

Intelligent predictive maintenance

Proven benefits of Artesis system

- 10% reduction in maintenance costs
- 50% increase in departmental productivity
- 25% reduction in quality related customer complaints
- Unplanned downtime cut from 5% to 1%
- Payback in under a year



Artesis simplifies predictive maintenance

From this

.... to this

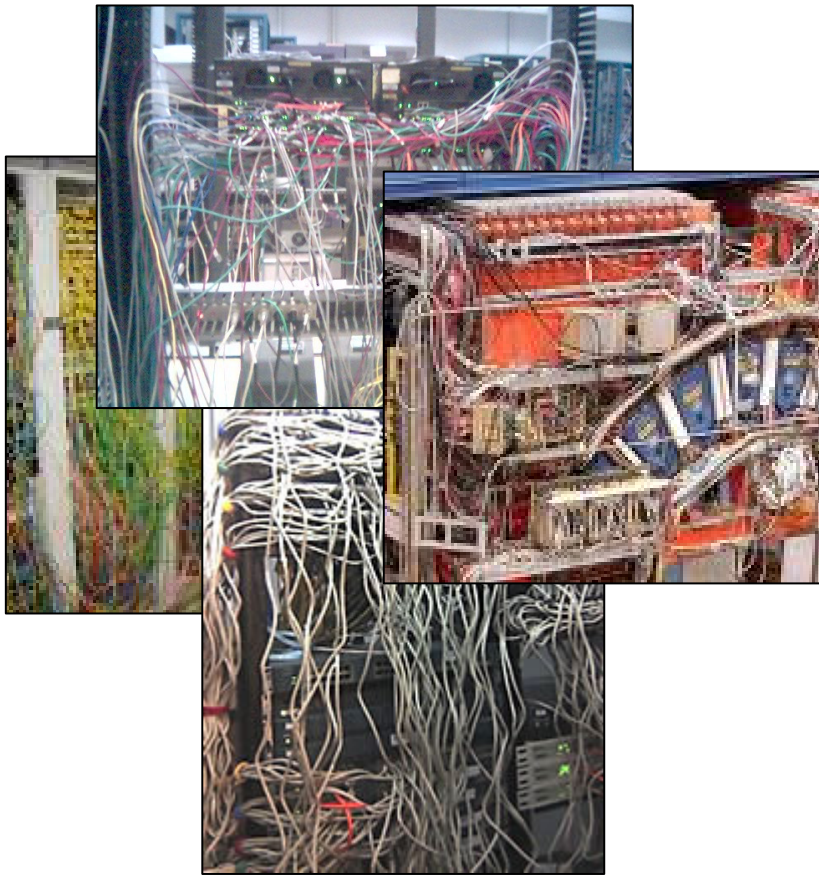


Artesis

Artesis simplifies installation

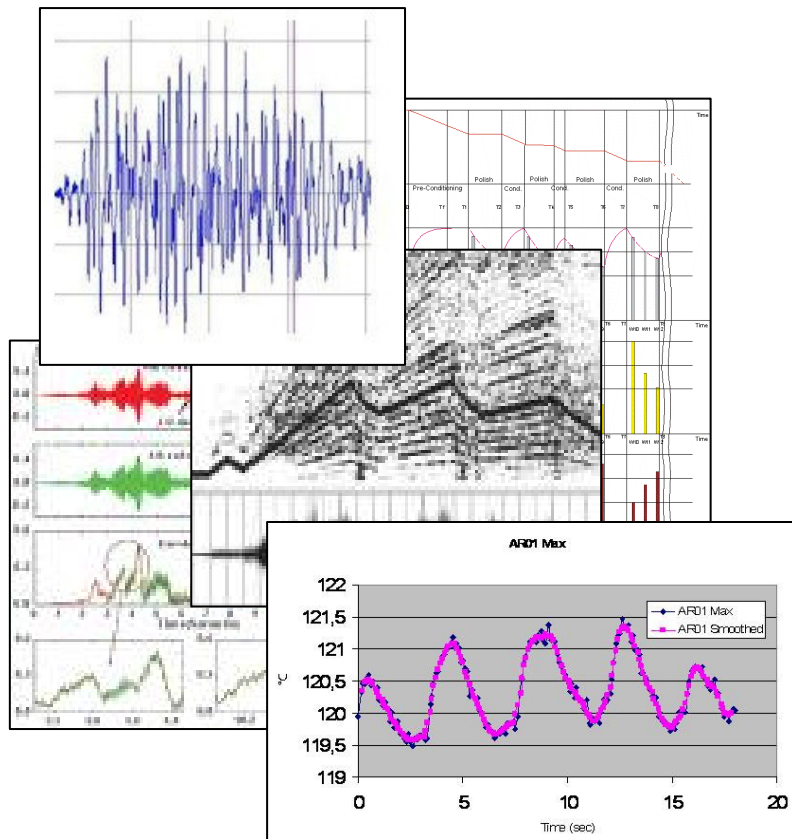
From this

.... to this



Artesis simplifies diagnosis

From this



.... to this

Diagnostic

MECHANICAL PARAMETERS		Fan MOTOR INFORMATION	
M1	Contactor/Cabling/Looseness	Nominal Voltage	130.00
M2	Looseness/Oil/Belt/Vane/Blades	Nominal Current	0.30000
M3	Unbalance/Coupling/Misalignment	Rotation Speed	1480
M4	Rotor/Transmission	MCM Address	6
M5	Rotor/Transmission	ELECTRICAL VALUES	
M6	Line Frequency	CosPhi	0.56247
M7	Rotor/Transmission	Active Power	5.90963
M8	Rotor/Transmission	Reactive Power	8.68696
M9	Unbalance/Coupling/Misalignment	V I-n	228.43378
M10	Bearing Housing	I-rms	15.62959
M11	Stator/2nd Harmonics	V Imbalance	0.47354
M12	Stator/2nd Harmonics	I Imbalance	1.70829
ELECTRICAL PARAMETERS		HARMONICS (%)	
E1	Electrical Problem	THD	7.37899
E2	Electric Supply Problem	5th	5.72946
E3	Fit Problem	7th	1.07257
		9th	0.11296
		11th	0.39081

