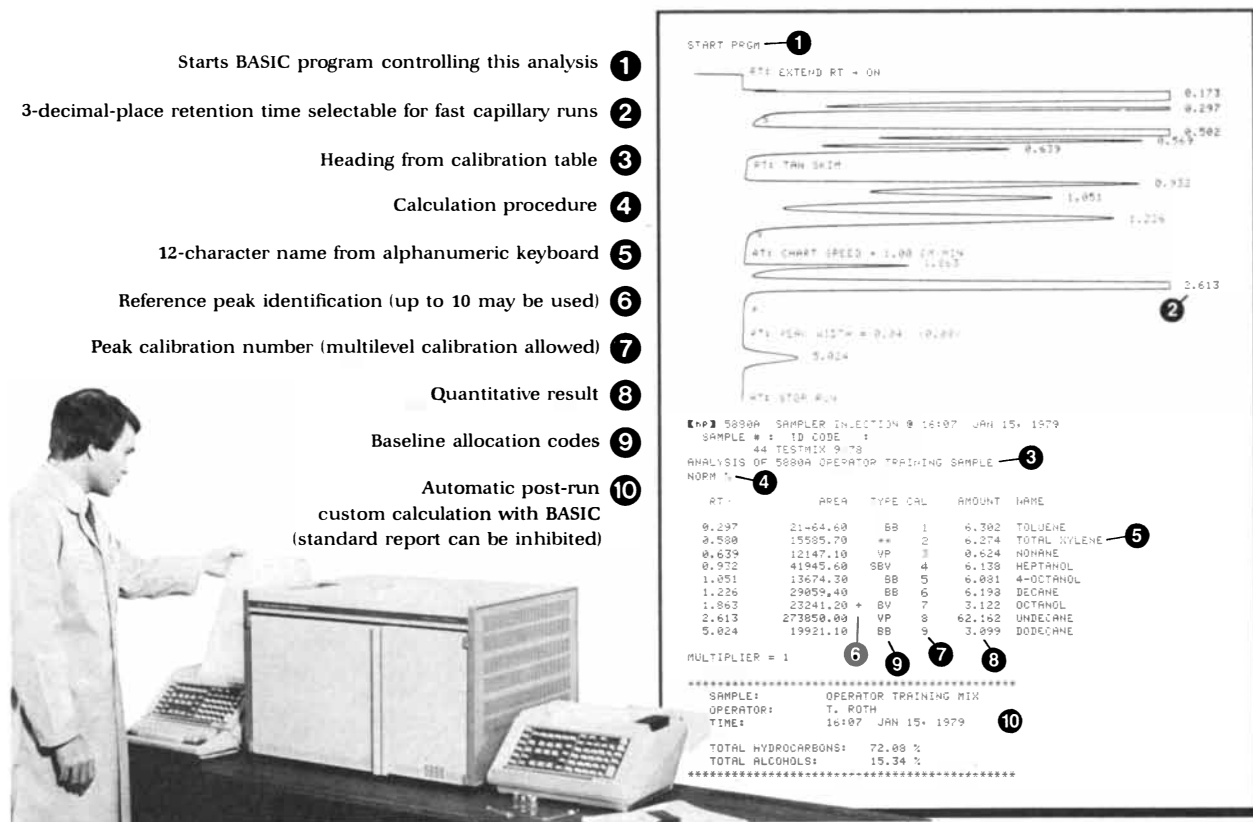


HP measurement and computer advances



HP's new 5880 series gas chromatographs: a productive combination of analytical and computing power.

The automation of analytical instruments has been a major trend of the last decade. The HP 5880 series gas chromatographs break new ground by adding decision-making capability.

Gas chromatography is an essential tool for organic chemical analysis in industrial and research fields. As each component in the sample under analysis elutes from a column, it passes into a detector which generates an electrical signal. This is plotted on a chart as a chromatogram. The HP 5880 advances this technique: it not only analyzes the sample, plots the chromatogram, and computes the results, but can also respond to those results by interpreting the data and modifying chromatographic conditions or data-handling procedures to yield better answers.

Programming power.

