BCL

BUSINESS COMPUTER SYSTEMS PLC

July, 1985.

THE BCL DISTRIBUTION SYSTEM

SEMINARS 1ST & 2ND JULY '85

HYATT CARLTON TOWERS HOTEL
LONDON SW1

Welcome to the BCL Distribution Seminar which has been
designed to be of interest both to existing customers
of BCL, as well as to companies coming to hear of the
BCL System for the first time.

We hope you find the Seminar stimulating and interesting.
You may well find that a number of questions arise.
There will be a question session at the conclusion of
the Seminar, and there will be a number of us on hand
during refreshments to deal with any specific points.

More importantly, if you would like to discuss our ideas
with you in relation to your own business, then we would
prefer to visit you at your own premises and, if possible,
we will make arrangements during refreshments.

You will find attached an Agenda, together with a brief
resume of the Seminar, to remind you of what has been
covered today.

Thank you for your interest.

Peter Haynes
National Sales Manager

THE BCL DISTRIBUTION SYSTEM

SEMINARS 1ST & 2ND JULY '85

HYATT CARLTON TOWERS HOTEL
LONDON SW1

A G E N D A

- INTRODUCTION TO THE BUSINESS OF DISTRIBUTION   PETER HAYNES
                                                  BCL

- THE OPTIONS FOR COMPUTERISATION   PETER HAYNES
                                                  BCL

- THE BCL APPROACH   PETER HAYNES
                                                  BCL

- EPSON - THE LEADERS IN SMALL MICRO COMPUTERS   PAURIC SURLIS
                                                  EPSON

        ELECTRONIC ORDER ENTRY

- THORN/EMI MICROLOGIC   SHANE BARNES
                                                  THORN/EMI
        ELECTRONIC POINT OF SALE   MICROLOGIC
        TERMINALS

- THE BCL DISTRIBUTOR COMPUTER   KEITH HOWLETT
                                                  BCL/SYSTEMATION

- THE BCL DISTRIBUTION PACKAGE   JOHN GRIFFITHS
                                                  BCL

- THE BCL DISTRIBUTION SYSTEM   PETER HAYNES

CONCLUSION

July 1985.

THE BCL DISTRIBUTION SYSTEM

SEMINARS 1ST & 2ND JULY '85

HYATT CARLTON TOWERS HOTEL
LONDON SW1

R E S U M E

We believe that this is the first occasion that any computer/
systems supplier has staged a Seminar to cover the entire
aspects of how modern technology can assist a distribution
company, large or small, in becoming more efficient, offer a
better service and create more profit.

BCL have brought together hardware, application programs,
electronic remote order entry systems, and electronic point
of sale systems to show, in a comprehensive way, how the
interaction of customers, representatives, stocks and
suppliers can all be handled in one complete system, to the
much greater benefit of the Distributor and Customer alike.

BCL have been installing computer systems for distribution
companies over many years - companies with turnover ranging
from £250,000 to several tens of millions of pounds. It is
our belief that any company, no matter its size, can review
its method of operation, use the latest techniques and tech-
nology to create larger profits from its present operation.

Theoretically, all computer systems should be able to do what
the BCL systems do - but in practice they don't, or, at
least, not at an economical price. There are many reasons
why this should be so :

-   The supplier hasn't studied the business of
    distribution.

-   The supplier hasn't produced the programs to
    carry out the functions of distribution.

-   The equipment is under-powered or requires
    too much expensive expertise to keep it
    running.

- The supplier has no experience of the problems of distribution.

In practice, most,if not all,computer systems trying to emulate BCL are incomplete, slow, relatively expensive, embryonic or just plain don't work. I hope you don't find this too arrogant a boast! - but BCL have many proven installations.

Initially, the Seminar explored the concepts of Distribution - how a Distribution company has basically customers, stock and suppliers. However, it can and, of course, often does, have multiple branches, or depots, trade counters, sales offices with incoming telephone orders/enquiries, and perhaps cash and carry departments. Some may have retail branches that may also need control and most will have some form of sales-force either reps or van sales. Internally, buyers are responsible for procuring products, pricing clerks for invoicing and, of course, accounting systems for central control. All these aspects could be either whole departments or simply individuals in a smaller business.

Irrespective of size these functions in a manual or semi-computerised company will create quite enormous clerical work, much of which is often repetitive and open to error or abuse.

Like all other businesses, the Distribution company is seeking to make a profit and, indeed, to maximise that profit by a combination of Customer Service, Stock Avail-ability (at the right price) and competitive terms. In this way, it hopes to make the maximum sales, with the best possible terms, to get the best possible margin commensurate with the least possible overheads and to limit, as far as possible, excessive credit terms and eliminate bad debts. Every area is geared, or should be, to the ultimate aim of generating maximum profit in real terms.

It is assumed that all companies present at the Seminar, or not, are generally satisfied with the present profit levels and can see no easy way of improving them.

However, profit can also lead to greater competitiveness and to diversification and thus spreading the areas of business to your advantage.

However, is it conceivable that you could do better?

First, we can examine how profit/margin be lost? even in the most efficient and well run organisation.

- Lost Sales - The wrong stock, or the wrong price, or simply inefficient service.

- Wrong and inaccurate pricing - especially at point-of sale, trade counters, etc.

- Pilferage - Stock that goes missing - customers? staff?

- Too generous discounting - favours to customers.

- Too much old stock gathering dust on shelves. Too much stock becoming old or obsolete before you know it.

- Inaccurate ill informed buying. Buying at the wrong terms, too small, or too large quantities.

- Over-high admin costs. Invoice typists, ledger clerks, pricing clerks. Inefficient warehousing.

- Too much credit given for too long. At 15% per annum, at least 1.1/4% in margin terms is lost for every month a debt is outstanding. Delayed payments can also lead to Bad Debts - and what does that do to margins.

If a case can be made for looking at a computer - where do you start to to look, considering the enormous range and types that are available :

- Computer Bureau

- In-house development

- General purpose computer supplier

- Software House

- Multiple micro-computers

So what can BCL offer? BCL are the leaders in systems for Distribution.

Apart from having been in business for 10 years, and the experience of some 4500 installed systems, all of which have been installed in business users, BCL offers a nationwide coverage of service and support.

But more vitally important, BCL who have specialised in Distribution systems over many years can show proven installations, and can offer a total range for small or large companies with specially developed programs for Distribution.

In addition, BCL have teamed up with two other formidable forces - Epson, the leaders in small personal computer systems, and Thorn/EMI Micrologic with an extensive range of electronic point of sale Cash Registers. This provides electronic order entry for representatives, van salesmen, customers, retail stock checkers, etc., and, of course, retail point of sale for retail stock control.

Central to the whole is the BCL Distribution system combining technologically advanced hardware with comprehensive and purpose designed software.

The BCL Distributor is the electronic nerve centre. It is a very fast computer designed to perform at high speed to give instant responsive information for non-technical people. It is simple to use for office and trade-counter staff alike. It is available at an economic price for the smaller company, but can grow to allow up to 56 terminals to have simultaneous access.

Based on the highly successful techniques of the MOLECULAR 18, it uses new technology to allow even more comprehensive programs and even greater numbers of simultaneous users to be incorporated. Not only is the central mini computer processor one of the fastest available at 20 Mhz, it is also supported by up to 15 micro computers each of 6 Mhz operational speed.

Disc capacity on the Distributor is equally enhanced, 60 Mbyte Winchester Discs are now available as standard and over 1000 Mbytes on-line Disc Storage is now available to the user of the Distributor. And of course telecommunication links are available to remote terminals or other computer systems.

In combination with the Distribution software package, the system is probably only 60% of the cost of any 'equivalent' system on the market today.

The distribution system is more adequately explained by demonstration, and it was this that forms a significant part of the Seminar presentation.

Examples of point of sale/telesales systems were shown, where a most significant aspect of the system - alphabetic matching - is shown to obviate the need for customer or product codes - thus simplifying the whole process.

The BCL method of alpha-indexing is itself a prime example of the thought and care that has gone into the design of this system, and gives a more simplified, yet more comprehensive method than any other so called similar feature.

In the short time available, the total concept of running a Distribution company on a BCL computer was covered showing all the operations necessary for sales - by telephone or trade-counter, for Purchase and Stock Management, for the Buyer, for Warehouse Control and for complete Management control, all leading to :

Improving Customer Service

Improving Stock Availability

Improving Margins

Rationalising Stock

Reducing Staff

Eliminating Error

Controlling Discounts

Controlling credit and credit risk

All leading to an overall drastic improvement in business profitability. It is not at all unreasonable for even the best run business to see a dramatic improvement in NET PROFIT from a BCL system.

All we suggest is, let us discuss our ideas with you! You may well profit from them.

CONTACT: AYON CINNAMOND **PRESS RELEASE**

NEW BCL DISTRIBUTOR SYSTEM

British Designed Hardware and Software
Specifically for the Distribution Industry

Business Computer Systems PLC have introduced the new BCL Distributor mini computer system which replaces their widely used Molecular 18 system. The new Distributor, which is British designed and built on behalf of BCL, combines the use of a powerful central miniprocessor running at 20 MHZ and up to 19 integral microprocessors which enable the system to handle large numbers of terminals in a high speed transaction environment.

Over the years BCL have become specialists in systems for wholesalers, merchants and distribution companies. As the name suggests, the new system has been designed to cater for the total computing needs of this industry where large storage capacities, very fast reponse times and ease of operation are essential for efficient performance in this very competitive and demanding market place.

The Distributor has a standard disc capacity of 60 million characters in fixed and exchangeable Winchester disc technology which can be expanded up to 720 million characters to support a maximum system configuration of 60 terminals. To ensure continuing fast response times as the system is expanded, each four terminals are controlled

by a dedicated microprocessor. And to maintain fast access to data
files there is also a microprocessor disc controller for each four
disc drives.

Communication facilities provide data transmission to and from the
central system to other Distributors and most other computers over
telephone lines and to and from VDU's and microcomputers at remote
depots and branches.

COMPREHENSIVE SOFTWARE

BCL has developed a suite of distribution software packages
incorporating the best features and facilities from experience gained
in designing and implementing several thousand systems within the
distribution industry over the past 11 years. The software is totally
flexible allowing all jobs to be run simultaneously and enabling on-line
enquiries, invoicing and stock control to be carried out by tele-sales,
trade counter and warehouse staff at both a head office location and
remote depots. Products can be easily identified by number or alpha-
match.

Purchase ordering, invoicing and stock control are totally integrated
procedures and the multiplicity of management reports which the system
provides enable distributors to maintain efficient business control
from accurate and up-to-the minute trading information. Over 160 major
programs comprise the software suite and despite its sophistication
and range of facilities can be set-up and used by non computer personnel
with minimal assistance from regionalised BCL systems supports staff.

In additional to the conventional display terminals and a range
of printers, off line cash tills for retail outlets, hand held
terminals for customers and reps and remote data handling devices
can also be used on the Distributor.

USER BENEFITS

Apart from streamlining trade counter and tele-sales procedures,
improved customer service and cash flow and reduced stockholdings
are among the main tangible benefits enjoyed by Distributor users.

