

INDUSTRIAL DATA PROCESSING APPLICATIONS REPORT

Applications	Order Handling and Billing
Type of Industry	Chemical Pesticide Manufacturer
Name of User	Pechiney-Progil Lyons-Vaise France

Equipment Used	Bull General Electric Gamma 30 Data Processing System
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Synopsis

Pechiney-Progil, France's leading manufacturer of chemical pesticides for agricultural, public health, garden and household uses manufactures over 600 different products which are sold to about 20,000 customers. Sales of these products, which represent approximately one-third of French pesticide production, require a high performance automated system to handle the resulting paperwork. For this purpose, the firm uses a Gamma 30 data processing system manufactured in France by Bull General Electric.

The computer's two major tasks are order handling and billing. For the first, input is provided by incoming order slips which, after transfer to punched cards, provide input to a Daily Orders file stored on magnetic tape. This file is then matched with others, also stored on magnetic tape, for retrieval of customer information, including sales terms, and updating of the Orders Outstanding file.

Billing is initiated by production of punched card delivery notices which themselves provide input for a magnetic tape Deliveries file. The latter serves to update the Orders Outstanding file and, after computations of individual bills, for production of invoices and statistical data. Accounts receivable data are recorded simultaneously with printing of invoices.

Through these automated procedures, Pechiney-Progil management reports that it now enjoys the continuously updated information required for effective control of what essentially are worldwide operations.

Hundreds of different pesticide products come daily off the production lines at Pechiney-Progil's main plant at Lyons-Vaise and other factories throughout France. Accounting for over a third of total French production, they also find wide use anywhere on the globe's five settled continents where men seek to protect themselves, their families and their crops from weeds, insects and other harmful pests. To meet the mounting paperwork burden brought on by its steadily expanding operations, the company uses a Gamma 30 data processing system manufactured

in France by Bull-General Electric. Through it, management now enjoys the firm, up-to-date control over company sales and production that is required for Pechiney-Progil's worldwide operations.

The Company

Pechiney-Progil's origins are reflected in its name, for it was founded after 10 years of planning in 1954 by two leading French producers of agricultural pesticides: Compagnie Pechiney and Societe Progil. From the first, the new organization had as a major aim the development and marketing of new agricultural pesticides which would be safer and easier to apply and more economical.

A second field of activity, public health, was soon joined to the first. Many of the deadliest diseases such as malaria, yellow fever, sleeping sickness and bubonic plague are spread by "vectors," intermediary carriers such as insects, rats and even snails. Pechiney-Progil products now provide new weapons in the fight against these disease carriers as well as other insect and animal pests. Similarly, as the company benefited from the results of its own research work and supplemented these results with the acquisition of patent licenses, it was enabled to market new products for gardening and household use.

Research plays an essential role in Pechiney-Progil activities. Every year, about 1,000 new products undergo testing at the company's anti-parasite center at Lyons. So thorough is this screening that at the end of the five years which usually elapse between initial testing and sales, only one out of every thousand of these new preparations is retained for marketing. Similarly, the formulation of both new and existing products is constantly reviewed by the chemical research laboratory to bring forth improved, more economical formulas. Their production, too, is the subject of research in a special "half-size" workshop which is equipped with a wide range of reduced scale industrial production units.

This work is done in the company's main plant at Lyons-Vaise. Power products are handled at the Peynier factory near Marseille. Another plant at Chazay-d'Azergues near Lyons produces up to 20,000 aerosol bombs a day. These activities are simultaneously characterized by a wide variety of products manufactured and a general absence of large production runs. Production capabilities are nevertheless adequate to meet sudden increases in demand such as that caused in some years by an abrupt rise in the number of insect pests.

EDP at Pechiney-Progil

Pechiney-Progil now ranks as the leading French pesticide manufacturer, accounting for about a third of the industry's gross money volume. This rank which the company has achieved and the steady growth of its sales have compelled Pechiney-Progil to automate its paperwork procedures progressively. The first installation was built around Machines Bull 150 electro-mechanical equipment, later supplemented by two Bull Gamma 3 electronic calculators. This installation has been replaced by a Bull G. E. Gamma 30 computer system installed and on the air within a year of its being ordered.

