The management of multi-million dollar assets and inventories can be a daunting 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.
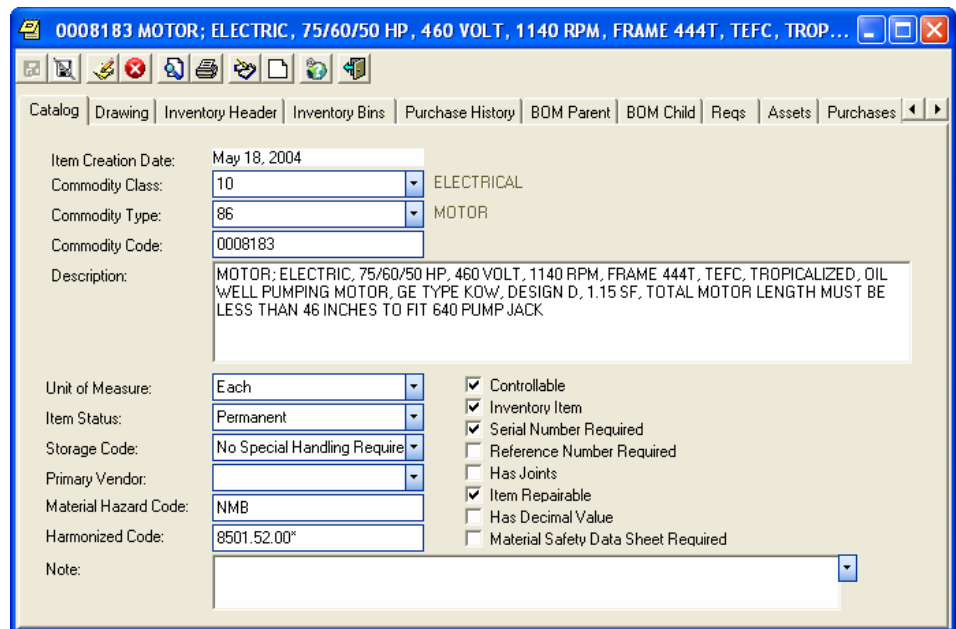
From automating daily processes to providing decision support information, CENDEC™'s systems give you the edge, whether you operate a single facility, multiple facilities, or even global operations.

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™ Materials Management Features

- **Corporate Catalogue**
  - ➢ The corporate catalogue not only determines the way in which CENDEC™ handles the item but also allows for consistency in item descriptions, numbering and classification.
  - ➢ The catalogue eliminates costly duplication, unnecessary purchases and over-stock situations.

  - ➢ Catalogue items may be easily added to any warehouse, requisition, purchase order or fixed asset location.
  - ➢ Classification of items allows for easy reporting on a class of items down to an individual item.

- **Inventory Data Management and Transactions**
  - CENDEC™ is a multi-site, multi-warehouse, application allowing you to save time and costs in the management of your dispersed inventory locations.
  - The inventory module supports serial number tracking, bills of materials, ABC inventory levels, min, max and re-order point levels, material reservations, consignments items, the ability to track items in decimal quantities, and dual currency costing supported by FIFO, LIFO or weighted average cost.
  - Also supported in inventory is a single screen view detailing the usage/historical information of each item. Such information includes all past movements and purchases as well as all on-order details.

