

**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

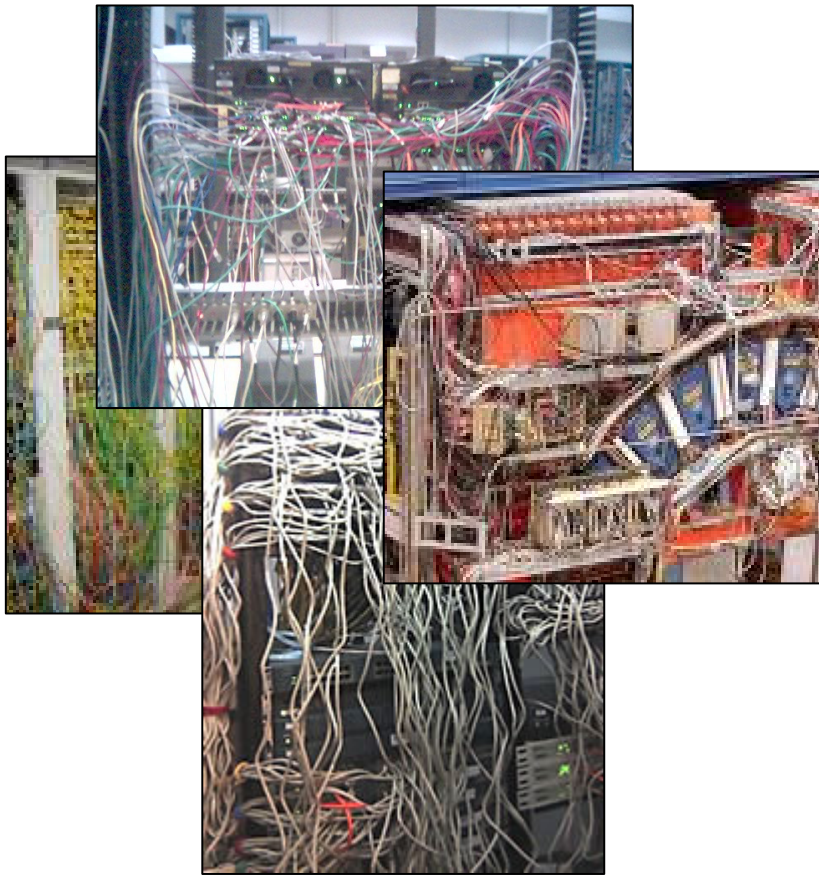


The Artesis logo consists of a red swoosh above the word 'Artesis' in a bold, black, sans-serif font.

# Artesis simplifies installation

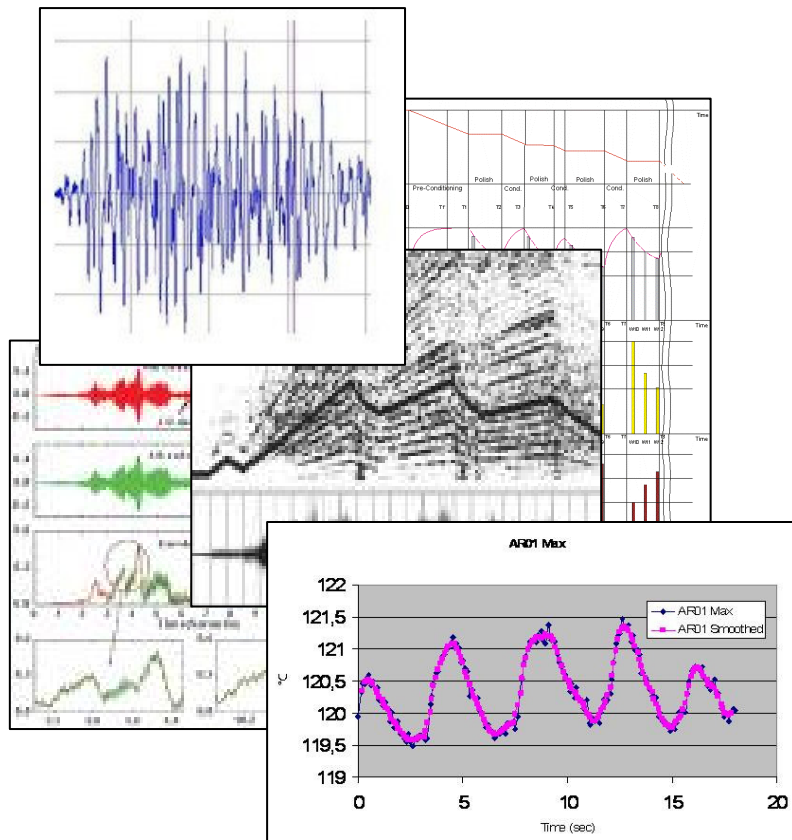
**From this ....**

**.... to this**



# Artesis simplifies diagnosis

From this ....