The magnetic tape-oriented Gamma 30 system has a memory capacity of 20,000 positions of alphanumeric core storage. Its configuration includes a 600 card-a-minute reader; a printer operating at speeds of up to one-thousand 120-position lines a minute; and six magnetic tape drives with a maximum read/write speed of 10,000 characters a second.

The computer's chief task is to handle orders and billing for the 600 different Pechiney-Progil products which are sold to over 20,000 customers. In doing so, it fulfills four major functions:

- Order, order book, accounts receivable, inventory and fiscal control.
- Invoicing of goods delivered - about 150,000 lines of billing data edited monthly (see Fig. 1).
- Computations of commissions, discounts and costs.
- Statistics and reports providing such information as quantities sold in each region and political unit, sales terms, sales volume for each salesman, region and political unit, etc.


PECHINEY-PROGIL - SOCIÉTÉ POUR LE DÉVELOPPEMENT ET LA VENTE DE SPÉCIALITÉS CHIMIQUES SIÈGE SOCIAL A PARIS - R. C. SEINE 84 9 841 SOCIÉTÉ ADRIENNE AU CAPITAL DE 18.360.000 F DIRIGÉES GÉNÉRALISTES ET INDUSTRIELLES 8 RUE, RUE PIERRE BAILEY SAINT-HAMBERT-LEZ-LYON (69100) PRÉFÈRE D'ADRESSER TOUTE CORRESPONDANCE BOITE POSTALE 74 LYON-TERRAUX TEL. LYON (03) 28-74-81 C. C. P. 101 LYON TÉLÉGRAMMES PECHPRO-LYON - TÉLEX PECHPROGRAM 51041										
CLIENT MONSIEUR GEMINET G. 15 R. GABRIEL-PÉRI MONTGEMON S. ET O.		CLIENT N° 78 00022 X 00 RÉFÉRENCE À APPELER SUR TOUTE CORRESPONDANCE ET RÉGLEMENT								
DOMICILIATION STE. GÉNÉRALE MEULAN		FACTURE N° 62 5153 DU 11 10 63								
DESTINATAIRE		MODE DE RÉGLEMENT TRAITE								
CONDITIONS DE FACTURATION 1 REMISE D'AVANT SAISON 2 REMISE AD VALOREM		DATE D'ÉCHÉANCE FIN 11 63								
LA DATE DE RÉPAY DE L'ÉCHEANCE EST CELLE DE L'ÉPÉMENT DES MARCHANDISES										
CODE PRODUIT	QUANTITÉ	DÉSIGNATION DES PRODUITS	RÉP.	P. UNIT. TARIF P. ET	VOIR CONDITIONS DE FACTURATION	P. UNIT. NET P. ET	QUANTITÉ	MONTRANT NET	T. V. A.	
4009	512	KR. HERBONEX	KHB	690	5	3	636	60	38160	20
4019	312	KR. GAZON LIQUIDE	KGL	280	5	3	258	36	9288	10
4031	420	KR. SOL	KS1	390	5	3	359	80	28720	10
4035	424	KB. LIMACE	KLA	95	5	3	88	96	8448	10
4043	404	KB. POUDEUR KB. JARDIN	PJ	2700	5	3	2488	16	39808	20
4045	302	KB. PULVERISATEUR KBJ	PJK	4800	5	3	4315	6	27090	20
4053	212	KB. TOTAL PULVERISATION	TP	690	5	3	636	24	15264	10
4055	212	KB. FRUIT	KF	595	5	3	548	24	13152	10
4057	120	KR. ENGRAIS PLANTES, POT	EP	270	5	3	249	20	4980	10
4059	220	KB. POLISH	PO	370	5	3	341	40	13640	20
4061	324	KB. CONSERVATEUR BOUQUET	CB	290	5	3	267	72	19224	20
6030	112	SUPERHUMBE ECONOMIQUE	BE	350	5	3	323	12	3876	20
6032	312	SUPERHUMBE STANDARD	B11	475	5	3	438	36	15768	20

Fig. 1 - PREPARATION OF BILLS for 600 different Pechiney-Progil products sold to about 20, 000 customers is one of the Gamma 30's most important applications.

