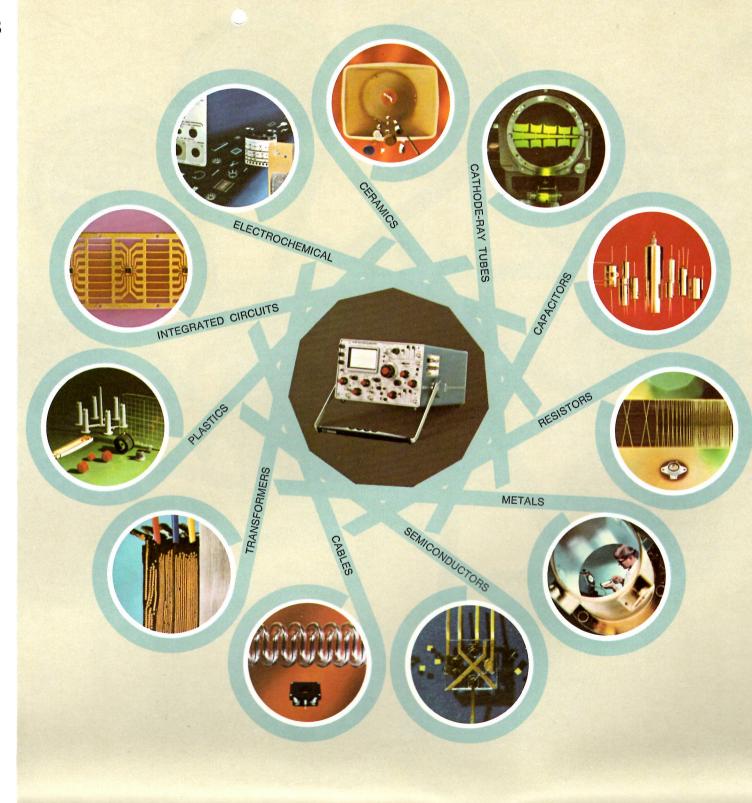


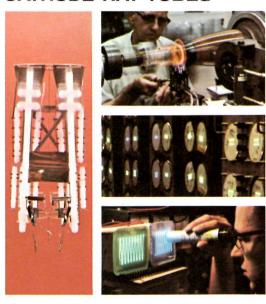
TEKTRONIX
1969
CALENDAR



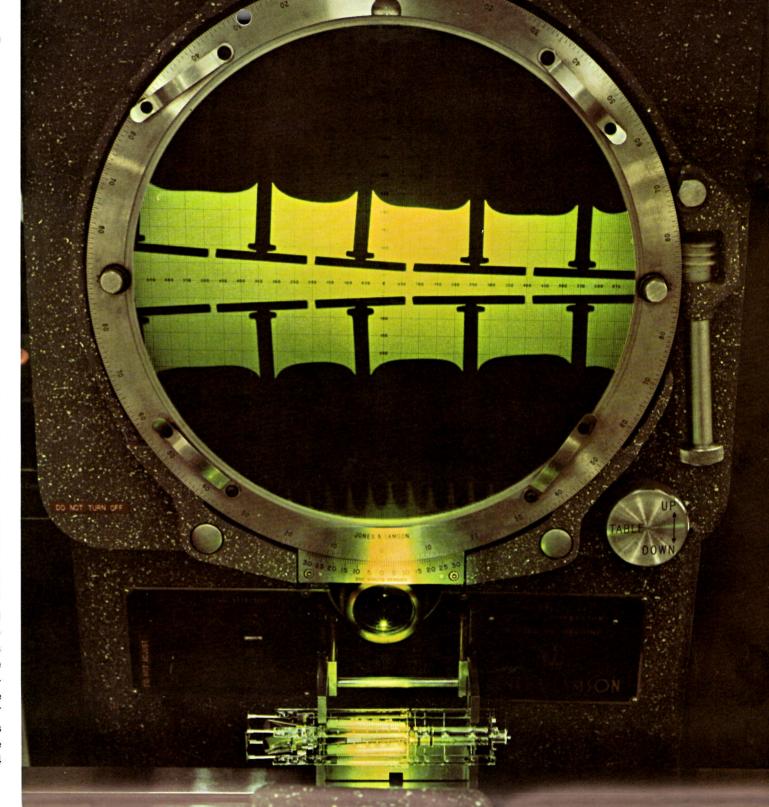
To manufacture high-performance oscilloscopes, we find it necessary to design and manufacture many components including: integrated circuits, transformers, resistors, capacitors, switches, relays, circuit boards, cathode-ray tubes, coaxial cables, and ceramic parts. The pages of this calendar illustrate our component manufacturing activities.