.... to this

**Diagnostic**

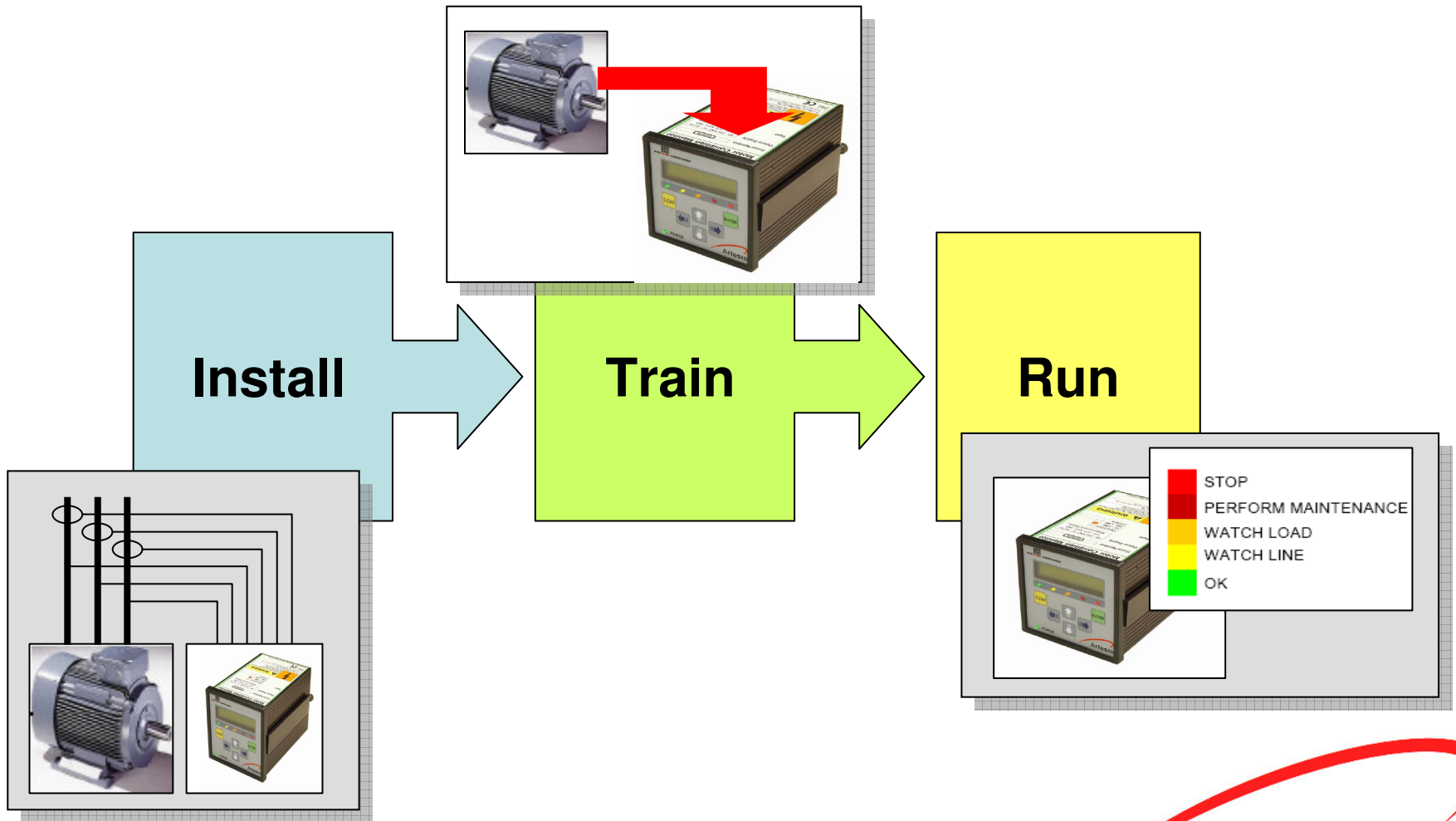
MECHANICAL PARAMETERS		Fan MOTOR INFORMATION	
M1	Contactor/Cabling/Looseness	Nominal Voltage	130.00
M2	Looseness/Oil/Belt/Vane/Blades	Nominal Current	0.30000
M3	Unbalance/Coupling/Misalignment	Rotation Speed	1480
M4	Rotor/Transmission	MCM Address	6
M5	Rotor/Transmission	ELECTRICAL VALUES	
M6	Line Frequency	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		Start Date	02/18/2006 10:51:49
<input type="checkbox"/>	NORMAL	End Date	02/20/2006 15:00:55
<input type="checkbox"/>	WATCH LINE		
<input type="checkbox"/>	WATCH LOAD		
<input checked="" type="checkbox"/>	EXAMINE 1		
<input type="checkbox"/>	EXAMINE 2		

