature at 0°C s and 0 static pressure

CFM output	375	525	750	1125	1500
Sensible temperature transfer efficiency	71%	66%	61%	57%	55%
Enthalpy transfer efficiency	41%	38%	35%	32%	30%
Total heat flow BTU/hr	14535	18118	21960	29770	37143

Total heat flow --- sensible + latent

AVI35 heat recovery in BTU / hr at 23 °C room temperature





total weight : 250 lbs

Electrical specifications of the Avi35

Intake ventilator specifications	240 Volts at 60 Hz , 1,9 amps
Intake ventilator rotation max speed	3200 RPM
Exhaust ventilator specifications	240 Volts at 60 Hz , 1,9 amps
Exhaust ventilator rotation max speed	3200 RPM
Water valve	240 Volts at 60 Hz , 17 watts

AVI35 Heat exchanger core

Heat exchange surface area	35 square meters
Ventilation Type	Cross flow
Material	polypropylene and aluminum

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AVI AIR Heat Exchanger

Avi35

Broiler barn gas economy analysis

CTGN

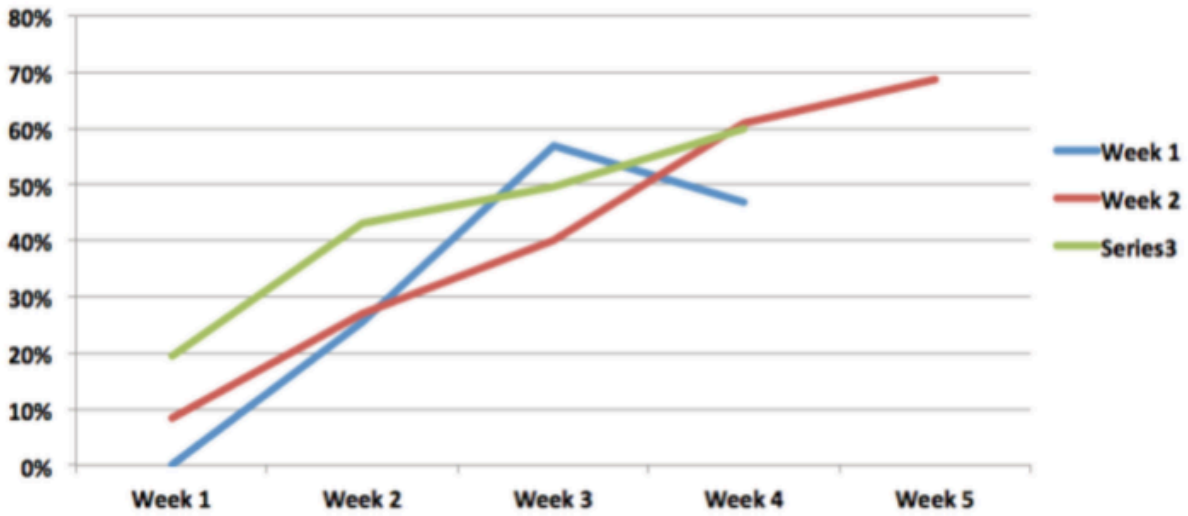
Winter 2019 Natural Gas Economie

	1st Cycle	2nd Cycle	3rd Cycle	Weekly Average
Week 1	NA	8%	19%	14%
Week 2	25%	27%	43%	32%
Week 3	57%	40%	50%	49%
Week 4	47%	61%	60%	56%
Week 5	70%	69%	NA	69%
Cycle Average	55%	41%	43%	48%

Échangeur-récupérateur pour poulailler Projet no : 421718

CTGN, Natural gas technology center, measured an average 48 % gas economy with broiler bar equipped with Avi35s.

CTGN



After week 2, most of the energy required to heat the barn comes from the heat exchanger as oppose to heaters. This is when gas economy is most significant.