

# Davison CMMS PredictMate®

[www.DavisonSoftware.com](http://www.DavisonSoftware.com)



# Why CMMS & PdM?

- Prevent untimely breakdowns
- Reduce maintenance oversight
- Consistently operate equipment at full capacity
- Save money by lowering operating costs
- Increase profits and "the bottom line"

# Getting Started

- Training to get started only requires about 2 hours
- Complete documentation & tutorials
- Customized support available
- Personal remote training by Internet connection
- On-site training and setup available

# Help And Documentation



The screenshot displays the Davison Maintenance System software interface. At the top, there is a menu bar with icons for Equipment, Work Orders, Scheduled PM, Parts / Inventory, Vendors & Purchase Orders, Reports, PredictMste, Exit, and Help Topics. Below this is a toolbar with buttons for Actions, Reports, Image, Handheld, Close, Send, Recv, Parts, Find, and Help. A table of work orders is visible, with columns for Scope, Work Order, Status, Priority, Location, Unit Code, and Unit Description. A help window titled "Davison Maintenance System" is open, showing the "Work Orders" section. A green hand icon is pointing to the "Help" button in the toolbar.

**Work Orders by Status + Priority + Date + Time**

Scope	Work Order	Status	Priority	Location	Unit Code	Unit Description
	0000000001	Ready/...	3-Normal	P1	BLK16S	Block Machine - Model
	0000000002	Ready/...	3-Normal	P1	BLK16S	Block Machine - Model
	0000000003					

**Davison Maintenance System**

File Edit Bookmark Options Help

Contents Index Back Print

## Work Orders

See [Reports for Work Orders](#)

To add new work order information, press  then select "Add".

See [How to Add Work Orders](#)

See [How to Print Work Orders](#)

### Grouping Work Orders

To find groups of work orders like Active or Closed, select a group from **Actions >> Group Work Orders** .... A scope of work orders is marked. For example, the "Active Work Orders" group will mark all corrective work orders where status is Working, Ready, or Project.

### Work Order Number:

Each work order number must be unique. The Work Order Number is actually a code that can contain letters and numbers.

To find a work order with no leading zeros, press <space> once, then the work order code.

# Software Overview

- Equipment information
- Work orders & scheduling
- Parts inventory
- Preventive maintenance (PM)
- Management reports
- Compare your costs
- Engineering support
- PredictMate®
- Analysis & Forecasting
- Multiple languages available

# Equipment Information

Equipment Components by Unit + Component Code

Actions Reports Image Handheld Work Orders PM Work Parts Find ? Help

Scope	Out	Unit Code	Component Code	Location	PM Gr
<input type="checkbox"/>	<input type="checkbox"/>	BLW01	...	F01	AWB
<input type="checkbox"/>	<input type="checkbox"/>	DD	DD54063	F01	

Equipment Components BLW01/

Save Cancel



Component Info. Notes and Nameplates Cost Info. Preventive

Part Group (No part group)

Priority **Priority (Criticality)**

- 1 One (Emergency)
- 2 High priority
- 3 Normal
- 4 Low Pr
- 5 5 Prio
- 7 Save f

Vendor



Work Order

Save Cancel Unit BLW01 -

Work Order

Number [ ] Leave WO number

11/18/2009 10:55 am Completed /

Cause No Cause Assigned

Status R Ready/Requested

Priority 2 High priority



# Work Orders & Planning

**Work Orders**

Actions Reports Image Plan Handheld Close Send Recv

Scope	Work Order	Status	Priority	Location	Unit Code	Unit Description
	0000001575	Ready/...	2-Urgent	MDF	DIRA02	CHLORINE

**Work Orders View Only**

View Only Edit Type: Corrective

Work Order	Description	Dates / Status	Personnel	Costs	Preventive
Number	0000001575				
Unit	DIRA02				
CHLORINE RESIDUAL ANALYZER # 2					
lengthened the discharge tube to avoid "water hammer" from kicking the drain tube outside of the drain line.					



**Work Order Request**

Add Edit Print

Description: Work Order

Requested: 11/18/2009 11:59 am Out of Service Date

Requested by: [ ]

Location code: FR Floor Base

Use P&ID: [ ] Select Unit

This needs to be fixed ----  
Painting rough.  
Leaking at drive end.