- **Fixed Asset Data Management**
    - ➢ The fixed asset module allows you to track a wide range of information for all of your assets, whether they are corporate of operational assets.
    - ➢ Managing your significant investment of fixed assets in CENDEC™ will ensure unnecessary costs, tax losses or missed revenue opportunities are things of the past.
    - ➢ Also supported in the fixed asset module is the ability to depreciate assets, or groups of assets, using a number of different depreciation methods.
    - ➢ The fixed asset module, in combination with the rental schedule module, is also used to track all of your rental items including a complete rental schedule, and all of the costs associated with the rental term.
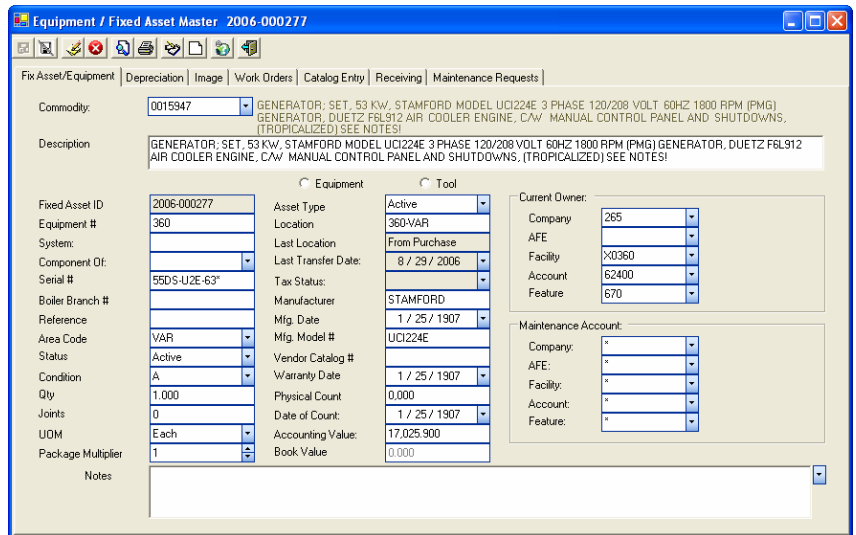
- **Material Movements/Transfers**
    - ➢ CENDEC™ features an extensive material movement/transfer module to facilitate a number of different methods of managing your inventory and fixed assets.
    - ➢ Inventory to Project movements, Project to Inventory returns, Warehouse
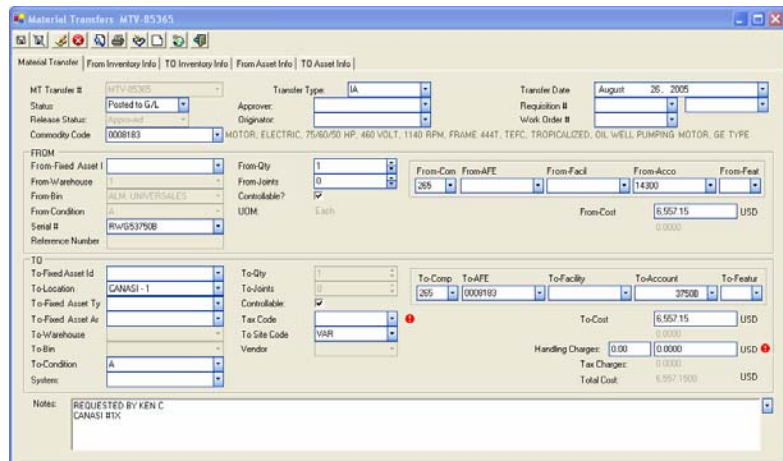
to Warehouse transfers, Project to Project moves, Material Upgrades/Downgrades, Quantity/Value Gains and Losses, and Non Controllable Item issues are all easily handled through one screen using information that is already stored in the system.

