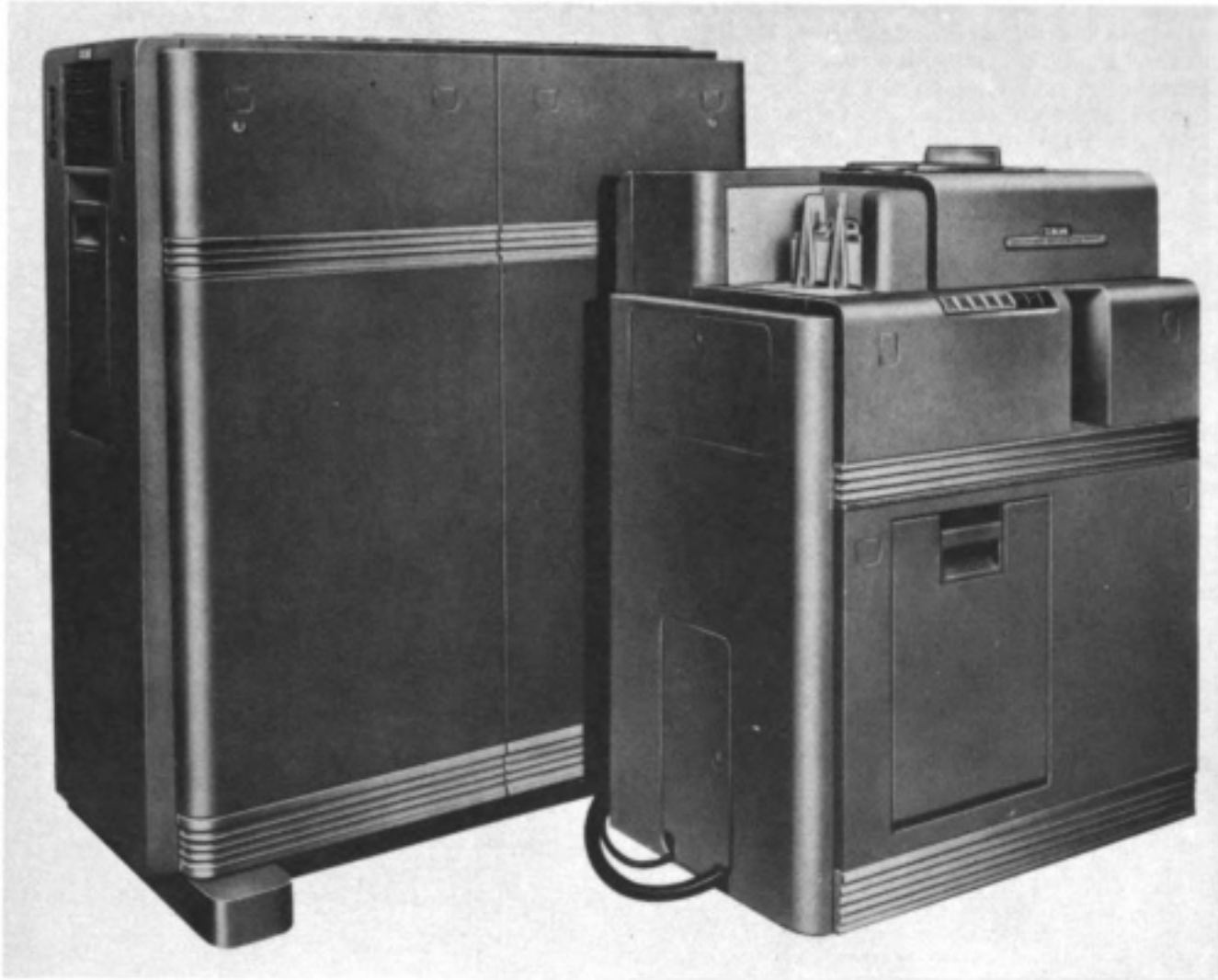


# IBM 604

Type 604 Electronic Data Processing Machine

## MANUFACTURER

International Business Machines Corporation



Picture by International Business Machines Corporation

### APPLICATIONS

Manufacturer  
Business and scientific.