Two of the most important computer runs which these procedures involve are the daily updating of the Orders Outstanding to reflect orders received that day and billing for goods already delivered (see Fig. 2).

Orders Outstanding Updating

Information from incoming order slips is punched into cards to provide input for a Daily Order file on magnetic tape. This file is compared with the Customer file (also stored on magnetic tape, as are all other files) for retrieval of suitable name, address and other information for appropriate customers. The resulting Edited Daily Orders file is compared in another pass with the permanent Customer Sales Terms file. This latter file provides discount percentages applicable to each individual bill. Thus completed, the Edited Daily Orders file is then matched in a third step with the Orders Outstanding file to update the latter. A listing of orders outstanding is printed out simultaneously, with data for each product line included within a single order taking up one line of the report.

Billing

In the Pechiney-Progil system, order handling is completed by automated billing procedures. These begin with the production of punched card delivery notices which provide input for the creation of a Deliveries file stored on magnetic tape. These data are then matched with the Orders Outstanding file to update the latter and for retrieval of information on each order to be invoiced that day. Data from the resulting Orders to Be Invoiced file are then processed for billing of each product line included in a single order and of the entire order. The Invoices file thus prepared provides input for printing of individual bills. Simultaneously, accounts receivable information is captured on a magnetic tape. The fully worked-out billing information which went into the preparation of the Invoices file is also retrieved on magnetic tape for daily updating of the Annual Statistics file which is always available for management to consult.

This automated system has not merely brought added efficiency to billing procedures but has also permitted payments to be cycled for each customer. The latter, instead of paying their bill for each order now pay on the average of twice a month to cover all purchases for the preceding period. In this way, the company has achieved substantial savings in paperwork costs. Customers, too, have benefited. Their own accounting has been made much simpler through the periodic, comprehensive payments which they now make.