#### **CATHODE-RAY TUBES**



At Tektronix, the cathode-ray tube is designed for each instrument to optimize total performance. The DC-to-150 MHz bandwidth, 2.4-ns risetime Type 454 Oscilloscope is an example of CRT and circuit design combining to provide unique measurement performance. The electron optics developed for the Type 454 CRT feature distributed vertical deflection plates (illustrated), that contribute significantly to the measurement performance of the Type 454 Oscilloscope.



## **CERAMICS**

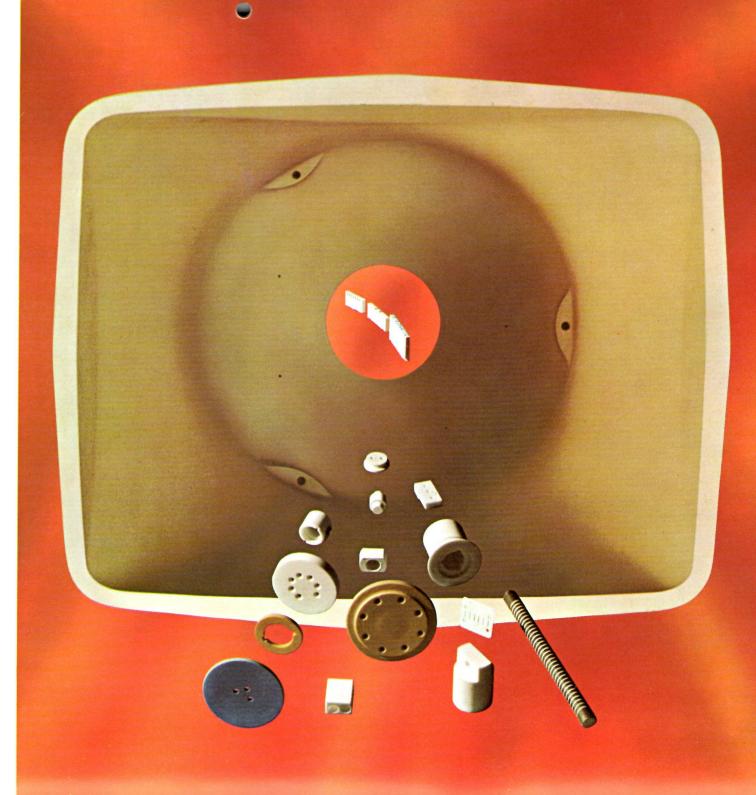




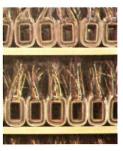




Tektronix has a 49,000 square foot building devoted exclusively to ceramics. Our ceramic technology gives us the ability to produce ceramic CRT's with increased strength, tight internal tolerances, and improved edge lighting for the illuminated internal graticules. We also produce a wide variety of specialized ceramic parts designed to satisfy specific oscilloscope requirements.