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Advanced Report Load Close



# Automated set up and operation



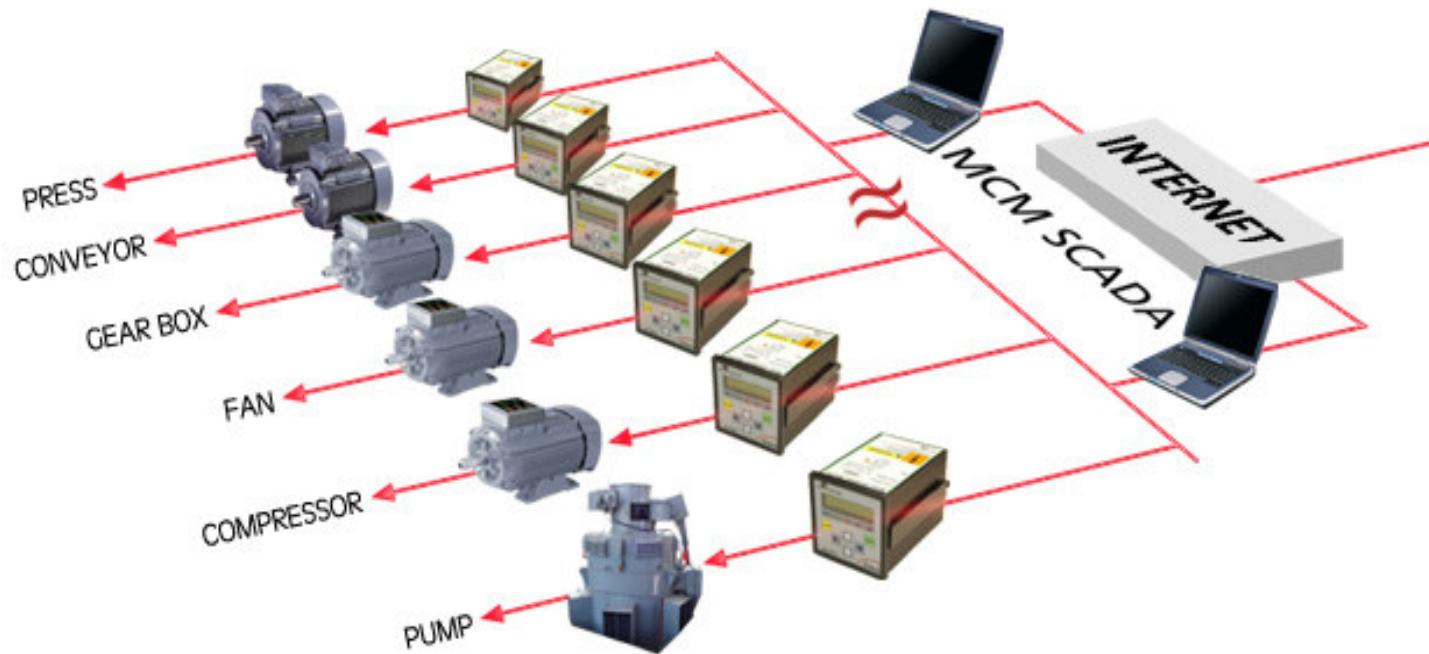
# Concise, reliable fault diagnosis

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), V Imbalance (0.47354), and I Imbalance (1.70829).
- ELECTRICAL PARAMETERS:** A list of 3 items (E1-E3): Electrical Problem, Electric Supply Problem, and Fit Problem.
- 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).
- MOTOR STATUS:** A list of 5 options with checkboxes: NORMAL (unchecked), WATCH LINE (unchecked), WATCH LOAD (unchecked), EXAMINE 1 (checked), and EXAMINE 2 (unchecked).
- 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.



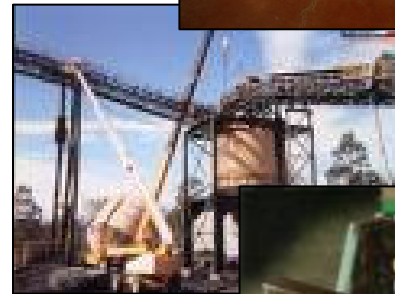
# Connects with other systems





# 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?