Management has access, on demand, to all information on costs,
margins, stock levels and discount structures etc. thus making it
easy to identify and take remedial action on any area operating
inefficiently and so maintain profitability.

The Distributor is a tried and proven system and operating in the many
areas of the distribution industry, so potential customers can see
it actually being used in similar businesses to their own. This
means it can be quickly installed and full use made of its facilities
with minimal risk or disruption to the day-to-day working environment-
and at a price far less than comparable machines.

The Distributor system can be configured to suit small users and large
multi-depot wholesalers. It has been of particular appeal to tools,
fasteners and engineers merchants; builders, plumbers and paper
merchants; electrical wholesalers and electronic components
distributors.

BCL operate a nationwide after sales customer hardware maintenance and software support service together with a complete range of computer supplies and stationery to ensure maximum system efficiency.

For further information
contact:-

Ayon Cinnamond
Business Computer Systems PLC
01-207 3344

JULY 1985

L. Hill (Veneers) computerise themselves

USING a manual system to control stock amounting to some 25,000 items and valued at £750,000 is not a simple task when endeavouring to provide a high level of customer satisfaction and product availability, and at the same time maintaining stocks at optimum levels so as to minimise costs. So L. Hill (Veneers) have switched to a computer.

"We obviously had to consider using some form of computer-controlled stock and sales order processing system which would provide the flexibility we needed for further development and expansion" said Allan De Luca, who is financial director of L. Hill (Veneers).

As the name suggests, real wood veneers formed the core of the firm's range when the company was established in 1938. They were suppliers to furniture manufacturers and shipbuilders. There have been many changes since those early years: today the company has an annual turnover of approximately £5m, and is a main distributor for products supplied by such well-known names as Formica, Warerite, Burbidge and Polyrey.

Three-day delivery

Products extend from decorative plastic laminates and melamine chipboards to postformed kitchen work tops and doors. A fabrication service is also operated for bonding, edging and cutting laminates on a wide selection of core materials.

Although the main outlets are London and the home counties, Hills also distribute nationally on a guaranteed three-day delivery service to builders, independent kitchen manufacturers and shopfitters.

A number of computer systems were investigated by Hills before the company decided that the Molecular Distribution system which was supplied complete with software by Business Computer Systems met the majority of requirements.

There was very limited in-house knowledge of computers in Hills, and the task of transferring all manual sales and stock records on to com-

puter disc was viewed with some apprehension. However, with the advice and assistance of BCL's software and back-up support services this was achieved without any major interruptions to the working environment, and the rewards are now being obtained.

As well as being an integrated purchasing and distribution system, the Molecular also provides for multi-company operation. It produces individual documentation for the three companies within the Hill's group that access and use the same stock. Reports and statistics relevant to operations of each company are identified by the system, and may be produced individually or in consolidated form.

The system has nine visual display and three printer terminals. Four of the VDUs are used in the sales department for processing sales orders received by telephone, post and company representatives. Invoice and despatch documentation is immediately produced on printers which are located in a separate warehouse and administration building. During invoice preparation, all stock and customer records are automatically updated, while if an incorrect price is being charged against any item the computer will signal that this item is being invoiced below a pre-determined margin.

Although product code

numbers can be used, they are often not known by the customer: the VDU operators simply key in abbreviated product descriptions using a useful facility called Alpha Matching Techniques, and product details are displayed either by individual product, product group or specific manufacturer, showing colour, finish, number in stock and price. In the event of a product being out of stock the system will identify the availability of a selection of alternatives or place a back order for this product.

In this way tele sales and stock enquiries can be processed immediately. All terminals in the sales department are linked to the central processor, disc data files and other terminals of the system.

Three VDUs are located in the accounts department to deal with all cash, invoice and journal postings, general system enquiries and stock and customer file updates. A small trade counter facility for members of the public to purchase items is also controlled from this area.

The fabrication department also has its own VDU terminal for stock enquiries and allocation of specific items from stock needed to make up finished goods and for the creation of the subsequent invoice and despatch documentation for these items.

The financial director uses

another VDU in his office for assessing current trading and other financial information.

A wide range of reports is provided by the system. These include aged debt analysis, and total stock valuation at any time.

Stock requirement reports give suggested re-order levels based on previous sales patterns in order to keep stocks at economic levels, while stock evaluation reports give quantity and date of stock receipts—over a three-year period—to identify slow moving stock.

One type of report, considered very useful by Hill's management, is the product group ratio analysis. This provides the total of sales between each product group, and the percentage of sales by product group of the total stock holding on a daily basis.

A recent addition to the distribution system was the direct linking of a BCL 16/8 personal computer which has the facility to use many of the microcomputer based software packages on the market today. Its main applications are financial modelling, word processing, sales promotion and overdue debt collection letters, contracts, price lists and list program generation from the Molecular files. When not being operated on these functions, the 16/8 has full access to the records on the main system and will be used for stock interrogation.

Reprinted from Cabinet Maker and Retail Furnisher.

Computers an obvious step says merchant Jones and Shuff

Jones and Shufflebottom, a well established plumbers' and builders' merchant has been offering a wide range of products to the trade over the past 50 years from its headquarters in Stoke-on-Trent. 'Jones and Shuff' as it is known locally, is a family business currently under the direction of Tony Jones.

Over the years the company has built up a good reputation for product availability and price and one of the main reasons for its success, says Tony Jones, has been responsive and efficient customer service.

"However, we have to think of the future," said Mr Jones, "and maintaining a good service very often depends on the successful replacement of experienced staff when they retire."

Investigate

"The obvious action was to investigate use of a computer system. The criteria established was that the computer system would be capable of addressing all sides of the business including trade counter and telesales and that customer service would not suffer in any way."

With the assistance of the BMF computer club and other contacts in the industry a mini computer system supplied by Business Computer

Systems plc (BCL) was ordered at the end of 1982 and became operational with all accounting procedures three months later. The next stage of computerisation was stock control and this operation took place in conjunction with a need to be re-bin the warehouse. By the middle of the year stock control procedures were operating with full pricing and automatic invoicing from the accounts office. Invoices were being posted within two days of sale. By October the trade counter was equipped with three visual display terminals and a printer, and invoices and goods advice notes were being produced immediately at the point of sale. All product and customer details, including individual discount structures, can be instantaneously displayed on the VDU screen by simply entering, to the system, an abbreviated alphabetic description.

Immediate contact

The management informa-
tion provided by the computer includes, among other facilities:-
● Margin reports for each product and customer.
● End of day profit report.
● Purchase order report based on current actual stock and current demand.
● Stock evaluation report to identify slow moving and obsolete stock.

Since installing the computer Tony Jones says he now has immediate contact with all aspects of his credit, stock and purchasing positions, with the appropriate savings in time and money – especially in administration. Turnover is showing an increase due to faster collection of money and even more efficient service at the trade counter and tele sales operations.

BCL Computer Terminal on the trade counter at Jones and Shufflebottom
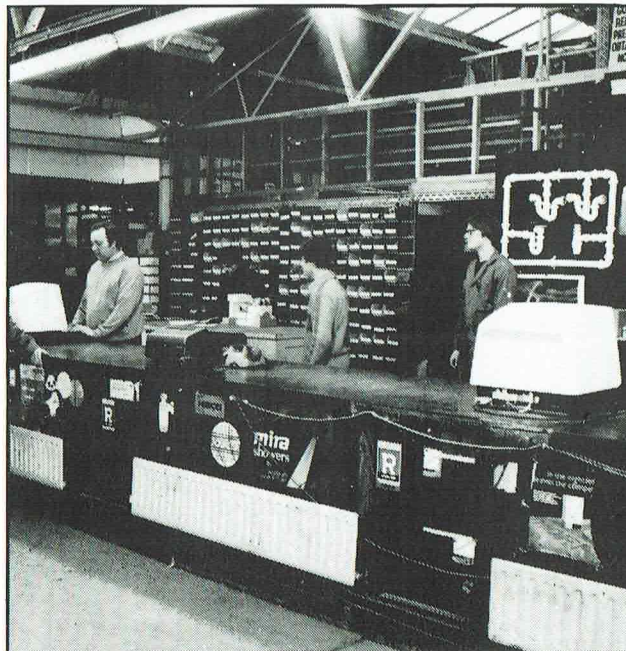
Jones and Shufflebottom, the plumbers' and builders' merchant based in Stoke on Trent says it is vital that a computer system is able to address all sides of the business including trade counter and telesales

For several years, Tunes Engineering Services Ltd, used a computer bureau for processing their sales ledger but at the beginning of 1981, increased business and an expanding product range prompted the investigation of the benefits offered from the use of a comprehensive 'in house' computer. The criteria agreed was that not only would it perform all the normal accounting functions but also control and maintain stock at optimum levels and address other significant operating areas such as trade counter and tele sales — without impairing customer service.

"At this juncture we began to search for a computer to suit us", commented Harry Wellington, Accounts Manager of Tunes. We didn't realise how extensive this would be. Nobody seemed to specialise in our type of business — and we had to make sure the system was right.

At the same time we also put into operation a sizeable internal re-organisation schedule. The main projects were production of a price book for our entire product range and the re-binning and numbering of our warehouse stock. Although this was a big task its completion certainly made life much easier and especially when we were transferring our manual records to the computer."

The search for the right computer lasted almost three years and involved looking at a great number of suppliers. However, after attending a T.H.S. organised computer seminar a decision was taken to install a Molecular distribution system which was supplied, complete with software, by Business Computer Systems PLC. "It seemed to be the system to meet our requirements, said Mr. Wellington and it was already being used in very similar types of business to ours."

The Distribution System, became operational on all applications in January 1984 — with minimal disruption to our business — and is configured with eighteen visual display units and three printers, which are located in key areas of the company.

SALES DEPARTMENT

Five VDU's are used in the sales department to process all orders received by post and telephone. Although the manufacturers part number can be used to access stock details, the tele-sales VDU operators simply key in abbreviated product descriptions — known as alpha matching, in order to instantaneously display all product information showing quantity in stock, price and discounts for that customer so that tele-sales orders can be processed at high speed. If any product is out of stock the system will identify alternative products so that a sale can be made and the order completed. Where no alternative exists the system will log the

product on the outstanding customers back order file. As orders are processed on the VDU's all customer details and stock levels are automatically adjusted and invoices and despatch documents on a printer in the warehouse despatch area. Invoices are sent with the goods thus representing considerable savings on postage as approximately 6000 invoices are produced monthly.

TRADE COUNTER

The Trade Counter at Tunes is an exceptionally busy operation which employs seven people and represents one third of the company's total business. In this area three VDU's and a printer are used to process customer requirements with speed and efficiency. According to convenience or familiarity with product, the warehouse staff can use alpha match, manufacturers part number or bin number to display comprehensive product and customer details for an account or cash transaction. A telephone order facility — direct to the trade counter — is operated for customers who wish to have goods ready for later collection at the Trade Counter.

Picture shows: the VDU computer terminals being used by the warehouse staff at Tunes Engineering Service Limited for streamlining order processing at the trade counter.