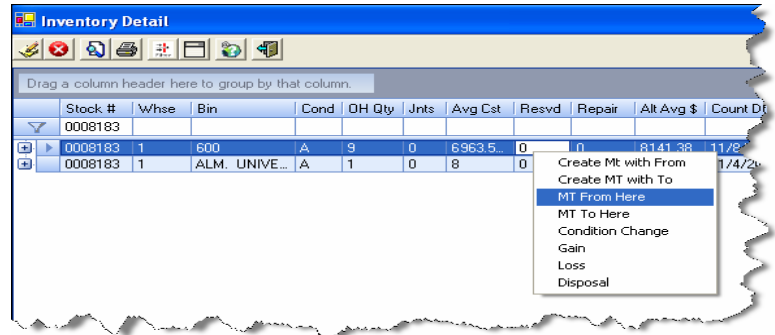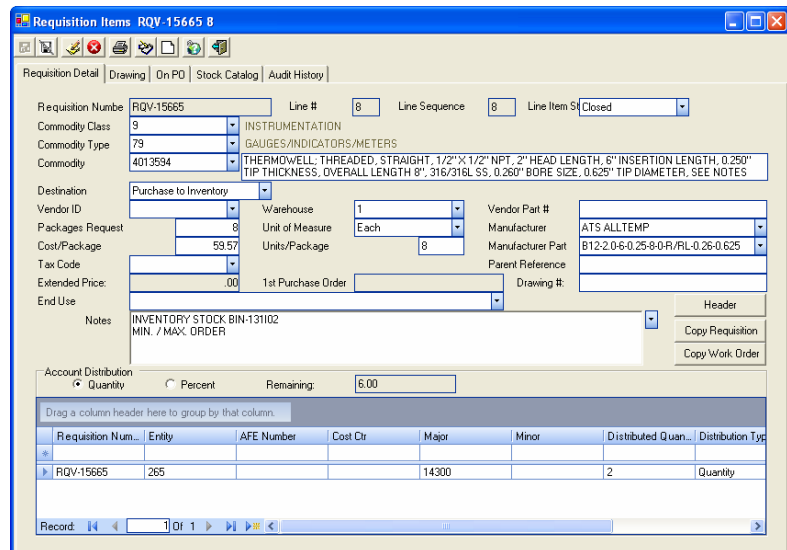➢ You can further minimize your effort because CENDEC™ automatically performs material transfers based on inventory requisitions.

➢ CENDEC™ can also assist you with managing the extra costs associated with inventory and fixed asset movements such as freight, handling charges and taxes.

- **Requisitions, Quotations, Purchase Orders, Receipts and Invoices**
  ➢ With the volumes of materials and inventory items that must be ordered, distributed, delivered, received and paid for, companies are looking for ways to streamline the process and reduce the time and paperwork involved. CENDEC™ provides you with requisitions, quotations, purchase orders, receiving events, and invoices to help with streamlining your procurement process.
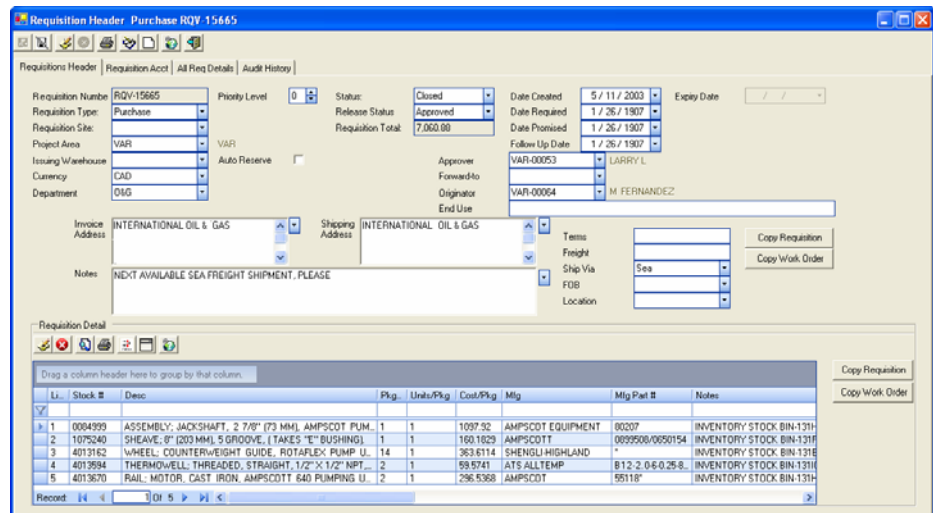
> Your procurement process can consist of all the mentioned steps/areas of the process or you can choose to use a single step/area of the process. If the entire process is utilized, all information can be easily copied from the first step to the last step.

> All types of requisitions and purchase orders support a full electronic approval process, complete with e-mail notifications and authorization limits for each type of order. These features help avoid unnecessary approval delays and administration costs.