#### **POWER TRANSFORMERS**

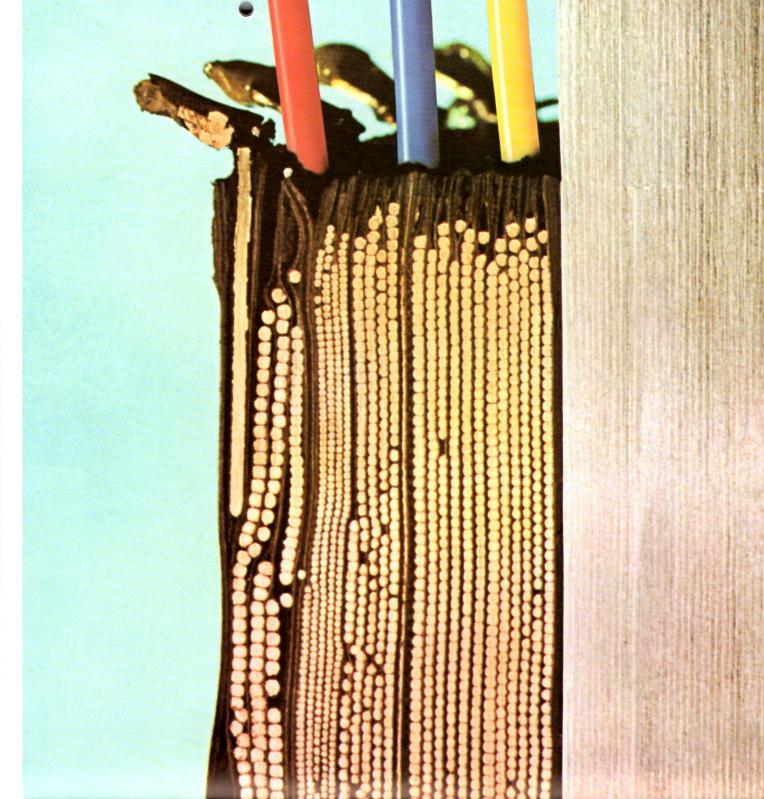








Power transformers, designed and manufactured at Tektronix, are warranted for the life of the instrument. Designing and manufacturing our own transformers, permits our engineers to easily satisfy the power supply requirements of each instrument.



## **CABLES**

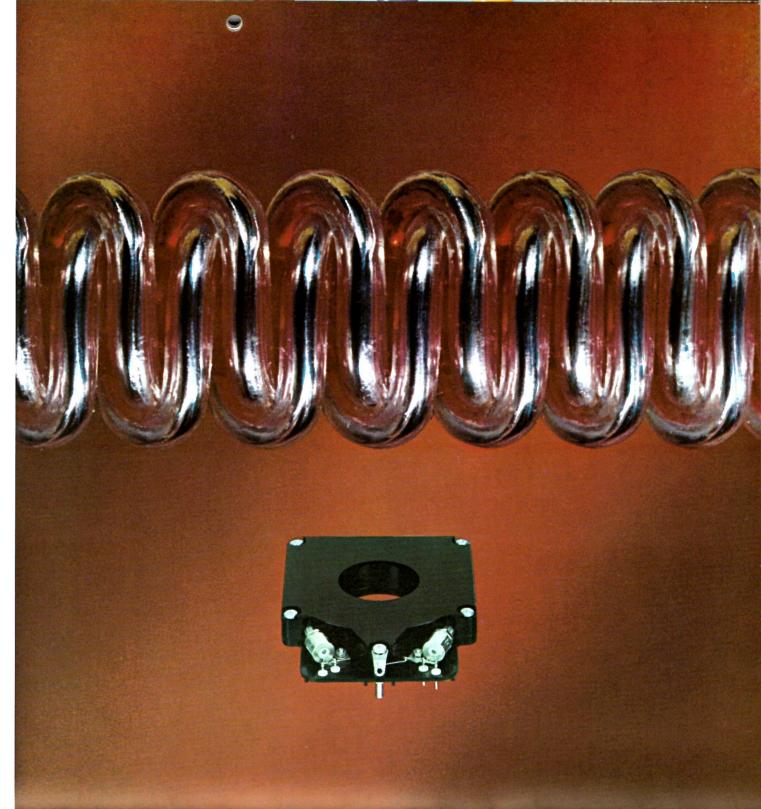




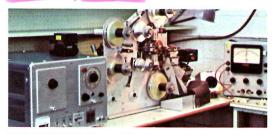




We manufacture more than 2,000,000 feet of probe cables and delay lines each year. Our cable technology permits us to make compact delay lines and voltage and current probes that are a necessary requirement for high-performance oscilloscopes. The illustrated over-and-under winding technique provides increased pulse delay and preserves waveform fidelity.