BUYING DEPARTMENT

Two VDU's and several of the management reports provided by the system give significant benefits to the purchasing department. The stock list levels report highlights periodic and seasonal demand for products and provides essential information for buyers negotiations with suppliers and on which to base purchase orders.

When dealing with specific suppliers, buyers can display any minimum order quantity or value discounts given to ensure they get the best price. At the same time a total value of outstanding purchase order cost will automatically be maintained.

These VDU's are also used for checking on over-due deliveries and monitoring goods received against purchase orders for price and quantity variances, before deliveries are accepted and stock levels updated.

ACCOUNTS DEPARTMENT

The five VDU's and printer in the accounts department, process bought and sales ledgers and many other accounting functions as well as management reports, quotations, pricing, payments and general systems interrogation. In the event of a major supplier having a price change from a given date, the system has the flexibility for new prices to be pre-loaded at any time prior to the date — thus avoiding any bottle-necks on the day.

Other VDU terminals are used in the offices of the General Manager and Accounts Manager to assist with their day-to-day business responsibilities.

The management information provided by the system includes:—

— margin reports for each product and customer.
— end of day profit report.
— purchase order report based on current actual stock and current demand.
— stock evaluation report to identify slow moving and old stock.

Since installing the computer eight months ago Tunes now have immediate access to all aspects of customers credit position, stock valuation and purchasing positions. End of month routines are completed in approximately one working day. Statements are run on the last day of the month and posted the following day with the resultant cash flow improvements.

"We have achieved very considerable benefits from our system, said Harry Wellington. For example, we now know precisely what is on our shelves, what margins we are making, what volumes we are selling; not only have we reduced stock levels substantially but we know what we need to stock to ensure the first-class product availability and customer service that we are renowned for."

"That's what the system gives us, and after all that's what it's all about in the Distribution business." I very much doubt that we could have done this so well and so quickly on any other system."

Picture shows: the tele-sales operation in the Sales Department at Tunes Engineering Service Limited. VDU terminals give instant access to stock availability showing prices and discounts for exceptionally fast processing of customer orders.

Reprinted from Newslink - courtesy of T.H.S. Tools Ltd.

The BCL Merchants Distribution System

## means improved customer service and more profit

The BCL Tool Merchants Distribution System is a totally integrated package which apart from offering all the facilities that you would expect from a computer such as sales ledger, purchase and nominal ledgers and payroll etc. also provides substantial benefits in the key operating areas of every merchant or business involved in volume distribution and control of a wide product range.

The system is tried and proven in hundreds of installations throughout the UK and operating in small and large businesses with turnovers as far apart as £750,000 and £100 million. You can start with a small system and add to it as your business expands. It is easy to use and does not require any specialist staff to operate it.

WHAT ELSE SHOULD A COMPUTER SYSTEM DO FOR A TOOL MERCHANT?

- Trade Counter
- Telephone sales
- Various discount structures
- Fast order processing
- Stock control
- Buying control
- Management information
- Current trading facts
- MORE PROFIT
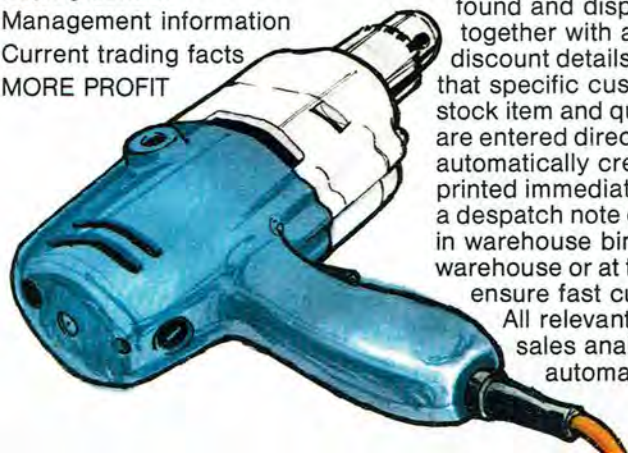
HELPING MERCHANTS WHERE IT MATTERS

In the fast moving and competitive business environment of today's Tool Merchant no longer may the buying and control of stock be left to chance or 'gut-feel'.

The facility to quote instantly the right prices, apply a variable discount structure specific to each customer, together with stock availability—and offer alternative products—in response to a telephone or trade counter enquiry must be vital to business profitability and future expansion.

Basically, the BCL system is designed to make it easier for the Tool Merchant to maintain stricter control of all main business functions, make business decisions based on factual trading information, optimise stock and buying control, and improve customer service and therefore profitability.

FAST ORDER PROCESSING

The BCL Distribution System places computer VDU's in the hands of the order takers—the tele-sales and trade counter clerks. Using a unique method called 'alpha-matching' any customer and stock item can be found and displayed immediately together with all stock, price and discount details as they apply to that specific customer, that specific stock item and quantity (ies). Orders are entered direct into the computer, automatically credit checked and printed immediately. Simultaneously, a despatch note or invoice is printed in warehouse bin sequence in the warehouse or at the trade counter to ensure fast customer service. All relevant sales ledger and sales analyses are automatically updated.

The memory of the system can be used by sales clerks to provide valuable selling information such as alternative products, prices, discounts, promotional offers and automatic back ordering—all details can be displayed in seconds on the VDU terminals.

OPTIMISE STOCK

The BCL system constantly monitors sales activity and highlights products, by supplier which need to be reordered. It ensures that order quantities follow sales trends and take into account current stocks, stock on order and back orders.

The stock control features ensure that stock is used to maximum benefit. Low profit and slow moving items are identified and can be replaced by products capable of contributing more to company profitability. Capital costs and warehouse space are maximised. Similarly, the system monitors fast moving products to ensure that customer demand can be met and so maintain a high level of service.

BUYING CONTROL

Buying quantities are recommended automatically as soon as stocks fall below minimum levels. This is determined by the computer, based

on suppliers lead times and historic demand. In fact the system matches stock levels to buying trends.

Purchase orders are entered directly to the system by buyers and are automatically priced and printed. A wealth of information held by the system assists buyers to make timely decisions on stock requirements and introducing new products. Margins, prices discounts and sales figures are also monitored by the system. Goods received notes and suppliers invoices are entered to ensure correct prices have been charged and all outstanding orders are identifiable.

MANAGEMENT INFORMATION
The system is designed to provide a comprehensive selection of management reports. Information which is based on up-to-date trading figures and beneficial to management for making business decisions. Reports on request include gross margin for each customer, each product group or selected products—comparison of sales and costs — aged debtors for more than a specific number of months/days, outstanding orders, slow moving products, goods ordered but unavailable and so on.

The Benefits of the BCL Distribution System

Better Customer Service

- Direct entry of order into the computer
- Comprehensive stock availability
- Fast turnaround of order
- Priced invoice available with goods
  MEANS INCREASED TURNOVER

Improved Management of Stock

- Stock matched to sales demand
- Slow-moving products highlighted
- Low margin products highlighted
- Stock below re-order level highlighted
- Accurate stock valuations
- Automatic back-ordering and back-order release
- Stock-taking reports in warehouse sequence
- Immediate or post-dated update of prices
  MEANS REDUCED CAPITAL INVESTMENT

Improved Buying Information

- Buying quantities calculated and recommended automatically
- Outstanding purchases highlighted by supplier or product
- Automatic pricing and printing of purchase orders
- Goods received matched against purchase orders
  INCREASED SERVICE LEVEL, ELIMINATES OVER-ORDERING

Accurate Management Information

- Customer profitability
- Product profitability
- Representative/area performance
- Total credit control
- Discount and promotion analysis
- Cash sales analysis
- Credit note analysis
- Contract sales analysis
- VAT analysis
- Fully audited system
  ALLOWS INSTANT DECISION MAKING

NATIONAL SALES, SERVICE AND SUPPORT

BCL

THE BUSINESS COMPUTERS DISTRIBUTION SYSTEM

Better Customer Service and Management Control
Better Purchasing and Stock Control

TRADE COUNTER

A fully descriptive and priced/discounted invoice produced automatically

No customer account codes, or product numbers need be used. All access to computer files by description (Alpha-Match)

Creditworthiness immediately checked

Checks on order numbers and/or valid signatories can be carried out

Stock availability, current price and appropriate discount shown immediately

Prices and discounts computer calculated and therefore accurate – eliminates risk of errors and omissions

Produces invoices in logical warehouse sequence – reduces picking time

Substitutions, alternatives and supercessions are automatically highlighted

No expertise required – your existing trade counter personnel can operate the system. New employees much easier to train

All relevant information – i.e sales ledger, stock, sales analysis, automatically updated

All designed to streamline the despatch of goods to customers in the minimum time

TELESALES

Enables existing personnel to provide a better service – stock availability, current price and discounts automatically shown – removes need for price lists, stock cards, actual warehouse checks and so on

Product knowledge is no longer essential. A single product, or a range of products can be shown instantly, simply by typing in an abbreviated description or name – product codes are obsolete

Provides an effective selling tool to increase turnover by telephoning out to new and existing customers and thus supplementing costly and relatively infrequent visits by representatives. Turnover increased by offering alternative products, promotion lines, taking back orders and monitoring 'lost sales' – all of which can only be done at point of sale

Telesales personnel build up a computer invoice automatically as they confirm, line by line, the customer order – this invoice can be printed immediately in the warehouse

No further operations such as pricing, discounting, stock control, invoice calculations, invoice typing, sales ledger update required

Invoices always accurate and consistant

Creditworthiness instantly checked

All designed to increase turnover by better customer service

ACCOUNTS

Accounts department reduced substantially. System eliminates pricing, discounting calculation of extensions, typing of invoices

Sales ledger postings are automatic

Errors in pricing and discounting eliminated

Statements printed automatically – on last day of month

Age-of-debt analysis – highlighting overdue debts, over credit limit, over specified accounts etc. Gives far greater control over debtors

Cash posting simplified – instantaneous enquires and reports for outstanding debts

Overdue letters printed automatically for selected customers

Stop lists for bad debtors

Fully audited system to reduce auditors fees

Accurate stock evaluations

Ledgers balanced daily to highlight any discrepancies

Full VAT and credit note analysis

Fully comprehensive purchase ledger

Automatic cheques and remittance advices

Profit and loss accounts and balance sheets printed on demand

Payroll automatically calculated and printed

MANAGEMENT CONTROL

Total control of company activities through instant enquiries

Analysis of profit margins and sales performance/turnover of customers representatives products, suppliers individual invoices

Exception reports of slow moving customers/products, low margins, customer and products, obsolete stock

Overdue accounts control

Credit control at point of sale

Control of discounting/performance by customer

Monitoring of high profit contribution products/customers

Control of back orders and 'specials'

Control of stock

Control of overdue purchases

All designed to help improve margins

THE BUYER

Has a constantly monitoring system to ensure that the right stock is ordered at the right time

Has instant information to spot sales trends immediately

Can closely monitor new lines on promotion or products on special offer

Raises fewer but larger purchase orders to obtain better discounts

Can eliminate obsolete, slow moving or low margin lines from the range

Can highlight short deliveries and 'overdues'

Has purchase orders accurately printed and priced automatically

Can give an improved service level with less stock value

Can exercise far greater control over 'specials'

Eliminates the clerical tedium of manual stock checks and inaccuracies of manual records

Have the right stock, at the right price,
at the right time

WAREHOUSE

Invoices/Despatch Notes can be printed in the warehouse immediately the order is taken

Computer printed despatch notes are clearly legible with standardised descriptions and names/addresses — thus eliminating picking and despatch errors

Products are listed in warehouse sequence for ease and speed of picking

Warehouse and product knowledge is reduced so that it is easier to train new employees

Pickers are more efficient, orders turned round and despatched faster, more turnover can be handled by fewer warehouse people

Stock checking can be reduced to a perpetual basis, eliminating the massive and costly end of year stock counts and valuation

Invoices can be sent with the goods — thus saving on postage

The warehouse can be more efficiently organised

Pilferage can be reduced because of the disciplines imposed

Goods received are booked in automatically thus ensuring that new stock is immediately available for sale

Shelf loading is speeded up and simplified

Back orders are immediateley and automatically satisfied, as soon as goods are booked in

Van lists produced to ensure that all orders have been picked and loaded

All designed to streamline the receipt and
despatch of goods in the minimum time

See the system in operation

The most cost effective computer is only as good as the software which controls it.