# Parts Inventory

Part Information								
Stock Code	Quantity in stock	Quantity on order	Reorder Limit	Reorder Margin	Lead Days	Total Usage	Price	
Stock Description	Location							
675.100.35	SPRING BAR	4	0	2	2	10	3	\$85.500
675.100.38	ROTOR	6	0	2	0	5	4	\$615.000



## Work Orders with insufficient parts

Work Order	Scheduled Date	Quantity Needed
Stock Code	Stock Description	
0000000135	3/27/ 2009	1
B000004	Cap Screws (C-43)	
B000003	Injector Plate	2
0000000168	5/7/ 2009	3
GBT001A	Input Shaft Roller Bearing	

Part Information from

File Edit View Insert Format Tools Message Help

Send Cut Copy Paste Undo Check

From: SendMework@davisonsoftware.com (DS Work)

To: Parts Vendor

Cc:

Subject: Part Information from

Attach: PartNeed.TXT (168 bytes)

Times New Roman 12 B I U A

Part Information. Please order this parts...



# Preventive Maintenance (PM)

DS Component PM by Location + Unit + Component																			
Actions		Reports		Image		Handheld		Setup		Next Due		Prev Due		Find		Tasks		Help	
Scope	Out	Location	Route	Unit Code	Component ...	Unit Desc.	Component Description	Method	PM Start Date	WeekDay									
	<input type="checkbox"/>		...	CPM ...	...	Block Machine - ...	...	Calendar...	09/13/2002	Friday									
	<input type="checkbox"/>		...	CPM ...	CSA ...	Block Machine - ...	Center Section A...	Calendar...	09/13/2002	Friday									
	<input type="checkbox"/>		...	CPM ...	FDA ...	Block Machine - ...	Feed Drawer Ass...	Calendar...	09/13/2002	Friday									

DS PM Tasks Due to 11/19/2009 - Closing 11/19/2009 - Selected Crafts for CPM/FDA																			
Actions		PM Work		View		Close		Close All		Re-Open		Add Ready		Filter		Work Orders		PM Due 11/19/2009	
Due	Actual Hrs.	Last Completed	Scheduled	Craft	Assigned to	Days	Interval	Type	Season mm/dd	Task Description									
<input checked="" type="checkbox"/>	0.00	09/10/2009	09/07/2009	...	No ID ...	1			/ - /	___ ___ Visually check									
<input checked="" type="checkbox"/>	0	/ /	09/20/2002	...	No ID ...	7			/ - /	___ ___ Inspect for fluid									
<input checked="" type="checkbox"/>	0	/ /	10/18/2002	...	No ID ...	30			/ - /	___ ___ Inspect feed dra									

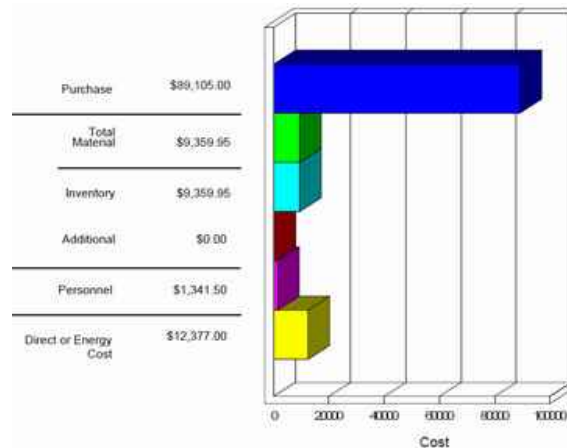
# Management Reports

- **Work Summary**
  - Reports personnel time, overdue PM
- **Personnel Productivity**
  - Percent of accounted time
- **Out of Service**
  - Work order costs for down time

# Compare Your Costs


## Equipment Costs

Unit	Direct or Energy Cost	Personnel Cost	Additional Cost	Inventory Cost	Total Material	Purchase Cost
0005 Compressor	\$1,348.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,300.00
11111 Influent Pump Station - General	\$3,355.00	\$20.00	\$0.00	\$341.05	\$341.05	\$26,500.00



# Engineering Support

**EQUIPMENT STATUS SHEET**  
CITY OF MIAMI, FLORIDA



FORM NO. 117    STOCK DISTRIBUTION FORM NO. 2    DATE: 02/05/09  
REVISED BY: EJP 10/20    GROUP NO. 009

DESCRIPTION	QTY	UNIT	MANUFACTURER	OPERATIONAL STATUS
BACKWASH PUMP	1	EA	3M	OK
WASH WATER PUMP	1	EA	3M	OK
DELIVERY VAN	1	EA	3M	OK



