Cool Machines Inc.

Fiber Machines - Cutting Edge Cool

BY DAVE KRENDL

www.coolmachines.com

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The *Cool* Quarterly

"It's about time!"...a comment many of our loyal followers have said when we mentioned this new effort to communicate with our customers. Over the past 12 years we have established thousands of customers eager to keep track of our "cutting edge" advances in technology with machines and accessories. Here is what we are going to do. Starting with this edition 3rd quarter/2016, we will create an awesome newsletter every quarter with some really exciting and spellbinding information to keep our readers on top of their game and their markets. We promise to make this so fascinating and relevant… you will be counting the days until next edition.



What will our newsletters include?

- Feature articles discussing a 'hot' topic
- "Dave's World" with comments and musings about our world of business.
- New/Updated Products featurettes
- Garage Sale items, used equipment, and clearance items.
- Guest authors focusing on their areas of expertise

Meet the Editorial Staff:



Dave Krendl:
"Cool" President, (over 40 years in this business), *Seen and heard it all...*but still willing to learn more.



Andy Schulte:
Operations Manager & Electrical 'Guru', 25 years of design in the insulation industry.



Adam Warren:
CAD Design, Facebook creator/moderator, and purveyor of all things "Cool" to you.

Want more?

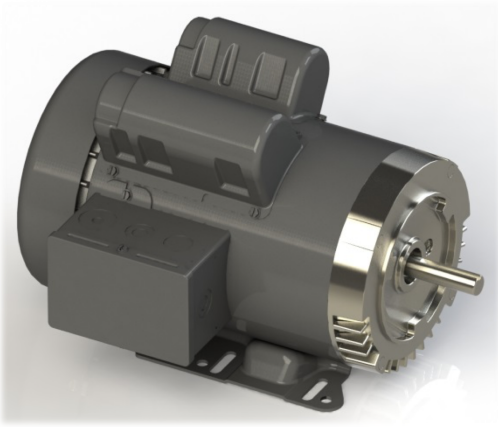
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So please "like" and follow us on Facebook.

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Gas Versus Electric Machines



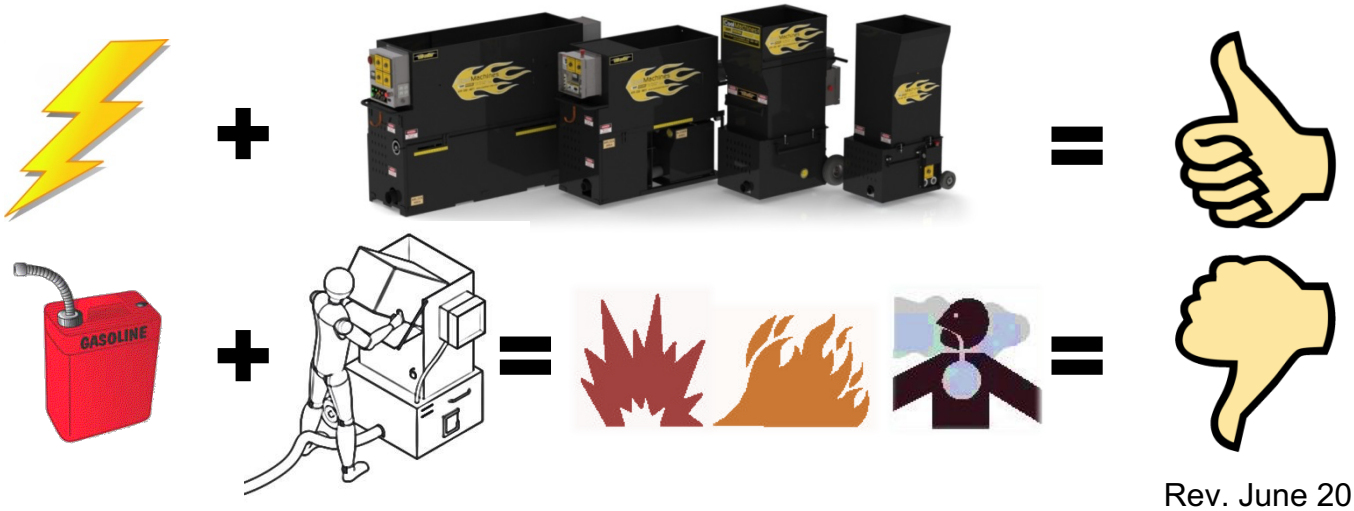
Many contractors choose (gas or electric) machines based upon previous experiences and sometimes “old wise tales”. Cutting edge advances in technology have created an epic shift in technology, steering markets (i.e. vehicles, watercraft, & outdoor products) from internal combustion (gas) engines to ***electric motors.*** Advances in electric motor technology and the rugged plug & play design of control panels offer a reliable solution to the insulation machine market today. Totally Enclosed Fan Cooled (TEFC) electric motors provide thousands of quiet, trouble-free hours of running in harsh, dirty, hot environments. **Gas engines** by their very nature are susceptible to heat due to fiber build-up around air–cooled engines. This factor along with fuel and oil contamination results in higher maintenance and ***shorter engine life***.
Electric motors are always ready to start with a flip-of-the-switch. Parts are simple, few in number, and, for the most, part don’t move during operation. This reduces wear and the need for replacement parts.