The BCL distribution system software is tried and tested in hundreds of installations throughout the United Kingdom. The system is in operation in large and small businesses in many industry types involved in volume distribution of a wide product range.

BCL has an established reputation for making computing easy for the first time user.

Do not put your business at risk – use a system designed by experts who understand the problems of the distribution industry.

Seeing is believing – come and see the system in operation at one of our existing users in your type of business.

What our customers tell us

"The best investment I ever made, improved customer service is entirely due to the computer".

"We have already reduced our stock holding by £50,000 and are confident of further reductions without impairing customer service".

"Over the last 12 months the system has enabled us – in a period of recession – to increase turnover by 16½% and reduce staff costs".

Countrywide support services

To ensure that you will achieve maximum efficiency and cost effectiveness from your system BCL provides comprehensive customer support services.

A team of highly skilled personnel provide field service and systems support from convenient locations throughout the United Kingdom and our Education Department will train your own staff to operate the system.

The financial benefits of a BCL Distribution System

Increased turnover

Rationalised stock

Reduced overheads

Improved margins

Improved cash flow

The BCL system is a profit making tool – others are only computers

The Molecular Computer

No specialist personnel required

Very fast – designed for the business user

Very flexible – up to 25 terminals without change of processor

Highly efficient use of memory and disc storage

Uses mini computer technology – very fast powerful and flexible

High volume data storage from 10-1000MB

Easily expandable

Comprehensive printer control routines

Comprehensive range of printer speeds

VDU's and printers located locally or remotely over telephone lines

Here is a selection of the industries where BCL have demonstrated the benefits achieved by using the Molecular Distribution System:

Pharmaceutical Wholesalers
Tools Distributors
Nuts and Bolts Distributors
Wholesale Stationers
Shoe Accessories Distributors
Brush Manufacturers and Distributors
Oil Blenders and Distributors
Wines and Spirits Distributors
Builders Merchants
Hardware Distributors
Food Wholesalers
Agricultural Wholesalers
Clothing Wholesalers
Paper Merchants
Plumbers Merchants
Engineers Merchants
Meat Wholesalers
Timber Merchants
Toy Wholesalers
Decorators Merchants
Electronic Components Distributors
Photographic Equipment Suppliers

BCL

Business Computer Systems PLC

BUSINESS COMPUTER SYSTEMS PLC

BCL

The BCL
Distributor System
for
Merchants, Wholesalers and
Manufacturing Distributors

Better Customer Service and Management Control
Better Purchasing and Stock Control

Dedicated to the needs of the distribution business

Business Computer Systems Plc is a major independent computer supplier with access to the worldwide range of latest technology mini and micro computers.

Our tests have shown that most micro computers are not powerful enough for most distributors and our experience is that mini-computers generally are designed for wide purpose use over a spectrum of scientific, business and technical applications.

In sharp contrast the BCL Distributor is designed and manufactured specifically to suit the demanding total computing needs of merchants, wholesalers and manufacturing distributors.

Unique hardware features enable this computer to be exceptionally fast and flexible and it is supplied in conjunction with a suite of comprehensive distribution software packages. These have been

developed and proven over the last 10 years to supply and support the growing needs of our hundreds of merchant customers to enable them to get the most out of their computer investment without the need for specialist staff.

This successful marriage of purpose built British hardware and software has made computing easy for distributors enabling up to date information on pricing, stocks, accounts, orders and business trends to be instantly available on VDU's to the people who require it, namely the sales staff, buyers, warehousemen, accountants and executive management – as part of their day to day job. In other words a computer system that is a vital tool throughout the company, not just a computer for the accounts department.

Because the Distributor is specific to a type of business you benefit from

the experience of all the other users whose needs have contributed both before and after their installation to arrive at the most effective possible computer for their business and the distribution industry in general.

They have achieved better customer service, better serviceability, stock rationalisation, improved margins and management information and control. These specific benefits together with nationwide service and local support cannot be expected, at a realistic price, from a general purpose computer.

Whilst the Distributor uses the most recent computer techniques and components the total system has had years of development and field testing to eliminate the 'risk' element in installation and to afford a swift implementation of the outstanding facilities for increased profit that the BCL Distributor offers.

The BCL Distributor a British designed and built mini-computer system.

- **60 terminals**
- **high speed**
- **totally flexible**

The heart of the BCL Distributor is a minicomputer processor augmented by multiple micro processors to control input and output routines and data handling. It is designed to function with the BCL distribution software packages as an integrated partnership of hardware and software to provide fast responses in a totally flexible system easily run by non-technical business people.

CENTRAL PROCESSOR

The high performance central processor is a bit sliced mini-computer running at 20MHZ which is specifically designed and built to be the nucleus of a commercial distribution system. A double highway 'bus' ensures much higher than normal speed of throughput by eliminating interrupts on the memory bus. The central processor is capable of handling a large number of terminals in a high speed transaction processing environment.

BCL DISTRIBUTOR SYSTEM CONFIGURATION

Up to 240 Million Characters of Disc Memory per Controller

Maximum 720 Million Characters

Micro Processor Controlled Disc Controller

Each disc controller can support up to 4 drives each of 60 million characters.

Each disc Controller has its own 8K bytes of memory.

20 MHZ BIT SLICED MINI COMPUTER

Universal Communications Controller

Each UCC has its own microprocessor (6MHZ) & 16K bytes of local memory.

MAIN DISTRIBUTOR MEMORY up to 1 MEGABYTE

UCC 1 — UCC 15

Comms Multiplexer

PRINTER

Multiplexer

Communications Between Distributors and most other computers

VDU

Up to 4 Peripherals per UCC

UNIVERSAL COMMUNICATIONS CONTROLLER

The performance of the central processor is further enhanced by the Universal Communications Controllers – which handle all input/output functions. Up to 15 'UCC's' can be added to a Distributor processor. Each UCC has its own micro-processor as well as from 4K–16K of local memory and can handle 4 peripheral units to provide a maximum system configuration of 60 terminals. The characteristics of this architecture are paramount in providing, maintaining and improving the exceptional performance for which the BCL mini-computers have been renowned.

The design criteria of the UCC recognises that exceptionally fast VDU responses are required in a distribution business. So high speed information transfer from the central processor to and from the visual display units and printers is another significant feature of the system. The VDU's operate at up to 19·2K bits per second (nearly 2000 characters per second) providing extremely fast screen fill.

DATA COMMUNICATIONS

The UCC enables data communications facilities to operate either over telephone lines or locally between Distributor systems and with most other computers.

INTERNAL MEMORY

The Distributor incorporates the latest technological developments in CMOS memory to give high reliability and low levels of power consumption.

Each memory board is fitted with its own long life battery support system which in normal circumstances enables an automatic restart after a mains failure without any loss of data.

DISC MEMORY

The use of microprocessor disc drive controllers means that operating system software is simple by design and therefore faster in its operation which ensures maximum speed of data throughput. The disc transfer rate is 10MHZ (1·¼ million characters per second) to and from the processor.

The disc controller 'packs' information on the unique well-proven BCL Metacode principle so that much more data can be held on the same sized disc drive than on conventional systems. This can give up to five times more system efficiency in terms of throughput, speed and data storage capacity.

A disc controller caters for up to four series 9600 disc drives each with 60 million characters capacity; three disc controllers can be operated on each system giving a total disc memory capability of 720 million characters.

This memory potential enables a comprehensive business data base for analysis of company performance and history to be built up to enhance competitiveness and management control.

The 9600 disc drive incorporates the latest facilities of fixed and removable Winchester disc technology. The sealed Winchester drive has the advantages of reliability and low cost maintenance which are combined with the flexibility of a removable cartridge. This ensures total security for all files and additional 'off-line' memory resource. Disc copying time for data record security is approximately 8 minutes for 30 million characters.

MPOS OPERATING SYSTEM

The Multi-Processor Operating System has been developed specifically to meet the requirements of high speed commercial data processing and is therefore faster, more capable and uses far less memory than general purpose operating systems. The internal memory is divided into equal segments so that each peripheral has its own memory slice available at all times. This means that all tasks can be carried out simultaneously and all jobs can be done on any peripheral giving a high degree of system flexibility and ease of operation.

Any printer can be controlled by any VDU and a unique multi-print queue and multi-spooling system ensures that printing can be done when required. In addition, once the print task is initiated the VDU is free and available to carry out other operations.

RELIABILITY

The distribution industry is a fast moving and highly competitive business area where immediate access to accurate information on prices, discounts, credit limits, operating costs, margins and stock availability is vital to maintain a competitive edge and to ensure profitability. Because of this BCL fully recognises how dependent on the Distributor system its many users are.

In consequence the Distributor is built to highly rigorous standards of reliability using electronic parts from an extensively tried and proven family of components with proven design techniques.

Distributor system central processor with integral 9600 series disc drive.

Additional disc storage cabinet for up to three further 9600 disc drives.

