

Hollerith Electric Tabulating System / 1890 Herman Hollerith (1860-1929)

## House for the History of IBM Data Processing

### **Purpose**

- Demonstrating the history of IBM's data processing efforts, ranging from 1890 (Hollerith) through the Deutsche Hollerith Maschinen Gesellschaft, (DEHOMAG, 1910 -1949) up to 1995 (IBM).
- Disseminating information about the achievements which IBM accomplished as
   Data Processing Pioneer

and
Establisher of a German Technology Center

#### **Activities of the Club Members**

- · Conducting guided tours
- Maintaining the installed machines
- Completing the collection of historical IBM equipment

The exhibited Machines and Devices are restored and workable



DEHOMAG Tabulator D 11 with Summary Punch / 1935

Data processing started with the Punched Card System which **Herman Hollerith** invented and developed to a working product during the years 1882 to 1890. The first successful application of the Hollerith Electric Tabulating System (processing 63 Million cards) occurred during the US Census of 1890. The first large-scale commercial application was introduced in 1895 by a US railroad company.

In the 1905/08 time span Hollerith reoriented his punched card system predominantly toward commercial applications. Thereafter the number of customers in industry, commerce and administration grew rapidly.

In Germany the Hollerith-System reached a peek success in September 1935 with the introduction of the **D** 11 printing numeric Tabulating Machine developed by the **DEHOMAG** at Berlin (Germany). The **D** 11 was capable of multiplying, dividing and direct balancing, and could also punch results into punch cards. Its control panel provided the means to mechanize large and complex processing steps.

Character printing started in the USA in 1931 following the introduction of the 80-column card in 1928. Character printing was introduced in Europe in 1950.

In addition to the tabulator, all other machines which were in use in a Hollerith Department are also shown: Card Punch, Sorter, Collater, Interpreter etc.



IBM 1401 Data Processing System with Magnetic Tape Units / 1959

Electronic data processing started in the USA in the early 1950s, with Germany following not much later. At first, the large enterprises took advantage of the new means offered by electronic data processing.

Towards the end of the 1950s the transistor technology provided an increase in processing speed. Magnetic cores and magnetic tapes allowed larger storage for programs and data. This caused a wider acceptance of electronic processing. The **IBM 1401** contributed significantly to this success.

In 1964 the **IBM System/360** represented for the first time a complete family of processing machines with common architecture. The technological progress led to new dimensions in performance. The basic ideas of this architecture are prevalent even today.

The breakthrough into the aera of database systems, video terminals, world-wide communication and thus direct on-line data processing was achieved via large-scale integration of circuitry. This threshold is represented by the **IBM/370** family of systems, introduced in the early 1970s.

The trend of higher performance at lower prices for computers as well their application programs alike, led to a penetration of all aspects of life by the computer.

Our newly designed, spacious PC Department can only mentioned here.



#### IBM Devices for Banking Applications

In 1934 IBM developed its first device for teller applications, the Proof Machine IBM 801. This machine accepted, endorsed and sorted cheques. In Germany this machine was known as the IBM 803, which was used up into the 1950s. Thereafter, the IBM 1060 replaced it in 1962. It was the first on-line terminal which included a keyboard and a protocol printer capable of printing a balance into a deposit book. Also, money could be withdrawn or deposited, using just the deposit book as legimitation. Highly successful was the IBM 3600 System, introduced in 1973, which was the first computer system that operated unattended around the clock. It offered a large number of bank-specific devices, such as video consoles, keyboards, printers, magnetic stripe readers, and cash terminals. In 1981 the IBM 4700 System followed, eventually replaced by PC-Terminals.

## **Typewriters**

In 1933, IBM began the production and development of electric typewriters, starting with the *Electromatic*. As of 1948 and right through to 1979, IBM produced the Models A, AA, B, C, and D. In 1961, the IBM SELECTRIC Typewriter was put on the market. This machine was revolutionary for the market. Together with the Magnetic Tape Typewriter, the IBM Composer, Dictating Machines and Copiers, IBM created in 1963/64 the **Textprocessing** application. Also the complete range of Office Systems is exhibited.



IBM Electromatic / 1933

Last but not least, the Electronic Invoicing Machine IBM 632 must be mentioned. This machine was capable of conducting multiplications and punching results into punch cards as required for the creation of sales statistic reports.

In 1911, Hollerith's Tabulating Machine Company (which was established in December 1896) was merged with two other enterprises, the Computing Scale Company of America (CSCA) and the International Time Recording Company (ITR) to form the Computing Tabulating Recording Company (CTR). This company was renamed to International Business Machines Corporation (IBM) in 1924.

The CSCA produced *Computing Scales* which were used worldwide in various businesses, such as groceries, butcher shops, etc.

*Time Recorders* were produced first by the ITR, later by IBM, and sold world-wide until 1963.

**Guided Tours for Groups** (that is, lectures and demonstrations) can be arranged for 8 to 12 Persons four weeks in advance by appointment.

(Such guided tours can include merely a selected number of the exhibited machines)

The Information Point (i-Punkt) at Sindelfingen's Old City Hall offers Guided Tours for individuals. Appointed dates and Bookings via Phone: (049)-(0)7031-94-325

The House for the History of IBM Data Processing (HzG) was established in 1988 at Böblingen by former IBM people, and was transferred to Sindelfingen where it exists since 1995 in IBM's former card printing plant.

The HzG is operated by members of the section "IBM Geschichte" of the IBM Klub Böblingen e.V.

Nov. 2006 / © FWK + RZ Flyer HzG E241106



English

# House for the History of IBM Data Processing

## at Sindelfingen



### Bahnhofstr. 43 (at corner Neckarstr.) 71063 Sindelfingen

E-Mail: historyh@de.ibm.com Tel.: 07031 - 41 51 08

Parking lot behind the building (approach from Neckarstr,)