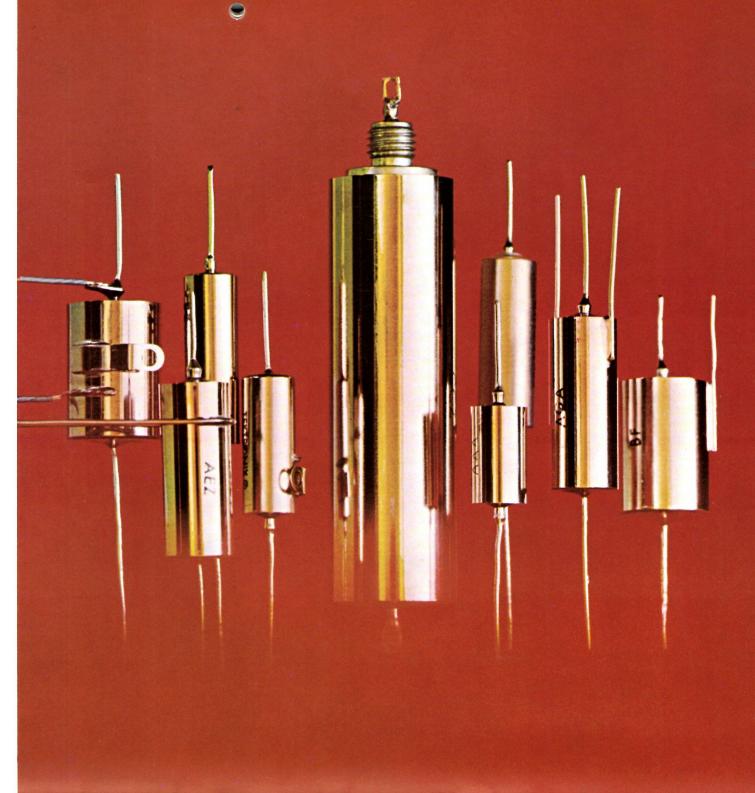


## CAPACITORS





Timing capacitors and input-coupling capacitors are critical components in oscilloscope performance. Building our own capacitors permits us to meet specific performance requirements and make special sizes and mounting configurations.