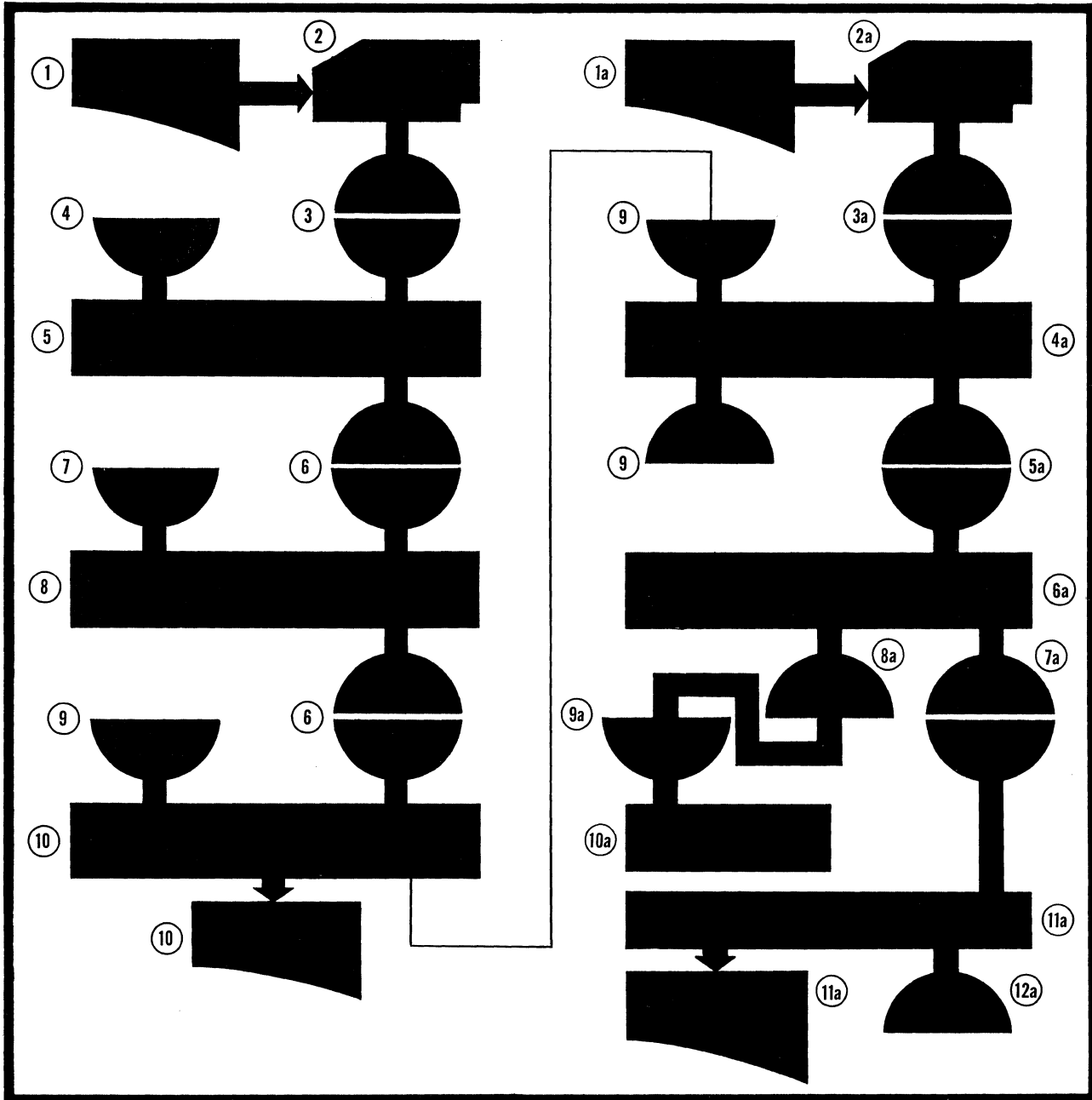


Fig. 2 - PECHINEY-PROGIL ORDER-HANDLING (at left) AND BILLING (at right) SYSTEM.

FLOW CHART TERMS TRANSLATION

1. Bon de Commande: order slip.
2. Carte Commande: card punched for each order.
3. Commandes du jour: Daily Order file.
4. Fichier Clients: Customer Information file.
5. The Daily Order File is edited for inclusion of relevant customer information.
6. Commandes du jour Documentees: Edited Daily Order file.
7. Conditions consenties aux Clients: Customer Sales Terms file.
8. Rates and terms for each product line included in each order are retrieved from the Customer Sales Terms File to complete the Edited Daily Orders File.
9. Carnet de Commandes: Orders Outstanding file (order book).
10. Orders Outstanding file is updated and a revised listing is simultaneously printed.
- 1a. Avis de livraison: delivery notice.
- 2a. Carte de livraison: card punched for each delivery notice.
- 3a. Livraison: Deliveries file.
- 4a. Retrieval of data for orders to be invoiced that day and updating of Orders Outstanding file.
- 5a. Commandes a facturer: Orders to Be Invoiced file.
- 6a. Billing for each product line included in each order and of the entire order.
- 7a. Facturer: Invoices file.
- 8a. Statistiques du jour: daily statistics.
- 9a. Ruban Statistiques annuelles: Annual Statistics magnetic tape file.
- 10a. Consultation a la demande: permanently accessible.
- 11a. Individual bills printed and checked.
- 12a. Tresorerie: Treasurer's department (accounts receivable data).

Results

EDP has, according to Pechiney-Progil executives, brought the company a number of significant advantages. For instance, the Orders Outstanding file, always up-to-date as of the preceding day, permits management to obtain on request a thorough analysis of these orders by product line, by customer, by sales territory and by industry. This permits efficient management control of production, inventory, and marketing and fiscal policies.

Automation has also brought substantial advantages to the company in its relations with its customers. Constantly updated files are now maintained for all customers at the head office and appropriate branch agencies. Similarly, sales terms to be granted are now computed automatically and methodically; each salesman's production and activities is under continuous control; and a like control is exercised over order fulfillment.

Finally, top management is now provided with detailed, analytical reports highlighting distribution, sales volume for each sales territory, inventory trends, and marketing costs and efficiency.

These results have been achieved through the speed and accuracy of computer processing. Gamma 30 operations at Pechiney-Progil have thus made the results of monthly computations of salesmen's commissions, inventory levels and general and special statistics available on the fourth business day of the following month. In a single 12-hour run during peak periods, the system can complete the orders outstanding file updating and billing procedures, producing 1,600 invoices, averaging 15 lines each and all the while recording statistical and accounts receivable data.