The management of multi-million dollar assets and inventories can be a complex task. For the past fifteen years, Oil and Gas companies have relied on Maintenance and Materials Management systems from CENDEC™ to provide them with the information they need to manage this critical area.

Now CENDEC™ is here to build on that achievement and expertise. Formed in October of 1997, following the acquisition of CENDEC Systems and Services from Ernst & Young, CENDEC™ has assembled a group of industry professionals, system developers and business analysts to provide you with Maintenance, Materials and Fixed Asset Management solutions that you can use to impact your bottom line.

Used worldwide in Oil and Gas and other industries, CENDEC™'s systems have proven themselves in a variety of environments and are employed in conjunction with many of the world's major Management Information Systems. Because of its origins in Ernst & Young which is widely recognized for its accounting and business process expertise, our products have excellent recognition as systems employing sound financial accounting principals and best business practices which are crucial to integration with existing corporate systems.

CENDEC™ is continually upgrading and enhancing processes, functionality and features to address the requirements of today's industry and the concern that many organizations have about bottom line management.

While other systems are primarily modeled on manufacturing sector processes, CENDEC™'s applications are based on input from the industries we serve and provide the information that you as an Oil and Gas professional need to manage your Maintenance, Materials and Fixed Asset Management requirements.

From automating daily processes to providing decision support information, CENDEC™'s systems give you the edge, whether you operate a single facility, multiple facilities, or even global operations.

The CENDEC™ Corporate Maintenance, Materials and Fixed Assets Management System contains all the tools you need to manage your maintenance and materials operations effectively. Not only does CENDEC™ track your data and automate daily processes, it also provides you with the information you need for better decision making and aids in process improvement within your organization. Furthermore, CENDEC™'s unique flexibility allows you to operate in environments ranging from small, single facility operations, to large, multi facility global operations with the use of our data distribution module. This flexibility also facilitates quick implementations, configuration of the system to meet your organization's individual needs, and full general ledger and accounts payable interfaces to a number of financial accounting systems.

CENDEC™ Maintenance Management Features

- **Equipment Master**
    - ➢ The equipment module provides a complete, yet fully flexible format for recording, tracking and storing equipment data.
    - ➢ CENDEC™ internally maintains the work history and individual requirements for each item separately regardless of the assigned equipment number, allowing the flexibility of changing the equipment number or having similar equipment numbers without losing any historical information.
    - ➢ Using OLE, documents, drawings and other files can be attached to both equipment and maintenance locations

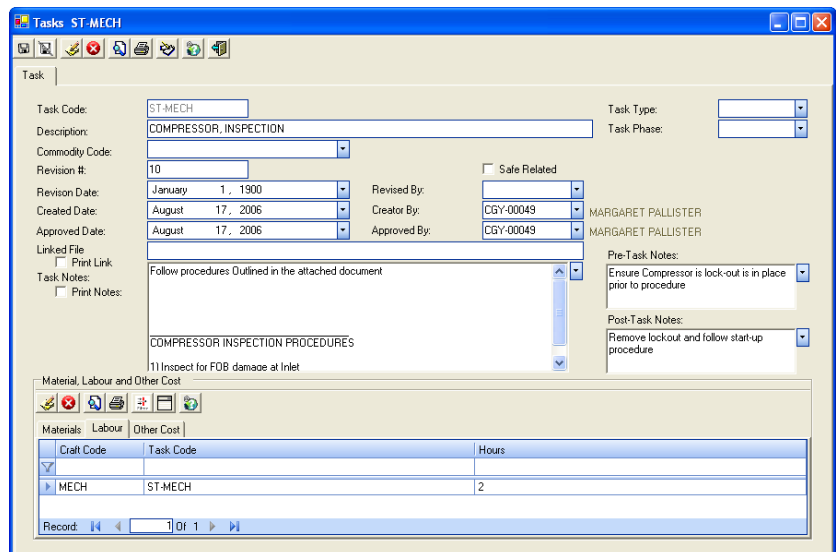giving you quick access to parts lists or other technical information.

➢ Counters and measurements and can be assigned to individual items and tracked separately. They can also be used to trigger PM generations at set values.

➢ Components of structures are used to facilitate items that may be made up of sub-assemblies or components that would also be tracked individually.