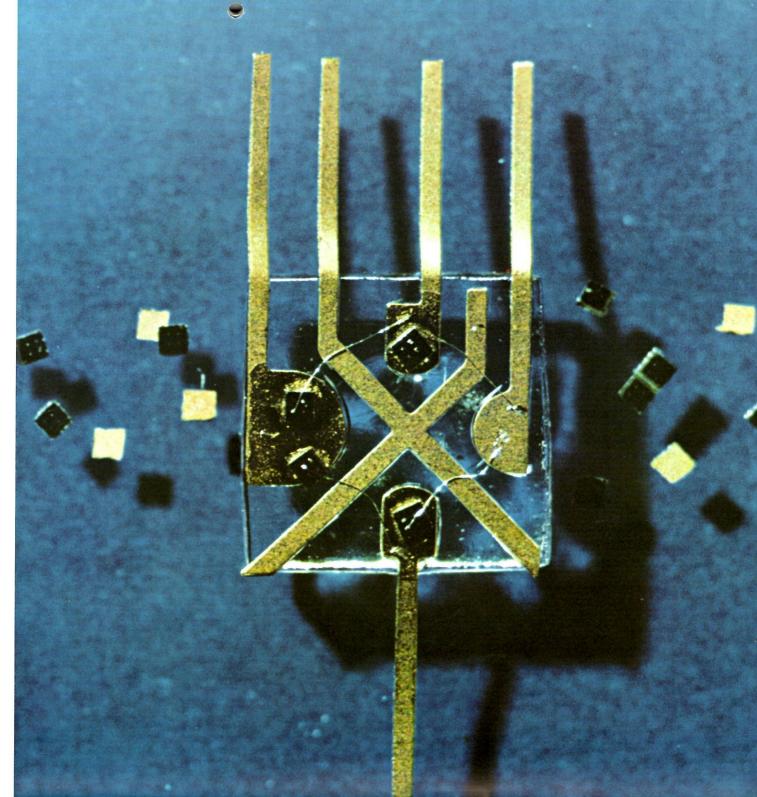
1969

## **SEMICONDUCTORS**





Tektronix designs and manufactures semiconductors to satisfy specialized instrument requirements. Notable examples are semiconductors used in sampling oscilloscopes that feature state-of-the-art measurements. Illustrated is the Type S-3 Sampling Bridge that contains four matched diodes in a single package.



1969

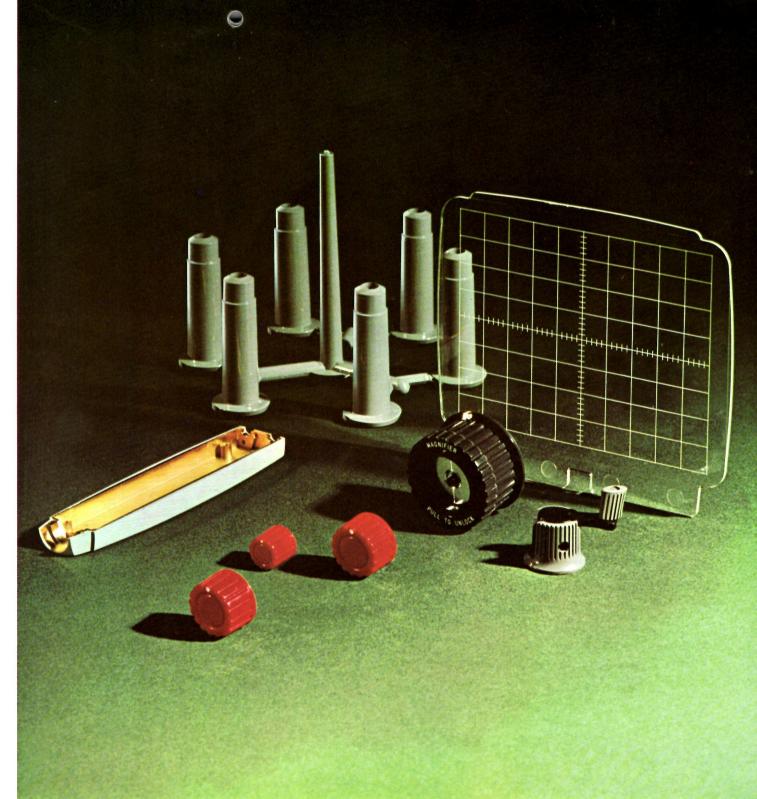
#### **PLASTICS**







Plastics technology provides Tektronix with many components. Voltage and current probe parts are made with special plastics that reduce undesirable electrical effects and withstand rugged use. A special packaging material protects instruments and parts during shipment. Other plastic parts include special switch couplings, handles, knobs, capacitor mounts and covers, and many other items designed to optimize oscilloscope performance.