Why the epic shift to Electric machines?

Consider this:

Efficiency: The average **gas engine is 30% efficient** at best, with the other 70% converted to heat, moving the pistons and crankshaft of engine. For every 1000 ft. above sea level, you loose 3.5% efficiency. **Electric motors are 85% to 92% efficient.** That’s why the electric motor conversion ratio vs. gas engine is: 2.5 gas h.p. = 1 h.p. electric.

What does this mean? Smaller motors, less weight, no emissions, no noise, and less moving parts means we can offer a high production, robust machine in a compact package.

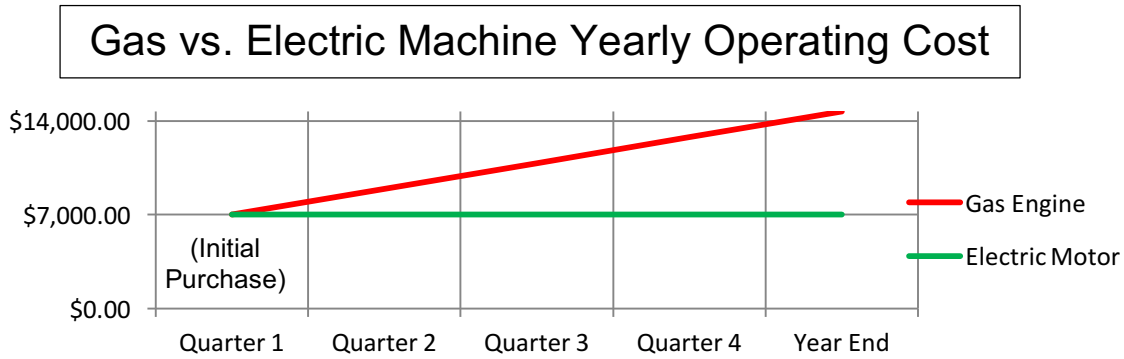


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Operating costs: Electric motors have a low **fixed** operating **cost** while gas engines have a high **variable cost**. A careful study and analysis by industry experts has determined costs for the average **(25.h.p.)** gas engine in our market:

- ***Maintenance:*** (oil changes, air, oil, & fuel filters, labor) = $01./hp./hr. This amounts to $2.00/day x 50 weeks = **$500/year**.
- ***Fuel costs:*** 1.6 gallon/hr. x $2.25/gallon x 40 hrs. /wk = $144/wk x 50 weeks = **$7,200/yr.** (Wait until this $2.25 per gallon of gas goes up in the near future. Overhead operating costs will go thru the roof!)

Total operating costs = ***$7,700 / year*** (You can purchase a new electric machine for this savings)



Durability & Longevity: **Gas engines** loose operating power and efficiency as the engine accumulates running hours. An electric motor remains constant. Air-Cooled gas engines have no protection against overheating and are susceptible to engine failures caused by heat. Electric motors have thermal /overload protection to offer many years of reliable service.

Versatility & Features: **Electric machines** have greater control options with on/off remote and variable speed controls. Constant r.p.m. speed offers even feeding while maintaining a high level of performance year after year.

Safety: Concerns for **gas machines**:

- Risk of **fire and explosion** due to storage of highly **combustible gasoline.**
- High **sound levels** require the need for hearing protection.
- Machine Operators exposed to **dangerous carbon monoxide emissions**.







Why not have the best of both worlds? Use grid power for electric machine when available and generator when portability is needed. The generator can be located away from the machine where potential dust and heat damage, noise, and toxic emissions are a non-issue.

Important choice of generators: Always choose a high quality, oversized generator to provide good, steady, uniform power. Choosing “grid” power is always preferred! (Consult factory for generator recommendations)

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Updated/New Products



-Wall Scrubber Update-

Just so you know, we've recently updated our wall scrubbers to include a newer DeWalt© battery mounting system option. So we now offer cordless scrubbers in an 18 volt Milwaukee© model or a 20 volt DeWalt© model. The new lithium-ion batteries, combined with our light-weight scrubber design, offer easier handling and greatly extended run-time.





-New CM1500VH Model for <u>Wall Spray</u>-

Customers have inquired about our CM2400VH & CM3500VH (Vac-Hood) machines. These are double sided machines for metering both ***recycle*** (from gas–vac) and ***dry fiber***, independently. Since contractors may already have their own ***'dry'*** blowing machine… we can now ***save costs*** by providing a solution for managing your recycle effortlessly. Simply, locate the CM1500VH machine next to your 'dry' machine on truck/trailer, interface the remote system, connect the hose from your gas-vacuum (any manufacturers, although "Cool-Vacs" are the best), and you are ready to start your wall spray project.

Our new CM1500VH machine features an air/fiber separation hood, upper hopper agitator to eliminate 'bridging', alarm sensor to prevent overfilling, and an optional on-board booster blower for supplemental air. This on-board blower allows machine to be converted to a standard blowing/dense packing machine to be deployed on separate jobs. Simply, remove the upper vac-hood section, drive chain, and you are ready-to-go!

Our design provides consistent blending of dry & recycle fibers, a compact system with low power requirements, a versatile independent blowing machine, and most importantly…a low cost solution for your wall spray ***recycle*** challenges.



*Machine Shown with Options

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