

Did you know? ... the root of high volume low speed, HVLS technology began with a University of Riverside agricultural engineer, W.C Fairbank and his class theorizing about how to eliminate heat stress for dairy cows for increased milk production? It's a fact! The professor took the idea to Walter Boyd, our founder, and over time HVLS technology evolved. As a result of many university studies and expert evaluations plus tried and true applications by dairymen everywhere people agree; HVLS fans are the most energy efficient, cost effective, air flow delivery system available to deliver all-around air flow and ventilation for dairy cows. We are happy to report we are helping to improve milk production worldwide!

HVLS fans are so effective; many energy efficiency programs offer grants, rebates, and incentives for HVLS fan procurement and installation.

By replacing inefficient, high speed fans with energy saving HVLS fans businesses are cutting their energy bills month-to-month and year-to-year. And a faster return on investment is realized through these cost saving rebate programs.

As an example of a program available today; **efficiency Maine** offers customers who purchase HVLS fans a

\$1,000.00 rebate
(per fan!)

"I have three reasons

for purchasing MacroAir HVLS Fans for cow cooling. The first is, the amount of electricity saved by using the fans. The second reason is, the big fans are very quiet, so they don't disturb the cows. And third, production is continually going up since I installed the big fan system. That's why I am ordering more fans for my next barn. The first barn, proved to be a big success, now I am building a new barn and I want the same system with the same results."

Mike Rasmussen of **Hill Haven Farms**



(866) MoveAir (1-866-668-3247)
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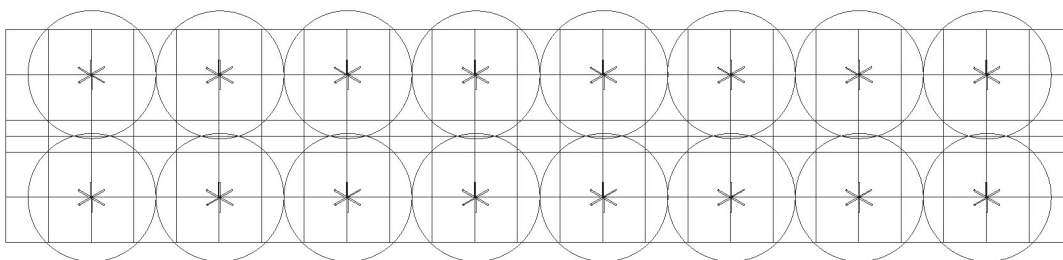
"HVLS fans use much less

electricity than typical ventilation fans, last longer and require less maintenance. Recent studies show another very important benefit: even on hot summer days, HVLS fans keep cows cool and comfortable."

Ref., Wisconsin, focus on energy
focusonenergy.com

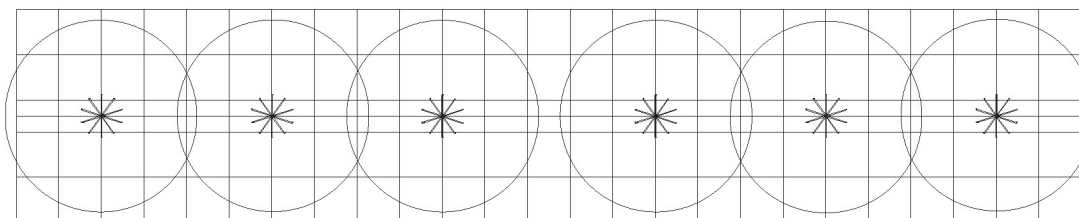
- » Quick ROI, Fans Pay for Themselves
- » Highly Energy Efficient
- » Air Migrates All Around Cows
- » Uniform Barn Coverage, Corner to Corner
- » Reduces Heat Stress for Comfort and Increased Production
- » Reduces Flies, Moisture, and Ammonia
- » Very Quiet, Safely Located
- » Deters Birds, Bugs, Insects
- » Easy to Install, Motors are Lubed for Life
- » Long Life, Highly Durable and Rebuildable
- » Provides Outstanding Air Flow for Cooling
- » Reversible in Winter to Push Warm Air Down
- » Very High CFM per Cow
- » Many States Offer Rebates

High Volume vs High Speed Cost Advantages



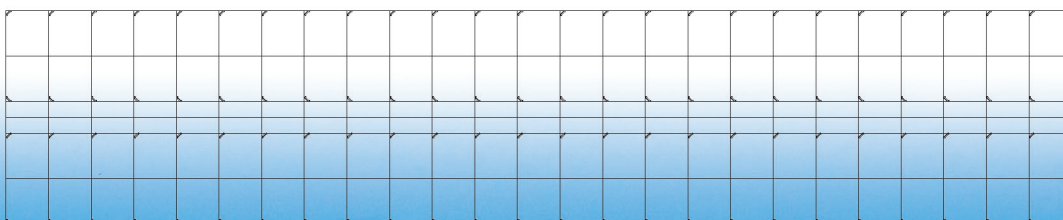
Sixteen 14' **AG-GreenStar** Fans Placed Over Feed Alleys

.678 kW per fan
128,010 cfm per fan



Six **24' MaxAir** Fans Placed Down Center Alley

1.65 kW per fan
376,804 cfm per fan



One Hundred 36" **High Speed Fans** Placed every 20'

.538 kW per fan
10,000 cfm per fan



520 Cows (Barn: 100 x 520 FT)
Sixteen 14' AG-GreenStar Fans
16 Horsepower at 10.848 kW
10.848kW (9 cents an hour) equals .976 an hour
Cost to run at 20,000 hrs., equals \$19,526.40
Energy Savings Comparison: \$77,274
Equipment Life: To 10+ years
Rebuild: YES
Maintenance: LOW to NONE
CFM per Cow: 3,939
Energy and Utility Rebates Available in Many States

520 Cows (Barn: 100 x 520 FT)
Six 24' MaxAir Fans
12 Horsepower at 9.9 kW
9.9kW (9 cents an hour) equals .891 an hour
Cost to run at 20,000 hrs., equals \$17,820.00
Energy Savings Comparison: \$78,980
Equipment Life: To 10+ years
Rebuild: YES
Maintenance: LOW to NONE
CFM per Cow: 4,348
Energy and Utility Rebates Available in Many States

520 Cows (Barn: 100 x 520 FT)
One Hundred 36 inch High Speed Fans
50 Horsepower at 53.80 kW
53.80 kW (9 cents an hour) equals 4.84 an hour
Cost to run at 20,000 hrs., equals \$96,800.00
Energy Cost Comparison is this much more to **A)** \$77,274 or **B)** \$78,980
Equipment Life: To 5 years
Rebuild: NO
CFM per Cow: 1,923
*Maintenance is HIGH (fans will loose 40% effectiveness when dirty)

COMPARE THE COST

HIGH SPEED FANS - **"Dirt on fan blades has little or no effect on fan performance, but dirt on louvers and guards can reduce airflow by as much as 40%. Fan louvers and guards should be cleaned regularly and lubricated ..."