The key is microprocessor control using a version of BASIC language tailored to gas chromatography. Through easily learned BASIC statements, the operator can write programs to access the data generated during a run and execute commands that change

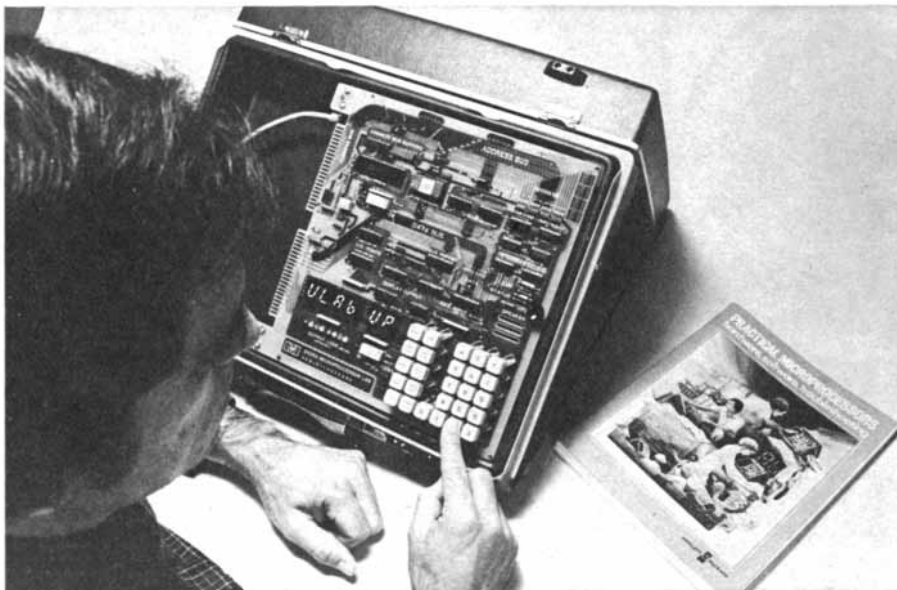
the 5880's analytical conditions—just as if the commands were entered through the keyboard. Program statements can enable the 5880 to reanalyze a sample, change the oven temperature, modify the internal and external events tables, and perform other functions to increase the chromatograph's usefulness and accuracy—all automatically and unattended.

Expandable and versatile.

New developments in analytical technology complement the 5880's programming power. An extensive range of accessories is available, including automatic samplers, valves, electronic flow and pressure controllers, and an auxiliary oven. Further examples of advanced hardware versatility are a new single-filament thermal conductivity detector that is ready for use within 30 minutes from a cold start, and a new flame ionization detector with standard autoignition.

The simplest HP 5880 configuration is a single-detector, isothermal instrument that costs \$7185*. It can be expanded in increments to a fully automated, multiple-detector, multiple-keyboard configuration with dual-channel data processing and programmability.

extend your possibilities.



***New HP training aid teaches how microcomputers work
and how to troubleshoot them when they don't.***

With the rush to put computation and control capability into a wide variety of technical and consumer products, manufacturers and equipment service organizations around the world have a pressing need for people who understand microprocessors and microcomputers. Now Hewlett-Packard can foster that understanding with the HP 5036 microprocessor lab.

HP's new 5036 microprocessor lab is a fully functioning microcomputer with an accompanying textbook that teaches a 50-hour, entry level course in microprocessor and microcomputer fundamentals. It gives product development, production, and service people both theoretical knowledge and practical, hands-on experience in programming and troubleshooting microcomputers.

With the addition of the HP 5004 signature analyzer and the HP 5024 troubleshooting kit, the microproces-

sor lab gives the user more extensive training in microcomputer fault location and, in addition, provides the hardware for troubleshooting microprocessor-based products in development lab, production line, or field service environments.

Housed in a rugged briefcase, the microprocessor lab is compact, simple to use, and comes with its own power supply, keyboard, and alphanumeric LED readout. The circuit board is laid out exactly like a microcomputer block diagram, with full labeling and color keys to give the user a sound understanding of hardware and software operations while revealing cause and effect relationships.

Designed for self-study as well as for use in the classroom or industrial training center, the microprocessor lab provides easy access to the mysteries of interfacing microprocessors in product design, and troubleshooting at the component level. Price of the HP microprocessor lab is \$800*; the HP 5004 signature analyzer is \$990*; and the HP 5024 troubleshooting kit is \$625*.



1502 Page Mill Road, Palo Alto, California 94304

For assistance call: Washington (301) 948-6370, Chicago (312) 255-9800,
Atlanta (404) 955-1500, Los Angeles (213) 970-7500, Toronto (416) 678-9430

Mail to: Hewlett-Packard, 1502 Page Mill Road, Palo Alto, CA 94304
Please send me further information on

- ☐ HP 5880 series gas chromatograph
- ☐ HP 5036 microprocessor lab

Name _____
Company _____
Address _____
City _____ State _____ Zip _____

*Domestic U.S. prices only.

00943