- **Maintenance Locations**

  ➢ Maintenance Locations are tracked similarly to equipment allowing them to be defined with properties, drawings, and sub-location build structures. They can also have individual PM requirements defined in the same manner as a piece of equipment.

- **Tasks & Work Packages**

  ➢ The comprehensive task module allows time materials and other costs to be associated with a procedure. These are automatically attached as planned items when the procedure is added to a work order. Pre and post task notes can also be identified. The actual procedure can be stored within the CENDEC™ system, or they can be linked to other files, such as a manufacturers procedure manual or document management system.

  ➢ Work packages combine a number of separate procedures and facilitate the roll-up of planned time, materials, and other costs.

- **Preventive Maintenance**
  - ➢ PM requirements allow you to schedule and generate preventive maintenance work orders based on any time increment, user-defined property, or the combination of the two. The preventive maintenance requirement not only determines the schedule but also the details of the work through the use of tasks, or work packages and therefore the planned time, materials and other costs associated with them. The generation of PM work orders can be user initiated or initiated through a scheduler.
  - ➢ Seasonal requirements can also be defined to generate at a specific day, week, or month of the year.
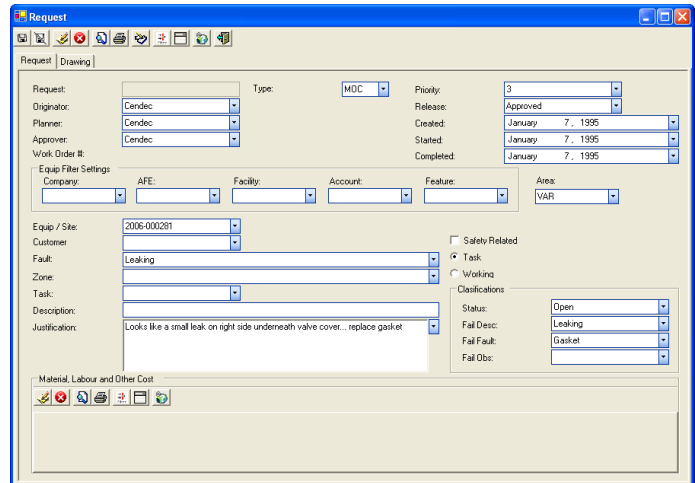
- **Trend Analysis**
  - ➢ The capability to track an unlimited amount of characteristics for a piece of equipment or maintenance location allows for better forecasting and trend analysis. The readings can be manually entered, or interfaces can be developed to import data from other equipment tracking devices such as SCADA systems. These readings can trigger PM generations, as well, trend analysis can be facilitated using the reporting tool and exporting the reports to a graph or spreadsheet.
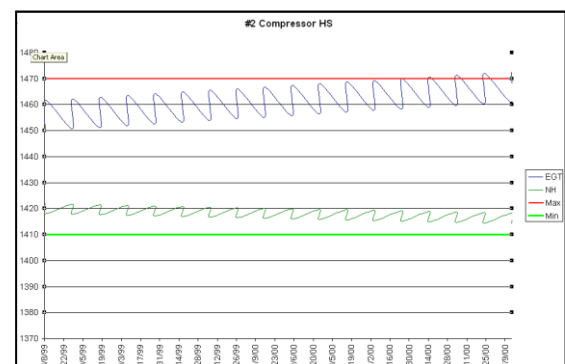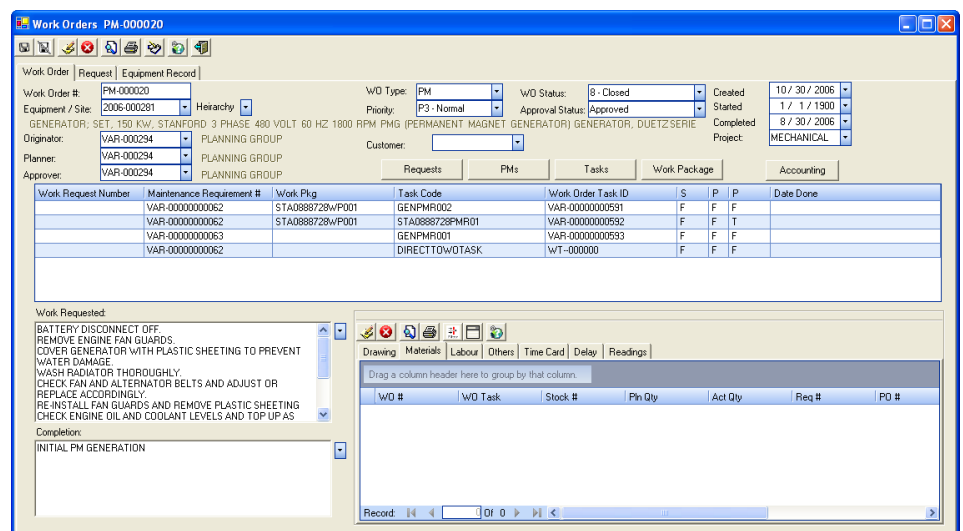
- **Work Requests**
  - CENDEC™'s work request module is an easy way to keep track of all the outstanding problems, concerns, or requests for work on a particular item or maintenance location. This "parking lot" of items that need to be addressed can easily be retrieved and added to existing or new work orders to ensure they get done, or flagged as information only to be used for reference purposes at a later time.