MOTOR STATUS

- NORMAL
- WATCH LINE
- WATCH LOAD
- EXAMINE 1
- EXAMINE 2

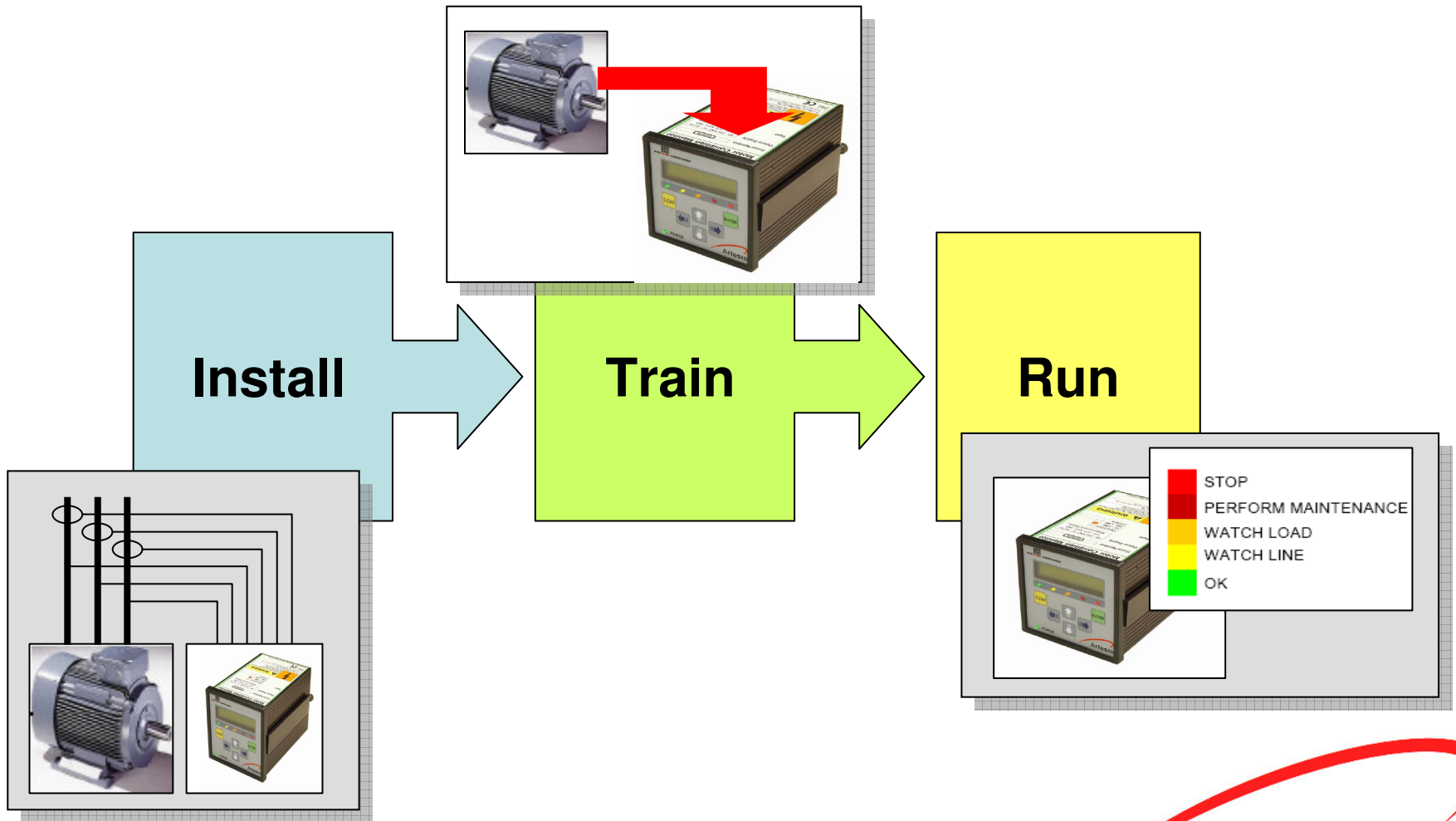
Start Date 02/18/2006 10:51:49
End Date 02/20/2006 15:00:55