TRADE COUNTER

A fully descriptive and priced/discounted invoice produced automatically

No customer account codes, or product numbers need be used. All access to computer files by description (Alpha-Match)

Creditworthiness immediately checked

Checks on order numbers and/or valid signatories can be carried out

Stock availability, current price and appropriate discount shown immediately

Prices and discounts computer calculated and therefore accurate – eliminates risk of errors and omissions

Produces invoices in logical warehouse sequence – reduces picking time

Substitutions, alternatives and supercessions are automatically highlighted

No expertise required – your existing trade counter personnel can operate the system. New employees much easier to train

All relevant information – i.e. sales ledger, stock, sales analysis, automatically updated

All designed to streamline the despatch of goods to customers in the minimum time

SALES OFFICE

Existing personnel can provide an even better service – stock availability, current price and discounts automatically shown – removes need for price lists, stock cards, actual warehouse checks and so on

Product knowledge is no longer essential. A single product, or a range of products can be shown instantly, simply by typing in an abbreviated description or name – product codes are obsolete

Provides an effective selling tool to increase turnover by telephoning out to new and existing customers and thus supplementing costly and relatively infrequent visits by representatives. Turnover increased by offering alternative products, promotion lines, taking back orders and monitoring 'lost sales' – all of which can only be done at point of sale
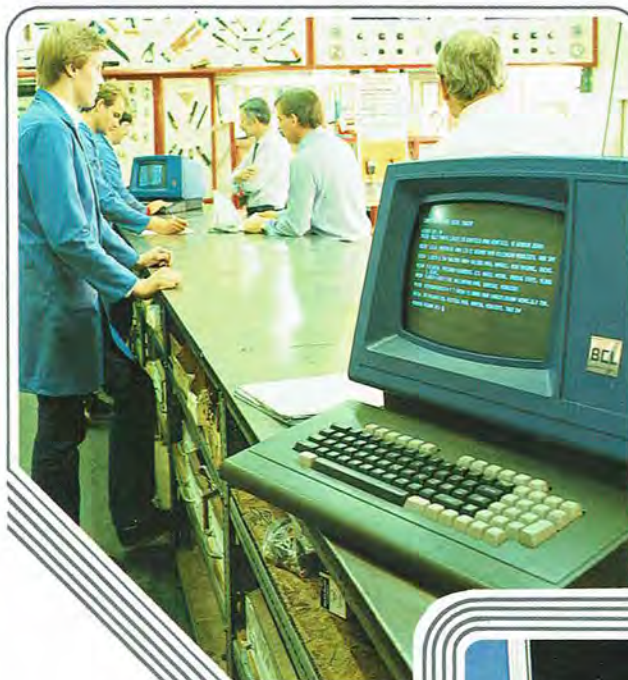
Telesales personnel build up a computer invoice automatically as they confirm, line by line, the customer order – this invoice can be printed immediately in the warehouse

No further operations such as pricing, discounting, stock control, invoice calculations, invoice typing, sales ledger update required

Invoices always accurate and consistant

Creditworthiness instantly checked

All designed to increase turnover by better customer service

OFF[...]

Accounts department reduced [...] pricing, discounting calculation [...]

Sales ledger post[...]

Errors in pricing and [...]

Statements printed automa[...]

Age-of-debt analysis – highlight[...] limit, over specified acco[...] control ove[...]

Cash posting simplified – insta[...] for outstan[...]

Overdue letters printed autom[...]

Stop lists for[...]

Fully audited systems [...]

Accurate sto[...]

Ledgers balanced daily to[...]

Full VAT and cr[...]

Fully comprehensi[...]

Automatic cheques a[...]

Profit and loss accounts and ba[...]

Payroll automatically c[...]

MANAGEME[...]

Total management informati[...] multiple de[...]

Total control of company activ[...]

Analysis of profit margins an[...] of customers representa[...] individua[...]

Exception reports of slow [...] low margins, customer an[...]

Overdue acc[...]

Credit control [...]

Control of discounting/p[...]

Monitoring of high profit con[...]

Control of back or[...]

Control [...]

Control of over[...]

All designed to hel[...]

substantially. System eliminates
f extensions, typing of invoices

ngs are automatic

discounting eliminated

ically—on last day of month

ing overdue debts, over credit
unts etc. Gives far greater
r debtors

ntaneous enquiries and reports
ding debts

atically for selected customers
bad debtors

to reduce auditors fees

k evaluations

highlight any discrepancies

dit note analysis

e purchase ledger

nd remittance advices

ance sheets printed on demand

calculated and printed

NT CONTROL

n by multiple company and
pot/branch

ities through instant enquiries

d sales performance/turnover
tives products, suppliers
invoices

noving customers/products,
products, obsolete stock

counts control

at point of sale

erformance by customer

tribution products/customers

ders and 'specials'

of stock

due purchases

p improve margins

THE BUYER

Has a constantly monitoring system
to ensure that the right stock is
ordered at the right time

Has instant information to spot
sales trends immediately

Can closely monitor new lines on
promotion or products on special
offer

Raises fewer but larger purchase
orders to obtain better discounts

Can eliminate obsolete, slow
moving or low margin lines from
the range

Can highlight short deliveries and
'overdues'

Has purchase orders accurately
printed and priced automatically

Can give an improved service level
with less stock value

Can exercise far greater control
over 'specials'

Eliminates the clerical tedium of
manual stock checks and
inaccuracies of manual records

Have the right stock, at the right
price, at the right time

WAREHOUSE

Invoices/Despatch Notes can be
printed in the warehouse
immediately the order is taken

Computer printed despatch notes
are clearly legible with standardised
descriptions and names/addresses –
thus eliminating picking and
despatch errors

Products are listed in warehouse
sequence for ease and speed of
picking

Warehouse and product knowledge
is reduced so that it is easier to
train new employees

Pickers are more efficient, orders
turned around and despatched
faster, more turnover can be
handled by fewer warehouse
people

Stock checking can be reduced to a
perpetual basis, eliminating the
massive and costly end of year
stock counts and valuation

Invoices can be sent with the goods
– thus saving on postage

The warehouse can be more
efficiently organised

Pilferage can be reduced because
of the disciplines imposed

Goods received are booked in
automatically thus ensuring that new
stock is immediately available for sale

Shelf loading is speeded-up and
simplified

Back orders are immediately and
automatically satisfied, as soon as
goods are booked-in

Van lists produced to ensure that all
orders have been picked and
loaded

All designed to streamline the
receipt and despatch of goods in
the minimum time

User Benefits of the BCL Distributor System

Customer Service

- Direct entry of order into the computer
- Comprehensive stock availability
- Fast turnaround of order
- Priced invoice available with goods

MEANS INCREASED TURNOVER

Management of Stock

- Stock matched to sales demand
- Slow-moving products highlighted
- Low margin products highlighted
- Stock below re-order level highlighted
- Accurate stock valuations
- Automatic back-ordering and back-order release
- Stock-taking reports in warehouse sequence
- Immediate or post-dated update of prices

MEANS REDUCED CAPITAL INVESTMENT

Buying Information

- Buying quantities calculated and recommended automatically
- Outstanding purchases highlighted by supplier or product
- Automatic pricing and printing of purchase orders
- Goods received matched against purchase orders

INCREASES SERVICE LEVEL, ELIMINATES OVER-ORDERING

Management Information

- Customer profitability
- Product profitability
- Representative/area performance
- Total credit control
- Discount and promotion analysis
- Cash sales analysis
- Credit note analysis
- Contract sales analysis
- VAT analysis
- Fully audited system

ALLOWS INSTANT DECISION MAKING

Total Support – From a Single Source

The BCL customer support operation is based on the knowledge and experience gained over many years of involvement in designing systems for the Distribution business.

Our aim is to provide a system which is right for your business. And from your first involvement with the company you will realise that our business analysts understand and appreciate all the 'ins and outs' of Distribution systems. They will advise if a standard system will suit your application, and if not, exactly what modifications are necessary to make the system ideal for your specific needs.

INSTALLATION SUPPORT

Site survey facilities are provided by our engineering division, operator training from our education department—either on site or at our Head Office, plus all necessary advice and assistance during installation set-up from our software division.

SOFTWARE SUPPORT

Full after sales support of the software programs and their application is provided by a 'hot line' telephone service—ensuring that problems, if and when they occur, are handled promptly and efficiently by highly experienced personnel.

ENGINEERING SUPPORT

Engineering support starts before the equipment is installed. BCL customer engineers will visit the site to ensure optimum operational conditions are available within the normal office environment. Thereafter a comprehensive countrywide after

The BCL Distributor is a Profit Making Tool – others are only Computers

sales hardware maintenance service is provided to include all the necessary parts and adjustments that may be necessary from time to time to keep the equipment in first-class order. Extensive stocks of spare parts are strategically located to ensure maximum computer time is available to every user.

PROGRAM MODIFICATION

Customer requirements change from time to time and to ensure that the Distributor continues to meet precise needs BCL provide a program alteration and development service. This is normally used after standard systems have been installed and have been operational for some time.

As experts in the provision of high speed systems specifically for the Distribution business, our BCL support services are geared to a responsive and high level of after sales care from staff who know and understand your type of business.

SEE THE SYSTEM IN OPERATION

The most cost effective computer is only as good as the software which controls it. The BCL Distributor system software is tried and tested in hundreds of installations throughout the United Kingdom. The system is in operation in large and small businesses in many industry types involved in volume distribution of a wide product range.

BCL has an established reputation for making computing easy for the first time user. Do not put your business at risk – use a system designed by experts who understand the problems of the distribution industry.

Seeing is believing – come and see the system in operation at one of our existing users in your type of business.

WHAT OUR CUSTOMERS TELL US

"The best investment I ever made, improved customer service is entirely due to the computer".

"We have already reduced our stock holding by £50,000 and are confident of further reductions without impairing customers service".

"Over the last 12 months the system has enabled us to increase turnover by 16% and reduce staff costs."

"We have achieved very considerable benefits from our system. For example, we now know precisely what is on our shelves, what margins we are making, what volumes we are selling; not only have we reduced stock levels substantially but we know what we need to stock to ensure first-class product availability and customer service".

BCL
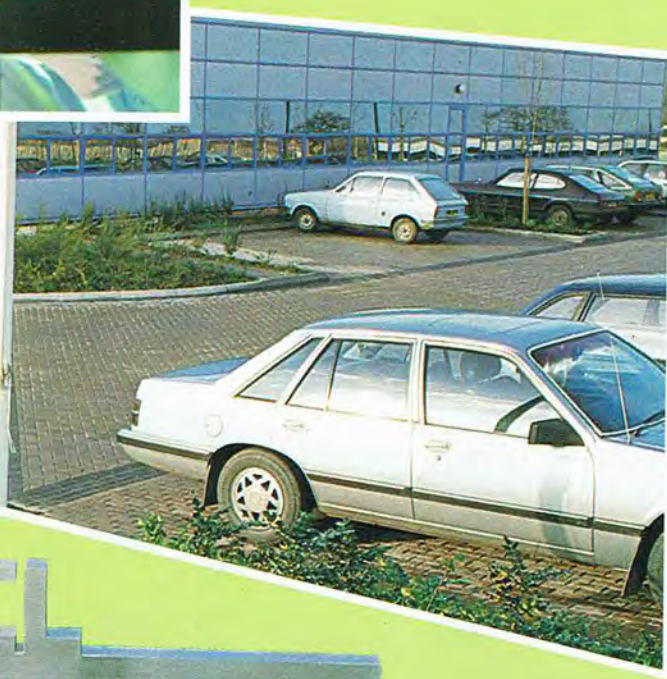
BUSINESS COMPUTER SYSTEMS PLC

BCL - The Specialist in Systems for the Distribution Industry

A selection of the industries using the BCL Distributor System

Tools Distributors
Fastener Distributors
Engineers Merchants
Hardware Distributors
Nuts and Bolts Distributors
Builders Merchants
Plumbers Merchants
Agricultural Merchants
Timber Merchants
Decorators Merchants
Pharmaceutical Wholesalers
Electronic Components Distributors
Electrical Wholesalers
Motor Factors/Dealers
Photographic Equipment Suppliers
Toy and Fancy Goods Distributors
Wholesale Stationers
Paper Merchants
Wines and Spirits Distributors

Meat Wholesalers
Food Wholesalers
Clothing Wholesalers
Shoe Accessories Distributors
Brush Manufacturers and Distributors
Oil Blenders and Distributors
Livestock Markets

From a single source nationwide
Hardware, Software, Service, Support,
Computer Supplies.