> CENDEC™'s quotation module makes it fast and simple for you to secure the best price and take advantage of special incentives and discounts offered by your vendors. The ease of this module is realized through options such as electronic submission of RFQs, and returns of bids via a number of different formats, as well as bid management tools.

> The type of orders supported in CENDEC™ to help you manage all aspects of your procurement function include Purchase Orders and Agreements, Blanket Orders, Blanket Releases/Call-offs, Contracts, Service Orders and Agreements, Rental, Consignment and Repair Orders.

> All orders can be received either to inventory or direct to project/asset, therefore reducing your forwarding time.

> CENDEC™ also facilitates expediting, commitment tracking, freight manifesting, a complete purchasing history of each item, and automatic generation of standing/re-order requisitions for items that fall below the re-order level as a result of a material transfer.

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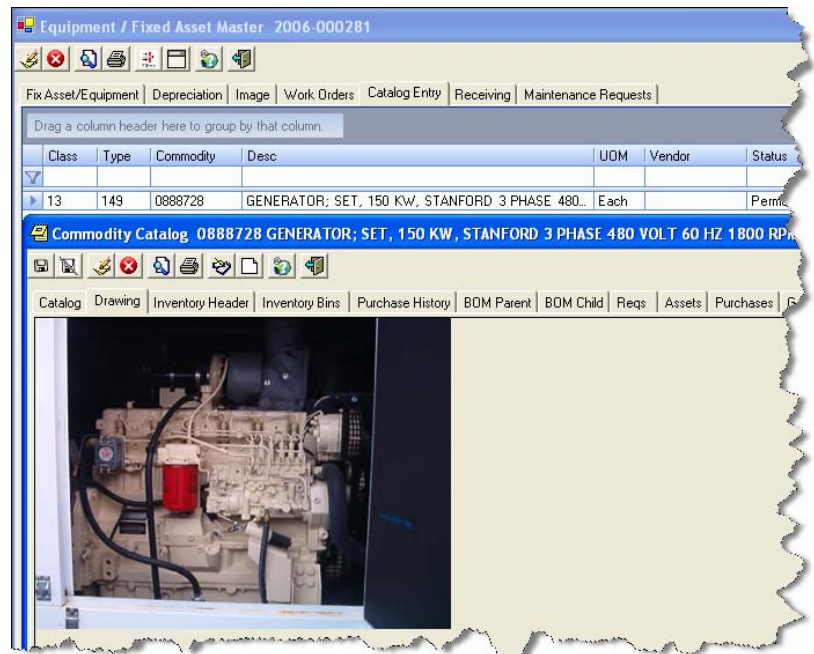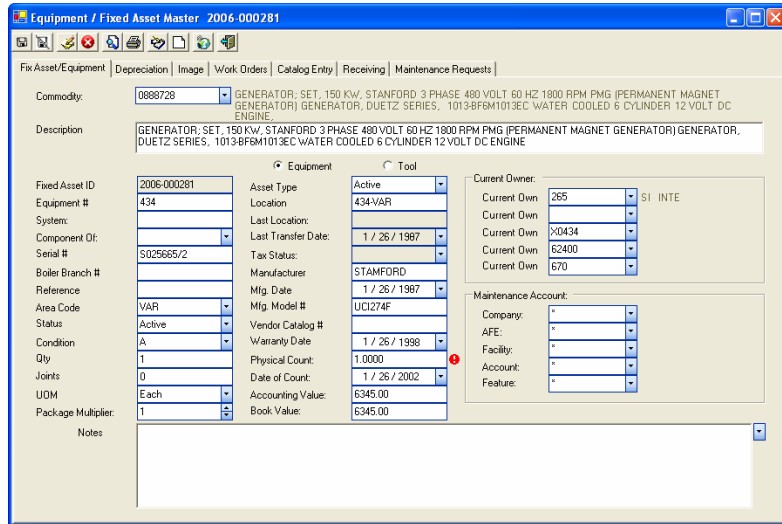
- **Maintenance Locations**
  - ➢ Maintenance Locations are tracked similarly to equipment allowing them to be defined with properties, drawings, and sub-location build structures. They can also have individual PM requirements defined in the same manner as a piece of equipment.

