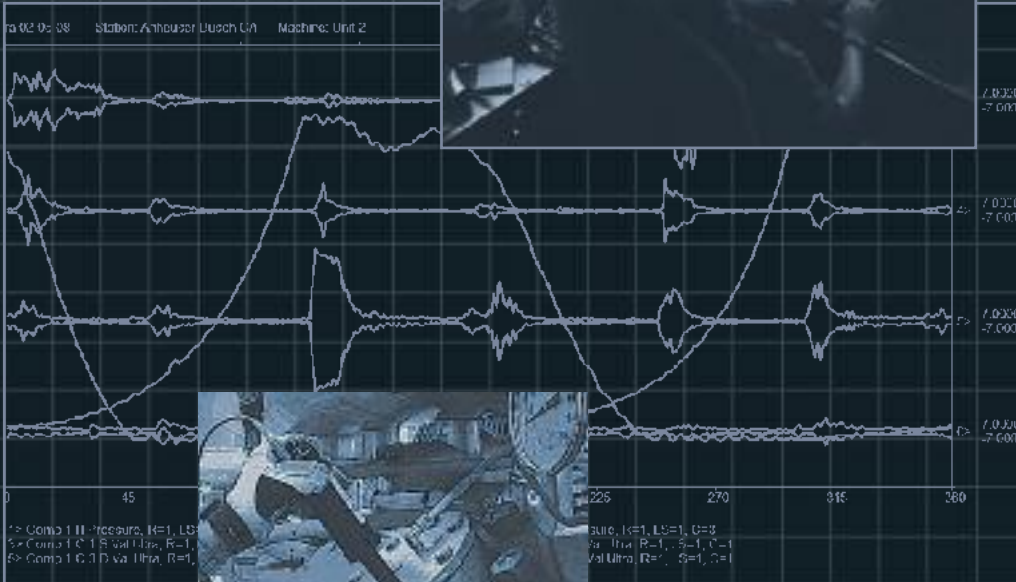


# Machinery Diagnostics & Training



*Revolutionize Efficiency,  
Productivity and  
Machinery Availability  
With On-Demand  
Diagnostics Services*

- | Remote Analysis
- | Web-Based Reporting
- | Expert Training



**T. F. HUDGINS**  
INCORPORATED  
MACHINERY DIAGNOSTICS & TRAINING

*Your Machinery  
Diagnostics Specialist*

713-682-3651  
1-800-582-3834  
[www.TFHudgins.com](http://www.TFHudgins.com)

# Optimization On Demand

*The benefits of machinery monitoring and diagnostics are clear: increased availability, improved reliability, maximized production, maintenance savings, and elimination of unnecessary downtime. True condition-based maintenance is the ultimate goal – and T.F. Hudgins is the best resource to help you achieve it.*

T.F. Hudgins Machinery Diagnostics and Training (MDT) is a practical, cost-effective solution for companies looking to optimize maintenance while using fewer internal resources. We provide on-demand, remote access to our industry-leading analysis expertise – at any time, from anywhere in the world. What's more, T.F. Hudgins MDT dramatically improves communication with Condition Monitor™, our innovative Web-based system for reporting, prioritizing and managing your maintenance requirements.



T.F. Hudgins MDT provides expert analysis services for industrial engines, compressors, pumps and other rotating machinery. We have a proven record of success in a variety of industries, including refining, chemical process, railway, pipeline, gas production, marine and power generation. MDT analysts have extensive knowledge of rotating and reciprocating machinery, including experience as reliability engineers and compressor valve designers.

## **T.F. Hudgins MDT Advantages**

- The world's leading analysts are available on-demand
- Remote analysis eliminates travel expenses, saves time
- Condition Monitor makes analysis reports available any time, anywhere in the world
- Allows state-of-the-art machinery optimization without adding plant personnel
- Training for plant personnel in English or Spanish

## **Services Provided**

- Condition Analysis and Performance Evaluation of:
  - Natural Gas Engines
  - Diesel Engines
  - Reciprocating Compressors
  - LDPE Hyper-compressors
  - Rotating Equipment
- B Probe Inspection of Bearing Clearances
- Boroscope and Videoscope Mechanical Analysis
- Compressor Valve and Unloader Evaluation
- Economic Evaluation of Machinery – Upgrades and Re-Rates
- Personnel Training

## **Convenient to Use**

**Data Collection.** T.F. Hudgins MDT analyzes data collected by: (1) your technicians, (2) MDT technicians or (3) online monitoring systems. Raw data may be submitted from any location for remote analysis using the Condition Monitor system.