File Equipment Personnel Tools Window

**PredictMate**  
Predictive Maintenance (PdM)

Equipment Reports Exit Help Topics

**Equipment by Location + Unit**

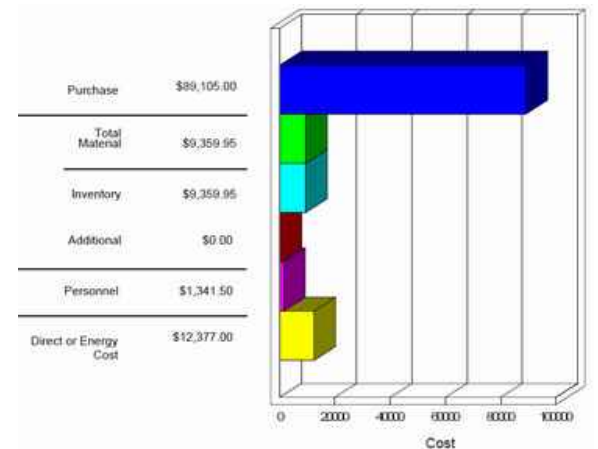
Actions Reports Image Graph Handheld Find Readings Limits

Scope	Out	Location	Route	Unit Code	Unit Description
	<input type="checkbox"/>	F01	2302	BLW01	AIR WASH BLOWER (BACKWASH)
	<input type="checkbox"/>	F01	2303	PMP01	WASH WATER PUMP - DEMO
	<input type="checkbox"/>	G01	1020	VEH01	Delivery Van - DEMO

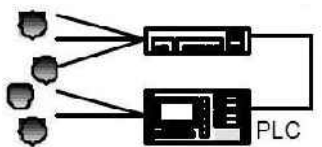
Microsoft Excel - EnergyCosts.xls

File Edit View Insert Format Tools Data Window Help

Equipment	Cost Date	Calculated Cost	Power Rate	Hours / Day	Days
PMP01	11/15/2009	\$174.00	4.35	8	5
FAN01	11/15/2009	\$107.52	2.56	6	7
PMP01	11/8/2009	\$152.25	4.35	7	5
FAN01	11/8/2009	\$89.60	2.56	5	7
PMP01	11/1/2009	\$148.75	4.25	7	5
FAN01	11/1/2009	\$85.75	2.45	5	7



# PredictMate®

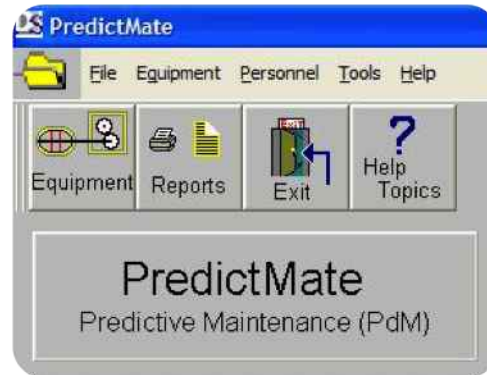


**Work Order List to file**

WO_NUM	PRIORITY	STATUS	EQ_CODE	COMP_CODE	DA_REQUEST	...
0000000004	2	R	BLW01	5/25/2006	...	
0000000005	2	R	BBB02	6/1/2006		
0000000006	3	R	FAN01	MOTOR	...	

Equipment Readings Due on 11/25/2009 Default Interval 20 Days  
Sorted by Location + Unit

Unit	Pos	Filter	Building	Rule
BLW01				2302
AIR WASH BLOWER (JACKWASH BLOWER) - DCMC				
Position	Type	Last reading by	(No Personnel ID)	12/18/2009
		New reading by		
	Time-weighted average from SCADA	565.0000		
	Cubic Feet per Minute air flow (Minimum)	1150.0000		
1H	Velocity Vibration	0.3000		
2H	Displacement Vibration	5.0000		
2H	Velocity Vibration	0.4400		