- **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.
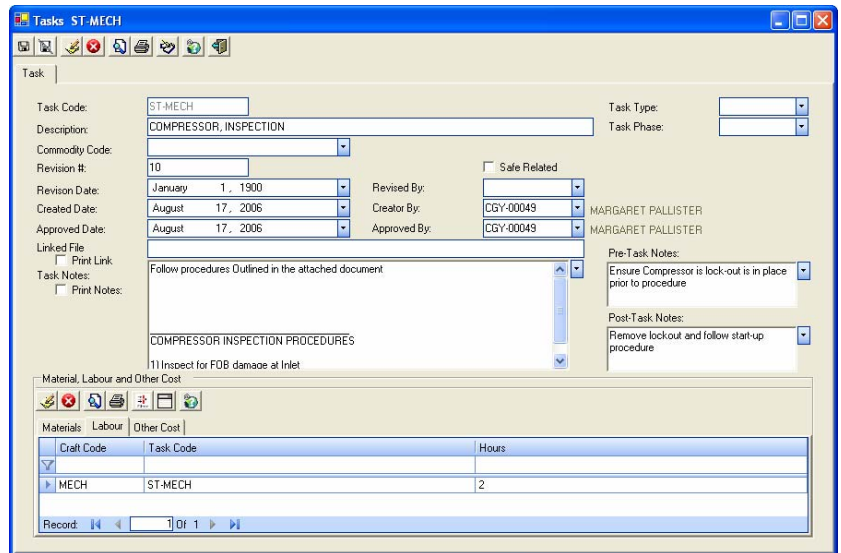
- **Preventive Maintenance**
  - ➢ PM requirements allow you to schedule and generate preventive maintenance work orders based on any time increment, user-defined property, or the combination of the two. The preventive maintenance requirement not only determines the schedule but also the details of
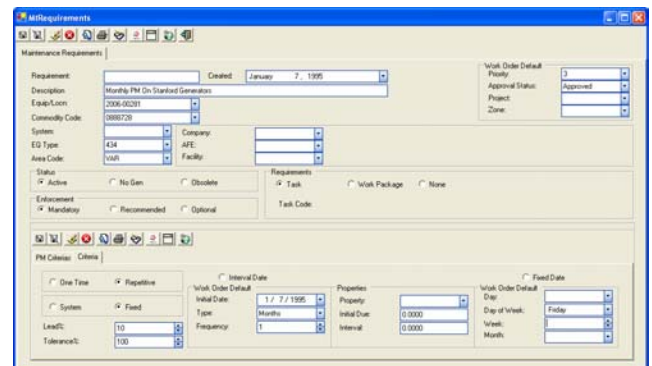
the work through the use of tasks, or work packages and therefore the planned time, materials and other costs associated with them. The generation of PM work orders can be user initiated or initiated through a scheduler.

➢ 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.
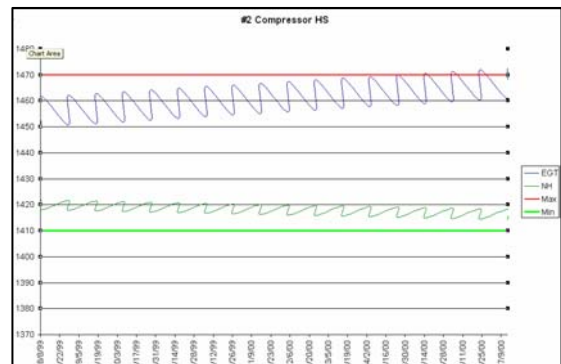
- **Work Requests**