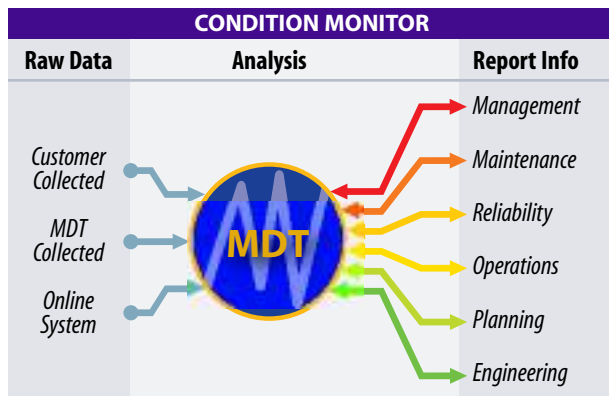
**Analysis.** MDT analysts are available 24/7. They evaluate raw data to determine the precise mechanical condition of all operating components. Then they prepare a comprehensive report of performance with a prioritized list of maintenance recommendations.

**Reporting.** Completed analysis reports are posted to the Condition Monitor system, which automatically notifies you via email, pager or other preferred method that a report is available for on-line review.



## Condition Monitor™ A Communications Hub

The Condition Monitor system is an innovative communications tool developed and offered exclusively by T.F. Hudgins MDT. It streamlines the flow of information between MDT analysts and all the functional areas within your plant that benefit from timely, accurate diagnostics.



The Condition Monitor system is accessed via Web browser and is password-protected. It is used for uploading raw data for analysis, displaying completed reports and viewing summary and historical information about machinery. This interactive system also allows your maintenance personnel to record repair events and comments.

The Condition Monitor system is powerful, yet easy-to-understand. Priority maintenance concerns are highlighted and you can quickly assess maintenance needs for all of your machinery.

Unit	Unit Name	Unit Type	Unit Status	Unit Location	Unit Operator
101	101-101	Compressor	Normal	101-101	John Doe
102	102-102	Compressor	Warning	102-102	Jane Smith
103	103-103	Compressor	Alert	103-103	Mike Johnson
104	104-104	Compressor	Normal	104-104	Sarah Lee
105	105-105	Compressor	Warning	105-105	David Kim
106	106-106	Compressor	Alert	106-106	Emily White
107	107-107	Compressor	Normal	107-107	Chris Brown
108	108-108	Compressor	Warning	108-108	Alex Green
109	109-109	Compressor	Alert	109-109	Mia Black
110	110-110	Compressor	Normal	110-110	Noah Grey

*The Condition Monitor system displays analyst recommendations by priority, highlighting critical itEMS needing immediate attention.*

## MDT Training

T. F. Hudgins MDT offers an extensive machinery diagnostics and optimization curriculum for engines, compressors and rotating equipment. Classes are presented at the T. F. Hudgins MDT training center in Houston, regional locations or customer sites. Courses are conducted in English or Spanish, with complete documentation provided. MDT training accommodates all personnel needs:



**Analysis Interpretation.** These classes help non-analyst personnel better understand and utilize analysis reports. They also improve knowledge of machinery design and operation. Typical attendees are engineers, technicians, process managers and maintenance managers.

**Compressor Fundamentals and Principles.** These courses build knowledge of compressor design and applications. Topics covered include lubrication, valve design, capacity control and material options. Engineers, process and maintenance personnel benefit from these courses.

**Analytical Training.** These classes provide hardware and software training for personnel needing in-depth knowledge of engine and compressor analysis. Analytical training is often provided at customer locations.

**Your Machinery  
Diagnostics Specialist**

713-682-3651  
1-800-582-3834

Mailing Address  
P.O. Box 920946  
Houston, TX 77292-0946

Shipping Address  
4405 Directors Row  
Houston, TX 77092



**T. F. HUDGINS**  
INCORPORATED  
MACHINERY DIAGNOSTICS & TRAINING

### Services

| Condition Analysis and Performance  
Evaluation of:

- Natural Gas Engines
- Diesel Engines
- Reciprocating Compressors
- LDPE Hyper-compressors
- Rotating Equipment

| B Probe Inspection of Bearing Clearances

| Boroscope and Videoscope  
Mechanical Analysis

| Compressor Valve and Unloader  
Evaluation

| Economic Evaluation of Machinery –  
Upgrades and Re-Rates

| Personnel Training

### Ready to Respond

MDT services are offered on an as-needed basis, through periodic contracts or by customized arrangements. To see how we can serve your needs, contact your local T.F. Hudgins representative or visit [www.tfhudgins.com](http://www.tfhudgins.com).