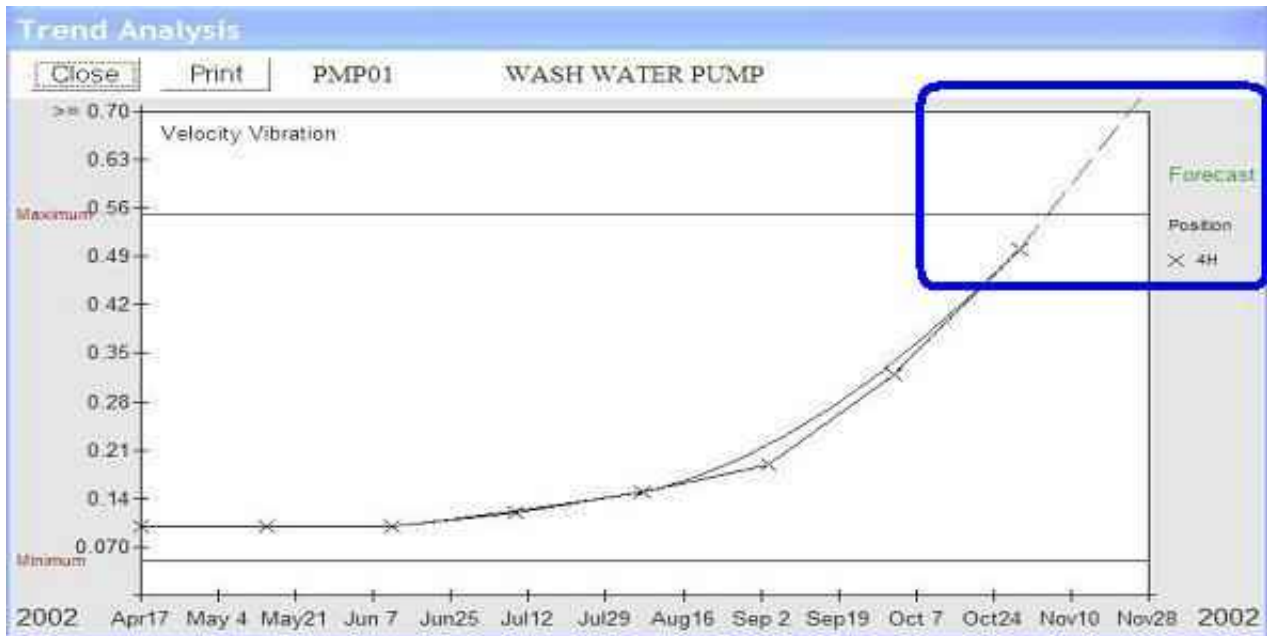
**Work Orders to CMMS  
No duplicates.**

Scope	Work Order	Status	Priority	Location
	0000001575	Ready/...	2-Urgent	MDF
	0000001575	Ready/...	2-Urgent	MDF

# Analysis & Forecasting

Equipment Alarms							
Sorted by Location + Unit							
Unit						Route	
Location	Filter Building					2302	
F01							
BLW01							
AIR WASH BLOWER (BACKWASH BLOWER)							
Date	Time	Person	Position	Type	Maximum	Minimum	
11/16/2005		(No Personnel ID)					
					Cubic Feet per Minute air flow (Minimum)	1300.00	1150.00
					Temperature	104.02	99.50
					2H Displacement Vibration	5.00	5.10
					2H Velocity Vibration:	0.35	0.44

*Forecast Maximum 12/7/2005*





# Davison Software Clients

- Goodrich Aerospace
- Heidi Chocolat S.A.
- Productos de Concreto
- Panama Ports Company
- Fauquier County Fire
- Rieter Feltex Automotive pty( ltd)
- Willow Creek Faribault Block Plant
- Kay & Kay Contracting
- Ricoh Electronics, Inc
- Advanced Plastics Reclaiming, LLC
- Gits Manufacturing Company
- SYCSA
- Spokane, WA
- Jud. Ilfov, Romania
- Aguascaliente, MX
- Panama, Panama
- Warrenton, VA
- Pretoria, South Africa
- Faribault, MN
- London, KY
- Santa Ana, CA
- Westlake, OH
- Creston, IA
- Pachuca, MX

# Client Quotes

“Davison Software has always provided timely and personal support as necessary. I would purchase this product again.”

Karl Royer, O&M Manager, East Bay Dischargers Authority

“Davison Software has accommodated our needs and provides our initial data and custom reports in a CMMS specific to our clients.”

Kevin Brown, Columbia Machine, Inc., Vancouver, Washington

# About The Developer

- Hands-on maintenance and operations background.
- Plant manager and superintendent for municipal water treatment.
- Technician for Engineering and contract operations.
- Software developer in a large corporation.
- Developed Davison CMMS and PredictMate®

# Contact Davison Software

Davison Systems, LLC

707.447.3227

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