BCL
BUSINESS COMPUTER SYSTEMS PLC

BUSINESS COMPUTER SYSTEMS PLC

Business Systems
that mean
Business

BCL 3220
MICROCOMPUTER

BCL 3220

From a high performance personal computer to a full
multi-tasking, multi-user business system

BUSINESS COMPUTER SYSTEMS PLC

Proven systems and software for a wide range of business applications...

BCL 3220 MICROCOMPUTER

High performance processing power, flexibility and expandibility – designed for success.

The BCL 3220 is one of the fastest, most attractively styled and complete microcomputer business systems available on today's market.

British designed and built, it combines the most recent proven developments both in hardware and software to meet current and future needs for the progressive business user. The 16-bit processor enables high speed performance for a personal user that can grow to a full multi-tasking, multi-terminal operation. The 3220 uses to the full all the exciting capabilities of the latest generation of operating and systems software to give the benefits of low cost access to the finest combination of commercially designed business software and industry standard packages available.

Operating under Concurrent CP/M, the compact powerful 16-bit 8088 low profile processor running at 8MHZ provides fast and efficient response times. The integral 5¼" Winchester disc drive gives instant access to data files and the integral tape cartridge provides security copies of data stored on disc with complete record security. A diskette back-up version of the 3220 system is also available.

The basic 3220 configuration consists of a system console, a 20 Mbyte Winchester disc drive, a 20 Mbyte tape cartridge, 256 Kbytes of memory and ports for the connection of four further terminals plus a dedicated printer port. Users requiring larger data file capacities have the option of choosing either a 40 or 120 Mbyte Winchester disc drive according to requirements. System memory can be expanded in 384 Kbyte increments to a total of 1 Mbyte to cater for the maximum system configuration of 6 visual display and printer terminals in any combination to suit specific needs.

The high capacity tape cartridge provides 20 Mbytes of back-up storage for data files on the Winchester disc drive. This means that the entire contents of a 20 or 40 Mbyte drive can easily be copied to tape.

PROGRAMMED FOR ACTION

DACL – The English-like program language of the 3220 system has been specifically designed for business applications in a 'real time' transaction processing environment and is geared to maximum speed of response.

DACL is outstanding in its economical use of system memory needing only a fraction of the requirements of other comparable high level languages. It is easy to understand and use and apart from giving very quick responses, it enables many more 'on line' programs to be used concurrently.

Power and Response for Better Business Decisions

Hardware and Software Exceptional User Facilities

The multi-tasking Concurrent CP/M operating system of the 3220 and the DACL interpreter give extensive user facilites by permitting not only the use of FAIRWAY business software and the BCL catalogue of vertical market applications but also the wealth of available industry standard packages.

FAIRWAY is the first suite of multi-tasking business software that takes full advantage of 16-bit memory addressing and utilises the powerful and sophisticated capabilities of today's hardware to provide an effective and efficient management tool for business control.

FAIRWAY is transportable across the entire BCL 3000 series of microcomputers which has resulted in highly reliable packages not just for accounting functions but for many applications in trades and industries across the business world.

One Screen – Four Jobs

The master screen and keyboard can actually be used to run four different tasks (programs) at once. All four can be running at the same time but only one is visible on the screen. By simply pressing one of the control keys the user can see any one of these four tasks.

For example in General Office use you could have:-

**Order Processing
Stock Availability Enquiry
Customer Account Status Enquiry
Invoice Production**

Whereas in Management use a typical mix could be:-

**Nominal Ledger
Stock Usage Enquiry
Spreadsheet
Supplier Enquiry**

The FAIRWAY software has been designed to take full advantage of these features and enable the user to effectively have a principal task operating concurrently with subsidiary tasks which aid swift decision making. Without this capability the user would require four actual screens and keyboards.

BCL 3220

Multiple Screens and Printers

The system is equipped with 6 serial ports. The master screen is connected to one and the system printer to another. This leaves 4 ports into which the user can simply plug additional screens or printers.

The extra screens can be located throughout the business and have the capacity to run one task at a time. These tasks may of course be identical to those running on the principal screen or on another screen. The FAIRWAY software ensures that data or system conflict does not occur. The user can therefore select to operate his multi-tasking system with full confidence to carry out several dissimilar jobs concurrently or to use the full capability with several screens working on exactly the same job.
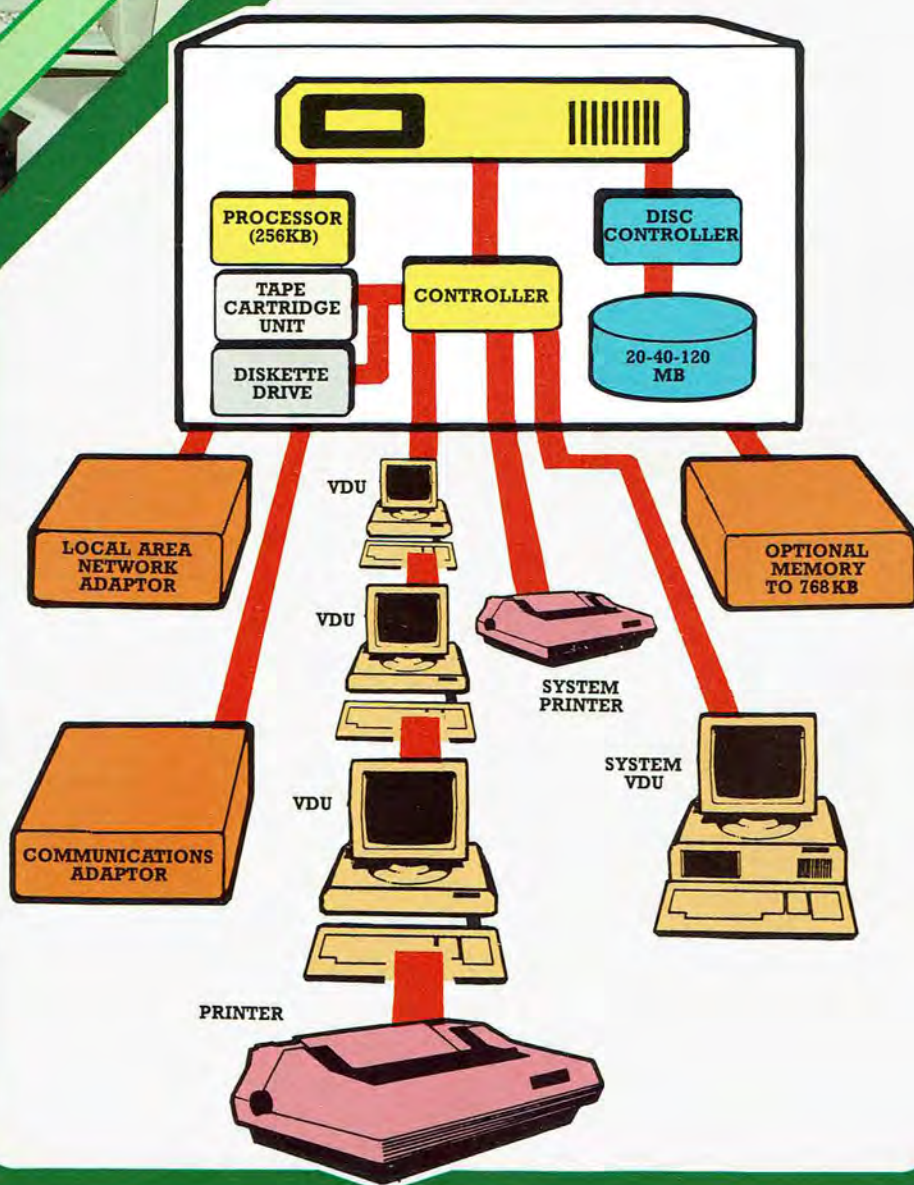
Local Area Network

The hardware incorporates Local Area Network as a standard. This provides the capability of sharing system resources through the interconnection of processors.

FAIRWAY software has the capability to take advantage of such a network subject only to the availability of operating software. System performance is different when a screen is connected directly to a processor rather than across a network. A good rule of thumb is that direct connection is twice as fast as over a network.

BCL 3220 System Configuration

PROCESSOR (256KB)

TAPE CARTRIDGE UNIT

DISKETTE DRIVE

CONTROLLER

DISC CONTROLLER

20-40-120 MB

VDU

VDU

VDU

LOCAL AREA NETWORK ADAPTOR

COMMUNICATIONS ADAPTOR

SYSTEM PRINTER

OPTIONAL MEMORY TO 768KB

SYSTEM VDU

PRINTER

Data Communications

The fully programmable RS232 communications interface of the 3220 provides bisynchronous 2780, 3780 and 3270 communications facilities to all BCL 3000 series systems and other computers at remote locations. It also provides asynchronous communications to visual display and printer terminals for remote processing facilities at depot and warehouse locations.

Visual Display Terminals

The ultra-modern 3220 visual display terminals incorporate many facilities for ease of operation. The display is mounted on a tilt and swivel stand to allow multi-directional positioning for operator comfort. And the cable connected low profile keyboard is designed to maximise data input. The clear crisp display features high resolution characters on a satinised anti-glare screen.

Choice of Printers

The 3220 comes with a wide choice of printers with options and accessories to suit specific user requirements. Included are letter quality daisy wheel models operating at 40 cps and dual speed matrix printers operating from general purpose output at 240 cps to correspondence quality output at 120 cps.

FAIRWAY the total business and accounting suite of applications packages

FAIRWAY is a comprehensive suite of fully integrated business software applications packages designed to provide a total computer accounting system to cater for most needs across the business and commercial spectrum.

FAIRWAY enables all terminals to have on-line access to all data files and be operated independently on the same application or each carry out a variety of tasks concurrently with total file security.

FAIRWAY encompasses packages ranging from order entry, invoicing, sales, purchase and nominal ledgers and payroll to internal orders with parts explosion, stock history, sales statistics and personnel records.

In addition, there are over 110 standard reports available with FAIRWAY. These provide accurate and up-to-the minute information on which to base management decisions and achieve tangible benefits in overall business cost control. A great many more reports can be produced by the user employing the FAIRWAY report generator Whiz.

NUCLEUS – Masterminds Package Integration

A unique software feature FAIRWAY NUCLEUS, controls all integration between packages, interaction between modules of FAIRWAY and automatically schedules events in a sequence to ensure maximum system through-put. Nucleus prevents out of sequence jobs from being processed and incompatible routines such as invoicing and end of period processing being carried out concurrently.

