

The MotorMaster+ Software Tool

Diagnose the energy use of your motor-driven system
and identify ways to improve its energy efficiency

Discover Your Facility's
Energy-Savings Potential with
ITP Software Tools



Energy Efficiency Software Tools

<http://www.eere.energy.gov/industry/bestpractices/software.html>

**Save
ENERGY
Now**®

The MotorMaster+ Software Tool

Developed by the U.S. Department of Energy's Industrial Technologies Program (ITP), MotorMaster+ is a free online motor selection and management tool. MotorMaster+ enables industrial energy coordinators, facility managers, and plant electricians to manage their motor inventory and maintenance logs in order to evaluate their energy efficiency and discover new ways to reduce energy use, thereby cutting costs and eliminating environmental impact.

How Does MotorMaster+ Work?

MotorMaster+ consists of a user-constructed database that allows the user to run the program on their hard drive or provide specific read/write access to other network users on a server. The creation of the user database requires six types of data inputs:

- Company information
- Utility service information
- Facility information
- Department information
- Process-related operating schedules
- Motor inventory information.

MotorMaster+ utilizes a list of more than 20,000 motors from 14 manufacturers to allow quick and accurate energy use and cost comparisons of motors with different efficiencies, in addition to repair-versus-replacement comparisons. This analysis assists users by calculating energy and dollar savings, simple payback, cash flows, and after-tax rate-of-return on investments.



MotorMaster+ Home Screen

Motor Comparison and Energy Savings Screens

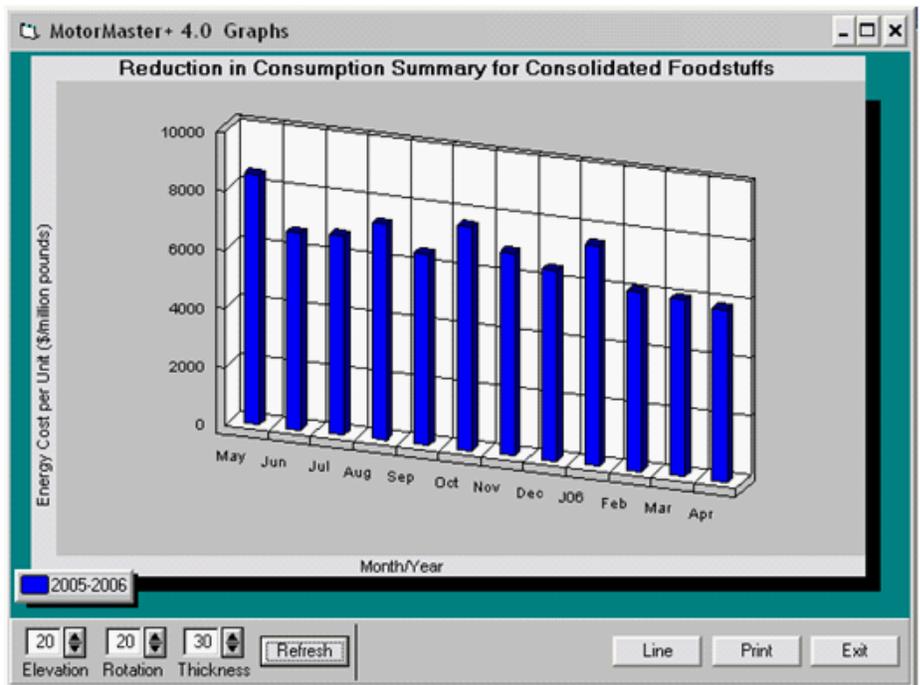
Utility	Rate Schedule	Facility	Energy price (\$/kWh)	Demand charge (\$/kW)	Motor Description and Features	Existing <Avg Std Efficiency>	Premium Efficiency <Avg Premium Efficiency>
Puget Power	Schedule 24 - General	Consolidated Foodstuff	0.06097		Size/Speed: 200 hp, 1200 RPM	200 hp, 1200 RPM	200 hp, 1200 RPM
					Enclosure/Voltage: TEFC, 460 Volts	TEFC, 460 Volts	TEFC, 460 Volts
					Hours use/yr: 8760	8760	8760
					Load (%): 75.0	75.0	75.0
					Efficiency (%): 90.0	95.7	95.7
					Full load RPM: []		
					Old Motor Effic Loss: []		
					Dealer discount (%): []	25.0	
					Purchase Price (\$): []	13409	
					Installation Cost (\$): []	650	
					Motor Rebate (\$): []		
					Peak Months: 12	12	

Energy Savings	Existing	Premium Efficiency	Savings
Motor premium (\$)	14,059		
Energy use (kWh/yr)	1,089,160	1,024,288	
Energy cost (\$/yr)	66,406	62,451	
Demand chg (\$/yr)			
Energy savings (kWh/yr)		64,872	\$ 3955
Demand savings (kW)		7.4	
Total savings			\$ 3955
Simple payback			3.55 yrs

MotorMaster+ also provides technical data that can assist with the optimization of drive systems, motor purchasing, and energy accounting, as well as energy savings, tracking, and greenhouse gas emissions reduction reports. Overall, MotorMaster+ is a one-stop shop for motor assessments, evaluations, and recordkeeping.

Once established, user databases can be updated at any time—the program readily accommodates modifications to each facility or motor inventory list.

The accuracy of MotorMaster+ is dependent on the information one inputs; however, the program does not require users to fully construct a database to utilize its various features. For example, you can search an existing database of premium efficient motors from various suppliers without having to create your own, allowing for a quick and useful stand-alone resource.



MotorMaster+ Graphical Output

What's the Next Step?

MotorMaster+ will guide you to the ITP resources that will help you implement energy improvements at your facility to realize energy and cost savings, including

- Other system-specific software tools to identify targeted savings opportunities
- Consultations with ITP's Qualified Specialists
- Special training sessions for plant-wide and system-specific improvements.

How to Access MotorMaster+

MotorMaster+ can be **downloaded for free** at http://www1.eere.energy.gov/industry/bestpractices/software_motormaster.html

To learn more about MotorMaster+, visit <http://www1.eere.energy.gov/industry/bestpractices/motors.html>



More ITP Resources

In addition to MotorMaster+, ITP provides a variety of free software tools to help you identify energy-savings opportunities across your facility. These tools specifically target

- *Compressed air systems*
- *Fan systems*
- *Process heating systems*
- *Pumping systems*
- *Chilled water systems*
- *Industrial facilities/buildings*
- *Steam systems*
- *Data centers.*

To access these tools, visit <http://www.eere.energy.gov/industry/bestpractices/software.html>.

To learn about training opportunities on topics related to these systems, visit <http://www.eere.energy.gov/industry/bestpractices/training.html>.

For more information on ITP, visit <http://www.eere.energy.gov/industry/>.

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For More Information Contact the EERE Information Center
| -877-EERE-INFO (1-877-337-3463)
or visit <https://www1.eere.energy.gov/informationcenter/>.