Industrial Sample  
Bridgeport Brass Company  
Payroll, standard cost, sales price extensions;  
machine is basically a multiplier.

### NUMERICAL SYSTEM

Internal number system	Binary coded decimal
Decimal digits per word	3 or 5
Instructions used	9
Arithmetic system	Fixed point
Instruction type	One or two address code
Number range	Variable

### ARITHMETIC UNIT

Time	Microsec
Add (exclud. stor. access)	500
Mult (exclud. stor. access)	14,000 average

Div (exclud. stor. access)	17,000 average
Construction	Vacuum tubes
Basic pulse repetition rate	50 KC
Arithmetic mode	Parallel
Timing	Synchronous
Operation	Sequential

### STORAGE

Media	Words	Microsec Access
Electronic Tubes	9	500

### INPUT

Media	Speed
Card Reader-Punch	100 cards/min

### OUTPUT

Media	Speed
Card Reader-Punch	100 cards/min

## CIRCUIT ELEMENTS ENTIRE SYSTEM

Tubes 1,250  
Tube types 4

### CHECKING FEATURES

Checking is possible through control panel wiring.

### POWER, SPACE AND WEIGHT

Power, computer 7.59 KVA  
Space, computer 73.9 cu. ft. 19.4 sq. ft.  
Weight, computer 1,949 lbs.

Industrial Sample  
Bridgeport Brass Company  
Power requirement is 5.1 KW.

### PRODUCTION RECORD

Produced 2,994  
Operating 2,904  
Delivery time 12 months

### COST, PRICE AND RENTAL RATE

Manufacturer  
Approximately \$550/month and up.

Industrial Sample  
Bridgeport Brass Company  
Rental rate is \$660/month, including 10% tax, for basic system.

### PERSONNEL REQUIREMENTS

Industrial Sample  
Bridgeport Brass Company  
Three operators or technicians utilized.

### RELIABILITY AND OPERATING EXPERIENCE

Manufacturer  
Average service time for all installed machines is approximately 10 hours per month.

## INSTALLATIONS

Government Sample  
U. S. Department of Commerce, Coast and Geodetic Survey, Washington 25, D. C.  
Industrial Sample  
Bridgeport Brass Company, Bridgeport, Connecticut  
Chesapeake and Potomac Telephone Company, Baltimore, Maryland  
Dow Chemical Company, Midland, Michigan  
General Electric Company, Schenectady, New York  
Hercules Powder Company, Wilmington, Delaware  
Manning, Maxwell and Moore Company  
Raybestos Company  
Singer Manufacturing Company  
Southwestern Computing Service, Tulsa, Oklahoma

### ADDITIONAL FEATURES AND REMARKS

Manufacturer  
The IBM 604 Electronic Calculator is a general purpose electronic digital computing machine which is helping solve problems in science, engineering, business and government.  
Reading problem data from IBM punched cards at a constant speed of 100 problems (cards) a minute, it can go through as many as 60 separate steps, such as multiplications and divisions, to obtain the solution to a single problem. Answers are recorded in the same cards which carry the problem data, or they can be punched in specially designated cards.  
The smaller of the two cabinets is the electrical card reading and punching unit. The larger cabinet is the all-electronic unit which includes the following sections: power, timing, arithmetic, storage and switching.  
Many built-in features make this electronic calculator easy to operate and service. These include interchangeable control panels for changing from one type of operation to another, and testing devices and pluggable subassemblies which facilitate rapid maintenance and service.  
These machines have been produced on the assembly line at IBM's plant in Poughkeepsie, New York, since early 1949.  
Industrial Sample  
Southwestern Computing Service  
Utilized for providing contract computing service.