573

Advanced Report Load Close



Automated set up and operation



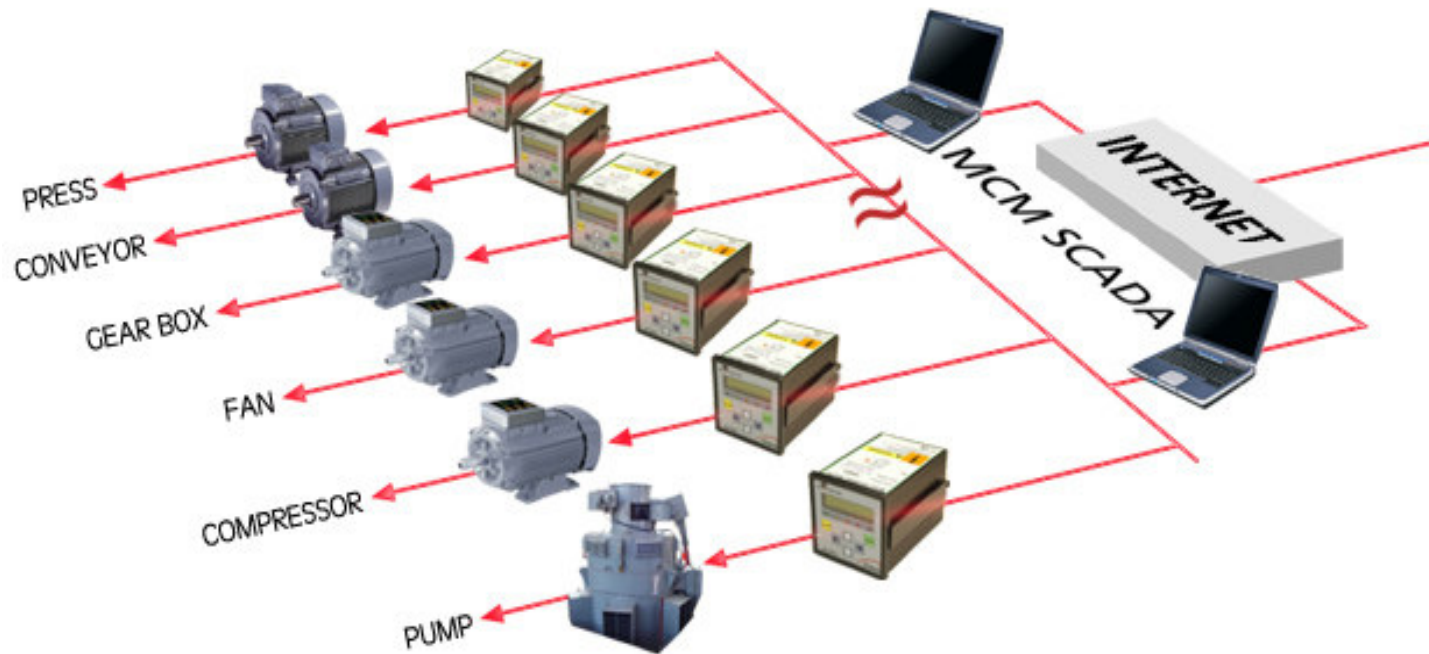
Concise, reliable fault diagnosis

The screenshot displays the 'Diagnostic' window of the Artesis software. It is divided into several sections:

- MECHANICAL PARAMETERS:** A list of 12 items (M1-M12) with color-coded status indicators (green, red, yellow).
- Fan MOTOR INFORMATION:** A table with 4 rows: Nominal Voltage (130.00), Nominal Current (0.30000), Rotation Speed (1480), and MCM Address (6).
- ELECTRICAL VALUES:** A table with 6 rows: CosPhi (0.56247), Active Power (5.90963), Reactive Power (8.68696), VI-n (228.43378), I-rms (15.62959), and V Imbalance (0.47354).
- HARMONICS (%):** A table with 4 rows: THD (7.37899), 3th (0.57733), 5th (5.72946), 7th (1.07257), 9th (0.11296), and 11th (0.39081).
- ELECTRICAL PARAMETERS:** A list of 3 items (E1-E3) with color-coded status indicators.
- MOTOR STATUS:** A list of 5 status options with checkboxes: NORMAL (green), WATCH LINE (yellow), WATCH LOAD (orange), EXAMINE 1 (red, checked), and EXAMINE 2 (red).
- Start/End Dates:** Start Date: 02/18/2006 10:51:49, End Date: 02/20/2006 15:00:55.
- Slider:** A horizontal slider bar with a value of 573.
- Buttons:** 'Advanced', 'Report', 'Load', and 'Close' buttons are located at the bottom.

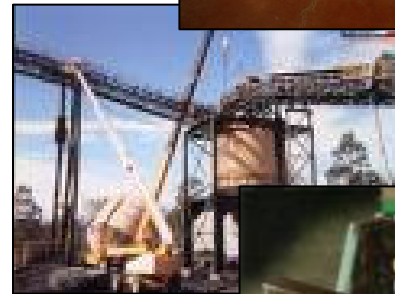


Connects with other systems



What equipment?

- Most equipment driven by 3 phase electric motors
- Generators and alternators
- Especially effective for remote or inaccessible equipment



Artesis summary

- Gives you all the benefits of predictive maintenance with a fraction of the cost and effort of conventional condition monitoring systems
- Simple to install and use
- Automated set up and operation
- Integrates with other systems
- Just gives you the answers
 - Which equipment requires attention?
 - What's wrong?
 - How soon do I have to act?

