

RTwin™

Predictive Maintenance Software

RTwin simplifies asset management decisions based on data acquired by Dynalco's RT Online™ system and/or the RECIP-TRAP™ portable analyzer. RTwin contains the most extensive set of analytical tools available today designed to drive your condition and predictive maintenance practices.

RTwin features a user-friendly Windows-based interface with step-by-step Wizards that guide you through the easy set up of machinery and routes. The design of the RT Online/RECIP-TRAP-RTwin solution is based on decades of proven standard practices and procedures that allow superior integrity data and solid decisions based on its analysis.

RTwin provides information on compressor health, economics, and performance and allows you to trend those conditions over time to assess the rate of change on a given component and schedule maintenance intelligently and accordingly.

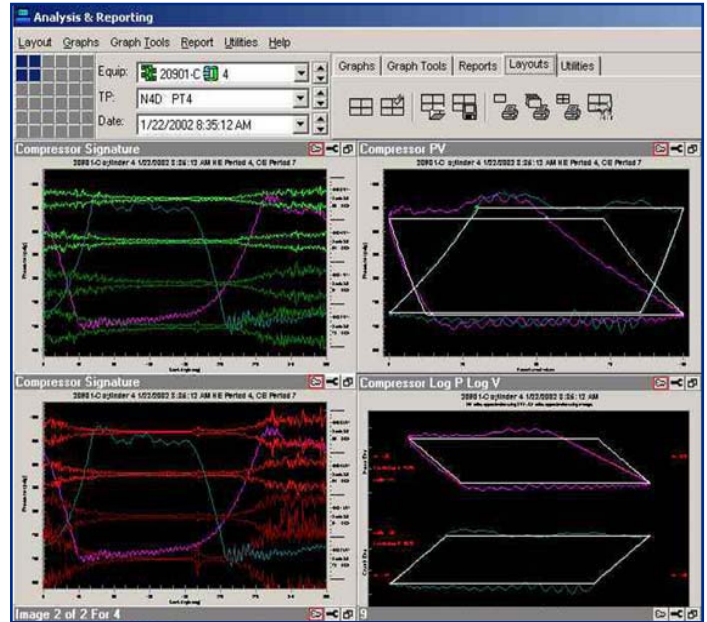
Using RTwin you can assess the condition of:

- Valves and rings
- Ring and rider band wear
- Piston rod load
- Crosshead pin load
- Connecting rods
- Liner wear
- Frame vibration
- Cylinder motion
- Piping vibration
- Oil and water pumps

RTwin provides customizable displays such as:

- Pressure vs. Crank Angle
- Cylinder Vibrations
- Cylinder Signature
- Pressure vs. Volume
- Rod Motion/Drop (optional)
- Log P Log V
- Rod Load

RTwin contains predictive maintenance features that allow you to trend new, previous and baseline comparisons to predict potential failures. A drag and drop overlay allows you to take graphical data from different dates and trend this information to assess rate of degradation. It also allows you to compare the condition and performance of similar compressors in your plant. RTwin is OBDCompliant and can be exported into Excel or like programs.



RTwin utilizes various metrics including capacity, horsepower and S/D flow balance to make assessments on the performance of your unit(s) and provides empirical and economic information such as:

- Losses in BHP due to the movement of gas through valves and passages and pulsation.
- Lost capacity due to recirculation and bypass valve leaks
- Total work required to move gas in BHP
- Amount of energy consumed in BTU/hr or kW/hr and the cost of energy, displays the cost of those losses

RTwin provides easy-to-use reports summarizing operating conditions, performance, economics and health. Analysts are able to take data and turn it into actionable information through Economic and Performance Reports such as:

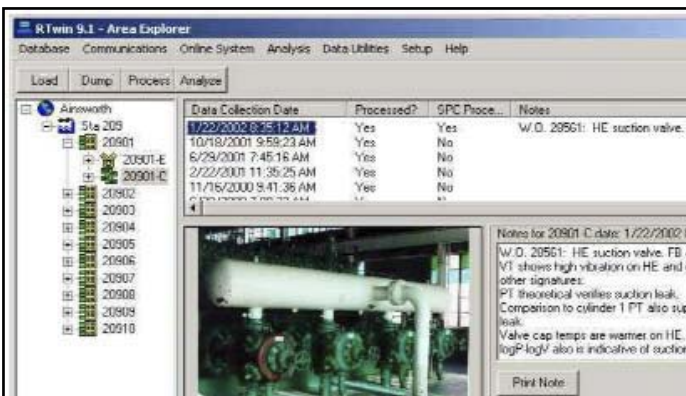
- Engine and Compressor Economics
- Compressor Horsepower and Capacity
- Clearance and Volumetric Efficiency
- Discharge Temperature and Theoretical Capacity
- Compressor Rod Loading
- Operating Conditions and Gas Properties
- Physical Gas Properties

RTwin Specifications

Testpoint Management allows you to use the convenient level data editor to add, change, or delete readings. If the marker correction angle is incorrect, you can change it for that set of data. You can also define a good set of data as a baseline for future comparisons.

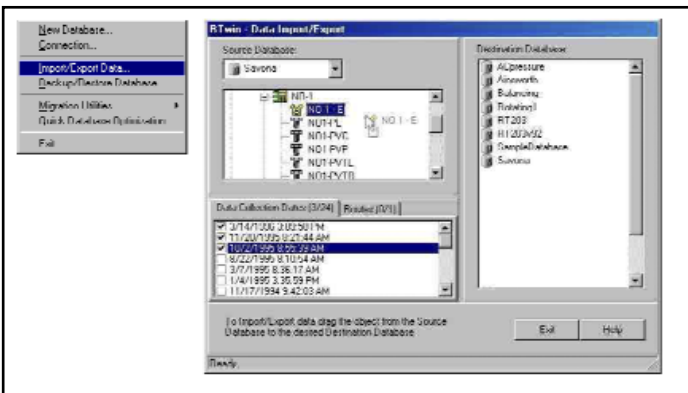
Area Explorer helps you easily move through your plant areas, machines and components and view collection dates, notes, images and setup geometry details. The menu bar provides access to functions such as:

- Database backup, import and export
- RECIP-TRAP loading and dumping
- Data processing and utilities
- Unit, component, testpoint and route setup
- Analysis palette



Database Management offers a number of utilities for managing your databases effectively. Database utilities include:

- Database connection to switch between multiple databases
- Backup and restore
- Export utility for specific data collection dates



Adding Images lets you display pictures of your engine, compressor, or any of its components, attach them to the component tree with a right mouse click. These images can indicate testpoint locations, component geometry, or could even be schematic drawings.



Analysis Palette allows you to display cylinder data beside the other cylinders for direct, visual comparisons. The analysis palette displays up to 36 sectors at a time. The grid control in the upper left corner controls your palette.

Population Based Comparisons are the most powerful and valuable feature of RTwin. This feature allows you to setup the analysis palette to show you how all of the units in your program are performing.

