CADOSYSTEMS Customer Profile

Multiple minis help manage growth

IN JANUARY OF 1977, Cold Spring Granite Company replaced its batch-oriented data processing equipment with three stand-alone interactive computer systems. They recently added a fourth system. The computers were originally spaced throughout the office, but as the company's processing requirements increased, they moved the systems into a central location.

Using four stand-alones has netted Cold Spring Granite a number of powerful bottom-line benefits:

- By spreading heavy processing loads across several units (accounts receivable is split onto four discs) they can process data on several machines simultaneously. Information throughout time has been cut by an average of 60 to 70 percent. Accounts receivable processing time has been slashed by 75 percent.
- Labor cost has been reduced by about 30 to 40 percent, as operator requirements dropped from seven or eight to four.
- A new operator can be productive in about one hour.
- The possibility of processing delays due to computer downtime has been almost completely eliminated.
- The cost of three systems (including lease, maintenance, and supplies) is the same as for the one previous batchoriented system.

Each system can be loaded with any of the programs that Cold Spring uses. All they have to do is go to the computer room, insert a program diskette into whatever machine is not in use, and the operator can go to work - no more hunting for a machine that is not being

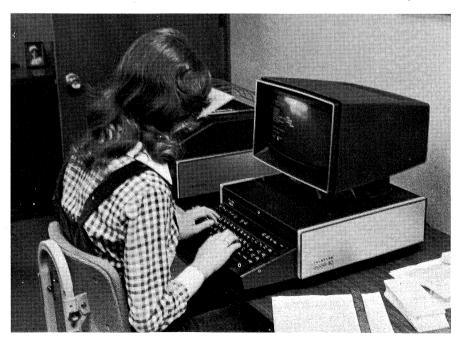
The management information system that Cold Spring has implemented keeps its four machines busy 60 to 70 percent of the working day.

The equipment Cold Spring Granite currently uses consists of four CADO System 40 stand-alone computers. Each unit (the System 40 is built around the Bell Systems' Teletype Model 40) consists of three disc drives using dual-density discs with 630,000 bytes capacity each; a 300 line-per-minute impact printer; and a keyboard/video display terminal.

Cold Spring Granite Company, founded in 1921, is headquartered in Cold Spring, Minnesota. They manufacture granite for use in buildings and as monuments, and have 1000 employees organized in eight operating units, with a total of 50 departments.

Payroll

Beyond manual entering of the initial payroll data, the payroll system is completely automatic. After manually extending the number of hours worked by each employee, the data from the time card is entered into the system alphabetically by employee. A printout of the input is made for the operator to check accuracy. When satisfied that input is



All of Cold Spring's programs can be accessed via master menu. All that is needed to call up any submenus is a simple operator prompt. The simplicity of the interactive programming has allowed CSG to reduce DP staff from seven and eight operators to four. New operators can become productive in about one hour. Shirley Klehr, one of the present operators, is going through a list of invoices, holding those that will not be paid and releasing the rest.

correct, the operator releases the data, which is then used to interactively update each employee's earnings file. The information is also posted to the accrual accounts in the general journal.

Each time card also lists the department in which the employee worked. That data is input for storage in the cost file for that department.

When payday comes, the operator keys in print payroll edit instructions. This produces a printout of the entire payroll, including wages, scheduled deductions, and tax deductions. Checks are then printed by supervisor number and distributed.

CSG can generate labor cost reports on the basis of employee, job, or department for any desired time period. They can access that information by employee number, job or department number, or time ticket number.

At the end of each month, labor costs are posted to the general ledger from the general journal. The costs are allocated to the various departments interactively.

A master file is kept on each employee, listing all relevant information: name, address, deductions, a complete pay history, dates of wage increases, earnings for the past three years, and current wages. The amount that any employee has earned can only be accessed by password.

Accounts receivable

Cold Spring Granite has about 2000 customers and 9000 open invoices at any given time. To reduce processing time, receivables are split onto four discs. When the time comes to prepare a billing, the four discs are run simultaneously on the four machines, cutting billing time by 75 percent.

Receivables are posted daily, as they come in. Each order is entered and held in file until the end of the day, when they are all released to the general ledger. Cancellations are easily made by entering reversing transactions, which automatically erase or update their alreadyentered counterparts.

Completed orders are interactively posted to each customer's file, an open invoice file. Billings can then be prepared any number of ways: by customer, invoice due date, or invoice number. Aging reports are generated by

printing out the invoices in order of due date. When receivables are posted, the year-to-date activity figure in each customer's file is automatically updated.

Customer files contain payment and discount terms, current purchases, as yet unpaid, last year's and the most current purchases, and the particulars of any contracts.

Accounts payable

Cold Spring Granite also deals with about 1800 vendors. To bring order to potential purchasing chaos, CSG executives devised a list that can be expanded to 1000 categories, into which all purchases fall. Typical categories include anti-freeze, anchor supplies, ball bearings, etc.

Credit expenditures are entered into the system daily along with a transaction number (assigned by the computer), invoice and purchase order numbers, invoice due date (adjusted to reflect the discount payment terms), vendor and check numbers, and the date of the invoice. Each entry also includes the amount of the invoice and descriptions of the item(s) purchased.

When the time to pay arrives, CSG executives run a printout by invoice due date on which they indicate which bills are to be paid and which ones are to be held back. Invoices can then be paid in blocks, singly, or in any combination, and those that are held will be skipped.

General ledger

The general ledger has all but eliminated Cold Spring Granite's manual accounting. The system can handle all financial and accounting activity. The general journal is used as a clearinghouse for all monthly transactions. After editing, the journal is cleared out to the general ledger.

All general ledger accounts have five-digit identification codes to simplify access. The first three digits refer to the nature of the cost, and the last two are the department number. G/L account 60901, for example, refers to FICA deductions for department 1.

Receivables are posted to the journal daily. At the end of the day, they are posted to the ledger as well as the open invoice file and customer files.

When payments on receivables come in, they are entered into the journal automatically and cancel out the receivable with a credit to the customer's file and a debit to cash. The open invoice file is interactively updated.

Payables are collected in the journal for the entire month. At the end of the month, a lump sum is transferred to the general ledger. The detail is kept in the vendor files, and reports can be generated at any time.

When bills are paid, the total amount paid is entered into the ledger (at the same time as the posting of the lump sum from the journal to the ledger), and the detail of which check number, invoice number, etc., is entered into the individual vendor files.

Payroll is posted to the general ledger from the general journal once a month. Payroll cost is automatically allocated to the various departments.

Recurring entries, such as rent and depreciation, are posted from computer memory at the end of each month. With a simple operator prompt, all the detail is posted interactively.

At the end of the year, the ledger has all the data needed to prepare a trial balance and eventually a balance sheet. The same applies for the income statement. Format is completely operator-controlled.

Production control

Tabs are kept on each piece in the shop. They are identified by size, weight, and color. Cold Spring Granite only sells to dealers.

Inventory of pieces in progress is kept track of by job number. Order status is maintained on file as each piece goes through the production process. The open piece file is the master file for all work.

Orders are placed in the open piece file as they come in from the sales staff. They are entered with a code meaning unfinished. The order is written out on a ticket, listing all finishing instructions, which is then sent out into the plant. When the work is completed, the ticket is returned to the office, where the status code is changed to finished/waiting for transportation. The finished piece is crated and placed in the yard, where it waits until shipment.

Costing tables are maintained on disc and can be updated at any time, as can the shipping tables. Invoice amounts are automatically determined by the computer.