FAIRWAY Application Modules

Integration – Optional Facility

Although integration between packages has many advantages it is an optional facility. Users of FAIRWAY may integrate a series of packages at any level to suit their exact requirements. Additional packages may be used with an integrated system and operated in isolation until such time as the user wishes to phase them into the system. Integration is a painless process and performed at the flick of a software switch.

- ● NUCLEUS
- ● SALES LEDGER
- ● INVOICING
- ● ORDER PROCESSING
- ● STOCK CONTROL
- ● STOCK HISTORY
- ● PRODUCT ASSEMBLY

- ● SALES ANALYSIS
- ● PURCHASE AND NOMINAL LEDGER
- ● PAYROLL
- ● WHIZ
- ● CROSSWORD

Business Application Areas include:

- · Invoicing
- · Stock control
- · Purchase and nominal ledger
- · Purchase order processing
- · Word processing
- · Fixed assets
- · Time ledger
- · Estates management
- · Plant hire

- · Motor factors
- · Production order processing
- · Builders estimating package
- · Sales Ledger
- · Management reports
- · Payroll
- · Sales order processing
- · Text processing
- · Job costing

- · Incomplete records
- · Solicitors accounting
- · Property management
- · Tyre and exhaust retailers system
- · Distribution systems
- · Material requirements processing
- · Jewellers retailing system
- · Systems for wholesalers

PLUS – An extensive range of industry standard packages.

Total service and support

BCL operate a nationwide engineering service, sales, support and dealer network, and provide customers with a comprehensive system installation service. Wherever you are there is a fully equipped service centre within easy reach to ensure the efficient operation of your system. A team of skilled personnel provide system support from convenient locations throughout the U.K. and our customer education department will train your staff to use the system.

From a single source.....

Hardware – software – service – computer supplies – support

BCL Business Computer Systems PLC

Head Office
Sunrise Parkway
Linford Wood
Milton Keynes
MK14 6LJ
Tel: 0908-665522

Telex: 825140

Branch Offices

London
01-207 3344

Midlands
021-550-9161

South
04862-21663

Scotland
0506-30242

North
0706-57131

*FAIRWAY is a trademark of Business Computer Systems PLC
*Concurrent CP/M is a trademark of Digital Research Inc.

BCL 3220 TECHNICAL SPECIFICATIONS

CENTRAL PROCESSOR
Operating Temperature   50°F – 85°F (10°C – 30°C)
Operating Relative Humidity   20% – 80% Non-Condensing
Heat Dissipation   410 BTU/HR (103 Kcal/HR)
Electrical Requirements   240V ± 10% AC; 50HZ, 120VA

CABLING
Power Cord   Two Metres

SIZE

CPU Box	**HEIGHT**	135mm
	WIDTH	490mm
	DEPTH	400mm PLUS connector space
VDU	**HEIGHT**	330mm
	WIDTH	325mm
	DEPTH	320mm
Keyboard	**HEIGHT**	55mm (Max)
	WIDTH	490mm
	DEPTH	215mm

PROCESSOR
Microprocessor   INTEL 8088
Standard Memory Capacity   256KB
Optional Add-On Memory   Up to 768KB (IMB Total)
Microprocessor Clock   8 MHz
Memory Cycle Time   270 n s
Memory Access Time   150 n s

DISC DRIVE
Capacities (Formatted)   20MB or 40MB (5¼" Winchester)
Sector Size   256 BYTES (32 Sectors/Track)
Rotational Latency   8.3Ms (Average)
Transfer Rate   3 M Bits/Sec.
Rotational Speed   3600 rpm
Recording Density   8720 Flux Reversals Per Inch (9000 BPI)
Track Density   356 Tracks/Inch (Average)
Seek Time (Average)   90 Ms

CARTRIDGE TAPE UNIT
Capacity   20MB (¼" Tape)
Disc to Tape Copy Time   15 Mins Approx Plus Format Time
Transfer Rate   500 Kbits/Sec (Nominal)
Recording Tracks   6
Speed   78 Inches/Sec
Recording Density   6400 BPI (Max)

DISKETTE DRIVE
Diskette size:- 5¼"
(double sided, double density, soft sectored 96/100 TPI)
Storage capacity:- 800 KB   (Formatted)
Tracks/Side:- 80
Bytes/Sector:- 1024
Sector/Tracks:- 5
Data transfer rate:- 250 Kbits/Sec
Access time per track:- 3 Ms
Access time average, including settling time:- 97 Ms
Access time settling time:- 15 Ms
Total Tracks:- 160
Average latency time:- 100 Ms
Maximum recording density:- 5,922 BPI
Track density:- 96 TPI
Disc rotation speed:- 300 RPM
Head load time:- 35 Ms
Motor Start-Up time:- 0.6 sec.

BUSINESS COMPUTER SYSTEMS PLC

Business Systems That Mean Business

BCL 3250
The versatile desk top multi user system with proven business software

BCL

BUSINESS COMPUTER SYSTEMS PLC

**proven systems
for a wide range of
business applications…**

BCL 3250
MICROCOMPUTER

Processing power and expandability for the progressive business.

The 3250 is the most powerful desk-top system in the BCL 3000 series of compatible multi-tasking, multi-user business systems. It is a professional microcomputer which combines the very latest microprocessor and disc storage technology with high speed throughput, reliability and expandibility. And today's technology means less space and greater flexibility – flexibility designed to meet today's and future needs for the growth orientated business user.

The powerful 16-bit processor provides fast and efficient response times; the 5¼" Winchester disc drive gives instant access to all data files and the high speed tape streamer produces back-up copies from disc files in a few minutes with complete record security.

The basic 3250 configuration has 256K bytes of memory, a 10 megabyte 5¼ Winchester disc drive and ports for the connection of up to four terminals plus two dedicated printer ports. Users requiring larger data file capacities may choose either a 15 or 28 megabyte disc drive according to requirements.

The system memory can be expanded up to 1 megabyte to support up to 12 visual display and printer terminals in full multi-tasking, multi-user operation.

The high performance streaming cartridge tape unit has a capacity of 20 megabytes and provides a quick and easy way to make end of day security copies of data stored on disc.
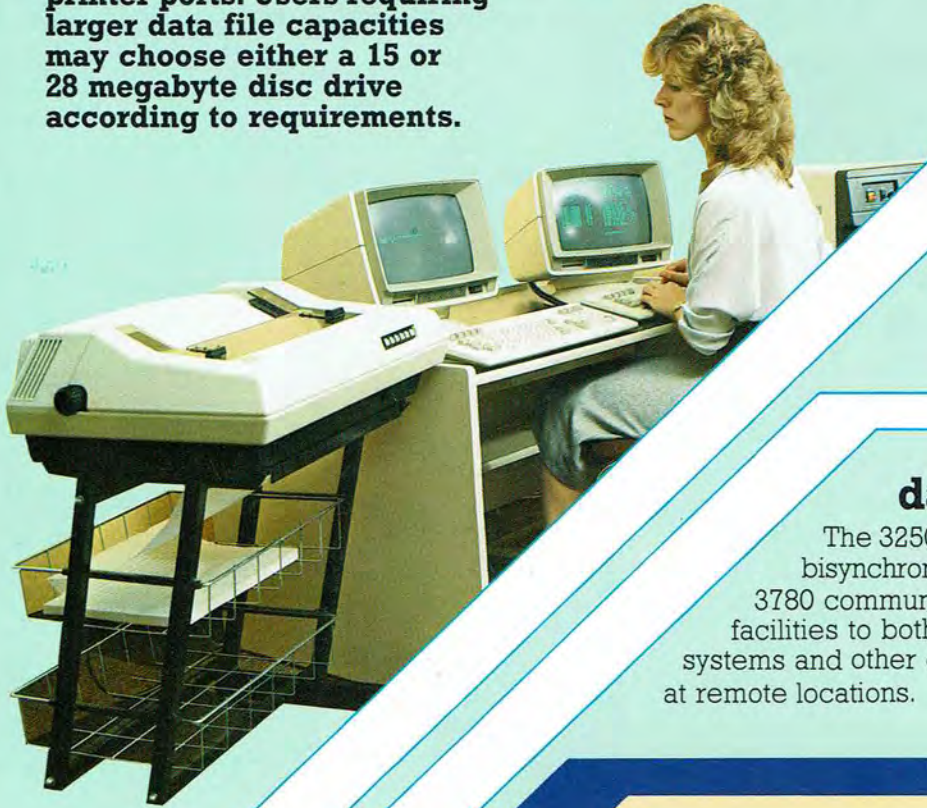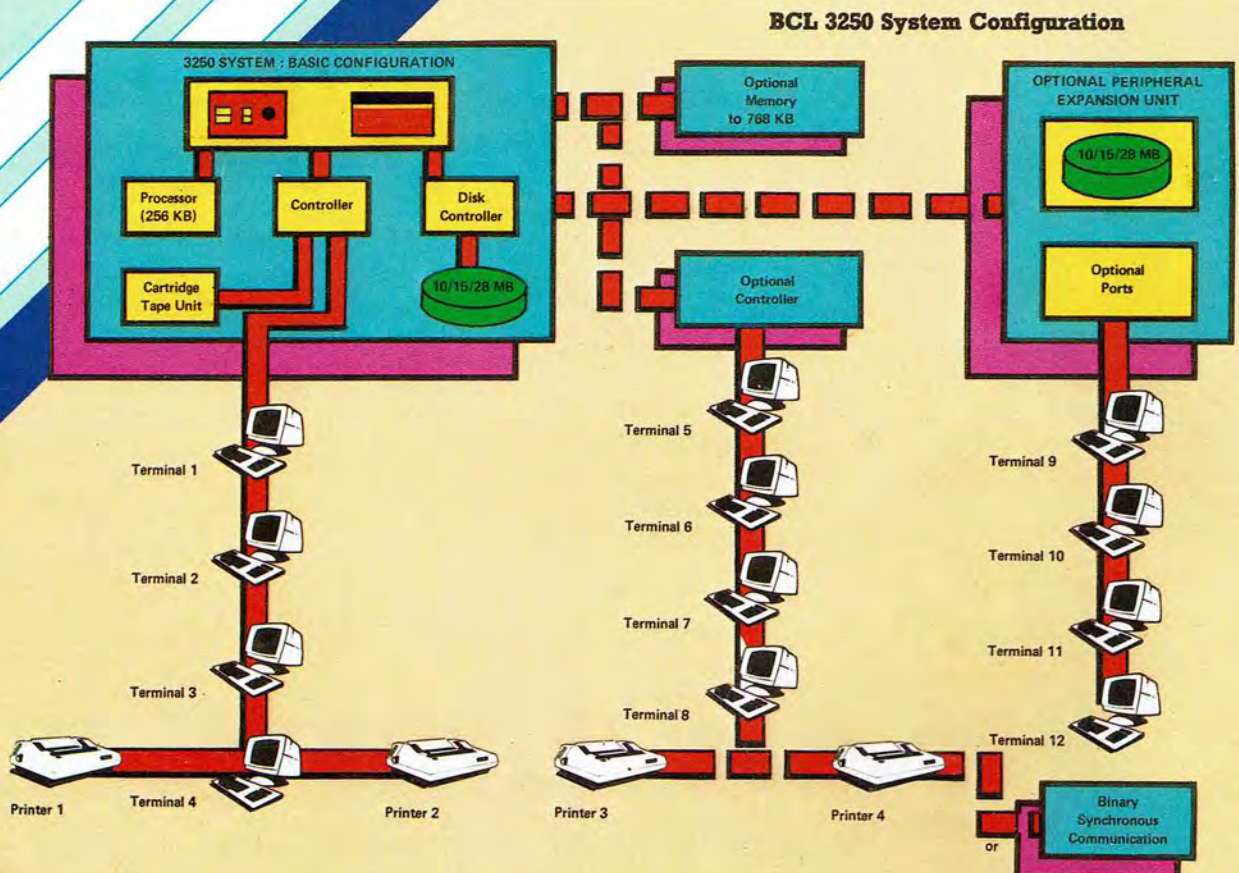
## hardware and software in complete harmony

data communications

The 3250 provides bisynchronous 2780/3780 communications facilities to both 3250 systems and other computers at remote locations.