 ➢ 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.
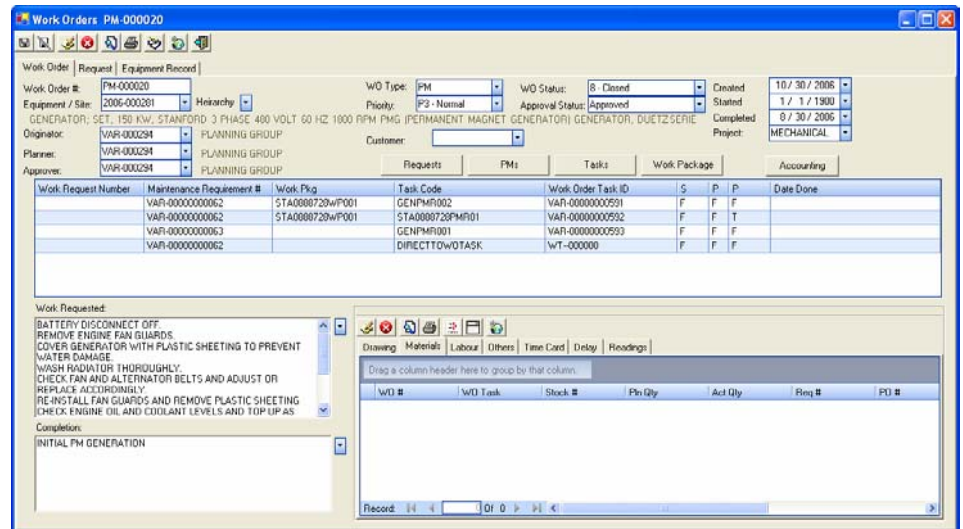
  - On-demand work orders are quick and easy to create through the use of either predefined tasks, or simply entering a description of the work that is required. Through the use of tasks, planned time, materials and other costs are automatically added to the work order, allowing you to quickly begin the 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.

- **Bar Coding**
  - Inventory and stocktaking are expensive and tedious tasks. They can be fraught with errors, especially in large or distributed warehouse environments. CENDEC™'s bar coding capabilities reduces time and potential mistakes by allowing users to quickly perform numerous transactions on-site and then update CENDEC™ with the data from the bar code reader.

- Upon upload CENDEC will perform all of the transactions performed by the bar code reader and update all relevant areas such as inventory, fixed assets and purchase orders.

- The bar code module supports stock counts, asset counts, material transfers/movements and purchase order receipts.

- Bar coding is also useful for supporting Just In Time inventory tracking where inventory issues and receipts can be done real time.

- CENDEC™ currently interfaces to a number of bar code readers. If necessary, an interface can be built specific to the hardware your organization is currently using. Furthermore, CENDEC™ is continually developing interfaces to take advantage of the latest bar coding technology.

- **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 ➡ **CMMS32**

    sources and in a variety of formats. CENDEC™'s OLE capabilities assists 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.

    External Applications

  - 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.

- **Other Features.** Other important features of CENDEC™ include:
  - ➢ Detailed security for each user based on a field level.
  - ➢ Full audit trail detailing all additions, changes and deletions, including who performed the transaction and when.
  - ➢ Multi-language capabilities including the ability to create separate 'languages' (screens, user prompts and field names) for individual industries.

CENDEC™ Systems Services and Support

CENDEC™, takes pride in being able to offer you key individuals who have both strong technical skills as well as solid industry experience in all aspects of maintenance and materials management. These individuals provide invaluable assistance in both implementing and supporting CENDEC™. In an implementation environment, CENDEC™'s maintenance and materials specialists can provide your organization with the assistance you need to both configure and implement CENDEC™ to meet the ever-changing needs of your organization. Our implementation specialists are able to assist you in data conversion from your existing system as well as all user training on CENDEC™. Furthermore, when you call our toll-free support line you will be assisted by our support staff who are not only familiar with maintenance and materials management processes, but who also have a strong technical understanding of CENDEC™.

CENDEC™ provides all of our clients with technical support for all of our applications. A Maintenance and Support Agreement entitles you to toll-free telephone support, fax, e-mail and Internet support, as well as dial-up support through the use of various external communication software packages. Product updates and new system releases are also included with the Maintenance and Support Agreement.

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