- **Work Orders**
  - CENDEC™'s work order module is flexible and user friendly. Work orders facilitate effective resource and materials planning, precise cost analysis, accurate performance trending, and informative status tracking as well as all other vital maintenance activities.
  - On-demand work orders are quick and easy to create through the use of either predefined tasks, or simply entering a description of the work that is required. Through the use of tasks, planned time, materials and other costs are automatically added to the work order, allowing you to quickly begin the repairs and minimize your down time.

➢ The capability to assign multiple tasks, maintenance requests as well as PM requirements to the same work order gives you the tools and information at your fingertips to make informed decisions, to better plan and scheduling work requirements, and to increase the effective utilization of your work force and the equipment they maintain.

➢ **Powerful Query and Reporting Functions**

➢ CENDEC™ is packaged with an advance third party reporting tool for all of its querying and reporting functions to provide you with the business intelligence you need.

➢ CENDEC™ comes a number of standard reports and queries that you can easily modify to suit the needs of your organization.

Purchase Orders Totals by Buyer
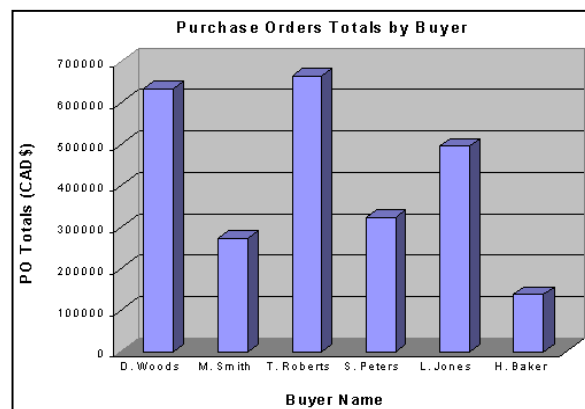
➢ New reports can also be easily created if the existing reports do not meet all of your reporting requirements.

➢ The reporting tool supports detail, summary, cross-tab, and graphical reports, and all reports can be exported to numerous file layouts such as labels, dBASE files or spreadsheets, e-mail, and PDF files.

➢ CENDEC™ also takes advantage of technologies that you most likely have in place such as facsimile and e-mail to save you time and enhance accuracy for communicating results and analysis.

- **Object Linking and Embedding (OLE), and Data Exporting Functionality**
    - The information your company needs to manage your maintenance and materials can potentially come from a number of different

        External Applications → CORE Enterprise Application

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        External Applications

        sources and in a variety of formats. CENDEC™'s OLE capabilities assist you in amalgamating all of this information into one system.
    - In areas such as the corporate catalogue, requisitions, quotations, purchase orders, receipts, inventory and fixed assets, CENDEC™ provides the ability to store large amounts of data consisting of text, graphics or objects.
    - Attaching information such as a schematic to a purchase order, or as part of an asset, can prove to be invaluable as far as tracking the item is concerned, or insuring that the vendor supplies the correct item.
    - CENDEC™ also has the ability to export data in a variety of formats. The data export ability facilitates interfaces to third party systems, and EDI functionality.