It also has the facility for asynchronous communications to visual display and printer terminal for remote processing at depot and warehouse locations.

BCL 3250 System Configuration

3250 SYSTEM : BASIC CONFIGURATION

Processor (256 KB)
Controller
Disk Controller
Cartridge Tape Unit
10/15/28 MB

Optional Memory to 768 KB

Optional Controller

OPTIONAL PERIPHERAL EXPANSION UNIT
10/15/28 MB
Optional Ports

Terminal 1
Terminal 2
Terminal 3
Printer 1
Terminal 4

Terminal 5
Terminal 6
Terminal 7
Terminal 8
Printer 2
Printer 3
Printer 4

Terminal 9
Terminal 10
Terminal 11
Terminal 12

Binary Synchronous Communication
or

he expanding business

All of this processing power fits into a compact unit that is just 18 inches square.
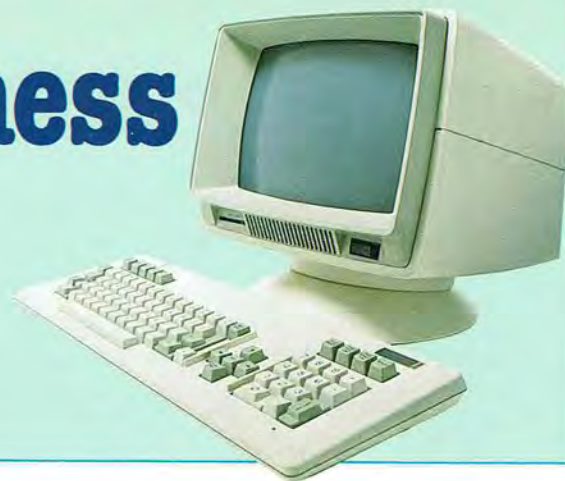
The multi-tasking MP/M 86 operating system of the 3250 provides extensive user flexibility by permitting not only the use of FAIRWAY, but also a very wide selection of industry standard and vertical market packages from the BCL catalogue. FAIRWAY is the first suite of multi-tasking software that takes full advantage of 16-bit memory addressing and therefore fully utilises the powerful and sophisticated capabilities of the 3250 to provide an impressive management tool for efficient and cost effective business control.

FAIRWAY is transportable across the entire range of the BCL 3000 series which has resulted in highly reliable packages not just for accounting functions but for many applications in trades and industries across the business spectrum.

MP/M on the 3250 will support BASIC, COBOL, PASCAL and ACL languages.

visual display terminals

The striking ergonomic design of the CT900 visual display terminal of the 3250 system incorporates many facilities for ease of operation.

The screen swivels and tilts so that the most comfortable working position can be assumed and the cable connected low-profile key board can be located as desired. The clear, crisp, green phosphor display features a large character matrix on an easy to read non-glare screen.

the BCL 3300 Winchester System

All the proven features of the 3250 are incorporated in the even more powerful 3300 system, which is compatible in every way, and provides an easy upgrade for business users whose workloads have outgrown the capacity of the 3250.

Disc storage capacity of the 3300 ranges from 56-140 megabytes and for users requiring unusually large data files the facility is inbuilt for a dual drive to be used with the system to provide a maximum of 280 megabytes of storage.

The 3300 can support up to 20 terminals in multi-user operation.

choice of printers

The 3250 offers a wide choice of printers with options and accessories to suit specific user requirements. Included are letter quality daisy wheel models operating at 40cps and dual-speed matrix printers operating from general purpose output at 240cps to correspondence quality output at 120cps.

versatile peripheral expansion unit gives even more processing power

If users need even more processing power the modular 3250 can be equipped, on site, with a peripheral expansion unit. This allows disc capacity to be enhanced with a further 10, 15 or 28 megabytes of Winchester disc storage and also gives the 3250 the versatility to handle an additional four visual display/printer terminals making a total of 16 peripherals in any configuration to suit user requirements.
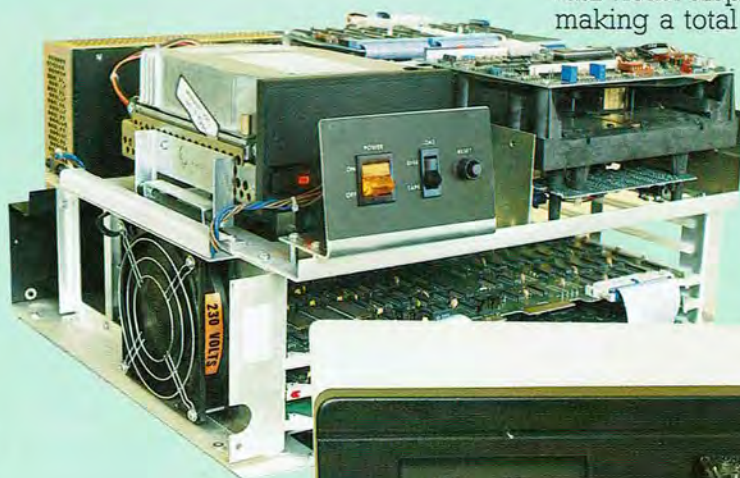
The rugged, compact 3250 Central Processor and Disc Storage unit is easy to service and expand.

FAIRWAY the total business and accounting suite of applications packages

FAIRWAY is a comprehensive suite of fully integrated business software applications packages designed to provide a total computer accounting system to cater for most needs across the business and commercial spectrum.

FAIRWAY enables all terminals to have on-line access to all data files and be operated independently on the same application or each carry out a variety of tasks concurrently with total file security.

FAIRWAY encompasses packages ranging from order entry, invoicing, sales, purchase and nominal ledgers and payroll to internal orders with parts explosion, stock history, sales statistics and personnel records.

In addition, there are over 110 standard reports available with FAIRWAY. These provide accurate and up-to-the minute information on which to base management decisions and achieve tangible benefits in overall business cost control. A great many more reports can be produced by the user employing the FAIRWAY report generator – Whiz.

FAIRWAY Application Modules

- Nucleus
- Sales Order
- Invoicing
- Order Processing
- Stock Control
- Stock History
- Product Assembly
- Sales Analysis
- Purchase and Nominal Ledger
- Payroll
- Whiz
- Crossword
- Document Writer

NUCLEUS – masterminds package integration

A unique software feature FAIRWAY NUCLEUS, controls all integration between packages, interaction between modules of FAIRWAY and automatically schedules events in a sequence to ensure maximum system through-put. Nucleus prevents out of sequence jobs from being processed and incompatible routines such as invoicing and end of period processing being carried out concurrently.

integration – optional facility

Although integration between packages has many advantages it is an optional facility. Users of FAIRWAY may integrate a series of packages at any level to suit their exact requirements. Additional packages may be used with an integrated system and operated in isolation until such time as the user wishes to phase them into the system. Integration is a painless process and performed at the flick of a software switch.

Application areas include:

- · Invoicing
- · Stock control
- · Purchase and nominal ledger
- · Purchase order processing
- · Word processing
- · Fixed assets
- · Time ledger
- · Estates management
- · Plant hire
- · Motor factors
- · Production order processing
- · Comprehensive builders package
- · Sales ledger
- · Management reports
- · Payroll
- · Sales order processing
- · Text processing
- · Job costing
- · Incomplete records
- · Solicitors accounting
- · Estate agents property matching
- · Tyre and exhaust retailing system
- · Distribution systems
- · Material requirements processing
- · AND the facility to use CP/M based application software packages.

total service and support

BCL operates a nationwide engineering service, sales, support and dealer network. Wherever you are there is a fully equipped service centre within easy reach to ensure the efficient operation of your system. A team of skilled personnel provide system support from convenient locations throughout the UK and our customer education department will train your staff to use the system.

**From a single source
Hardware – software – service – support**

BCL Business Computer Systems PLC

Head Office

Sunrise Parkway
Linford Wood
Milton Keynes
MK14 6LJ
Tel: 0908 665522
Telex: 825140

Branch Offices

London
01-207 3344

Birmingham
021-550 9161

Woking
04862 21663

Scotland
0506 30242

Rochdale
0706 57131

*Fairway is a trademark of Business Computer Systems plc
*MP/M is a trademark of Digital Research Inc

BCL 3250 DESK TOP WINCHESTER SYSTEM

TECHNICAL SPECIFICATIONS

CENTRAL PROCESSOR

Temperature	50°F-85°F(10°C-30°C) (operating environment)
Relative humidity	20% to 80% noncondensing (operating environment)
Heat dissipation	785 BTU/hr (200 Kcal/hr)
Electrical requirements	240 ± 10% AC, 50Hz, 250VA

CABLING

Power cord	8ft (2.4 metres) long

SIZE AND WEIGHT

Height	10½in (26cm)
Width	18in (45cm)
Depth	18in (45cm)
Weight installed	49lb (22kg)

EXECUTIVE PROCESSOR

Microprocessor	Intel 8086-2 (16-bit)
Memory cycle time	542 nsec
Memory access time	250 nsec
Memory capacity	256Kbytes of RAM
Processor cycle rate	7.3 MHz
Optional add on memory	Up to 768 Kbytes

DISC DRIVE

Capacities (formatted)	10,15 and 28 mbytes (5¼″ Winchester)
Sector size	256 bytes
Rotational latency	8.3 msec
Transfer Rate	5.0 megabits/sec
Rotational speed	3600rpm

10 and 15 mbyte units

Recording density	7690 frpi
Track density	345 tracks/in
Seek time (average)	85 msec

28 mbyte unit

Recording density	8730 bpi
Track density	800 tracks/in
Seek time (average)	45 msec

CARTRIDGE TAPE UNIT

Capacity	20 Mbytes (¼″ tape)
Disc to tape copy time	14 Mbytes in 4 minutes
Transfer rate	86.7 Kbytes/sec
Recording tracks	4
Speed	90 in/sec
Reading density	8000 bits/in