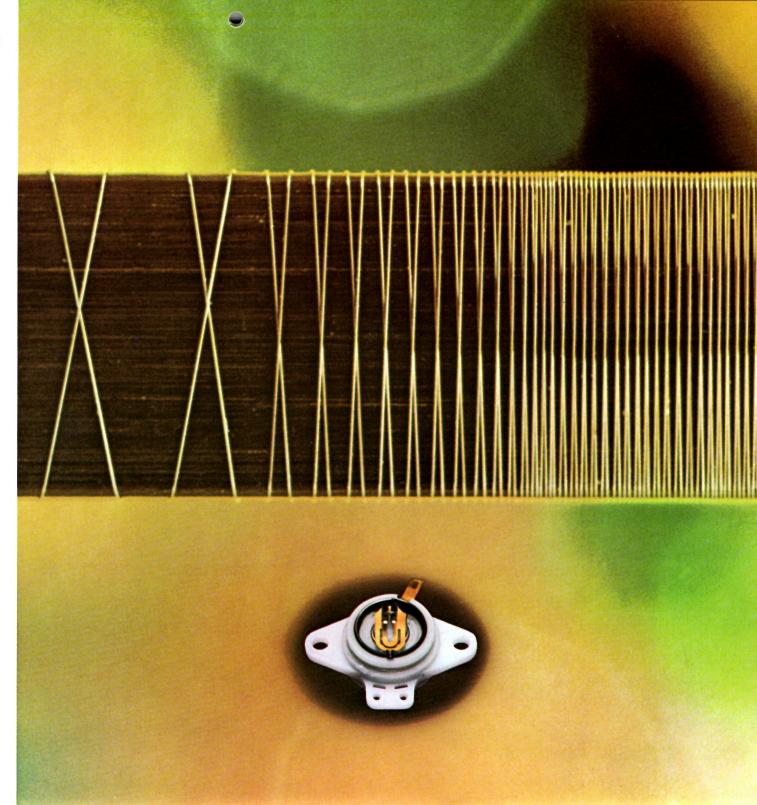
#### **RESISTORS**







Variable resistors, with reverse and multiple pitched windings (illustrated), provide a controlled inductance per unit resistance. Used as variable controls in Tektronix oscilloscopes, they change the vertical gain of the oscilloscope while maintaining pulse fidelity. We also design and manufacture precision power resistors and high-frequency output resistors that contribute to unique oscilloscope performance.



# SEPTEMBER 1969

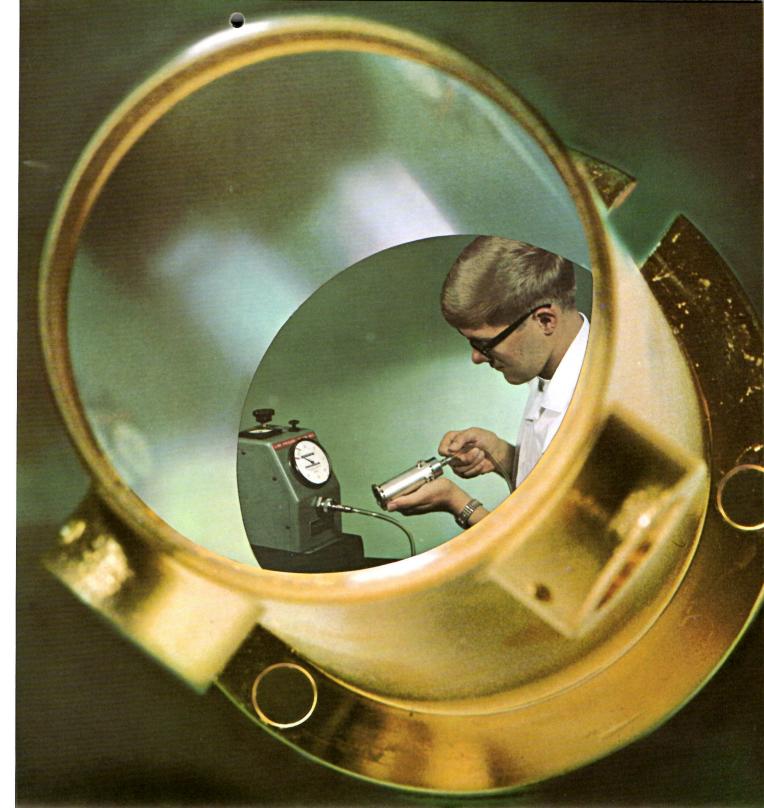
## **METALS**







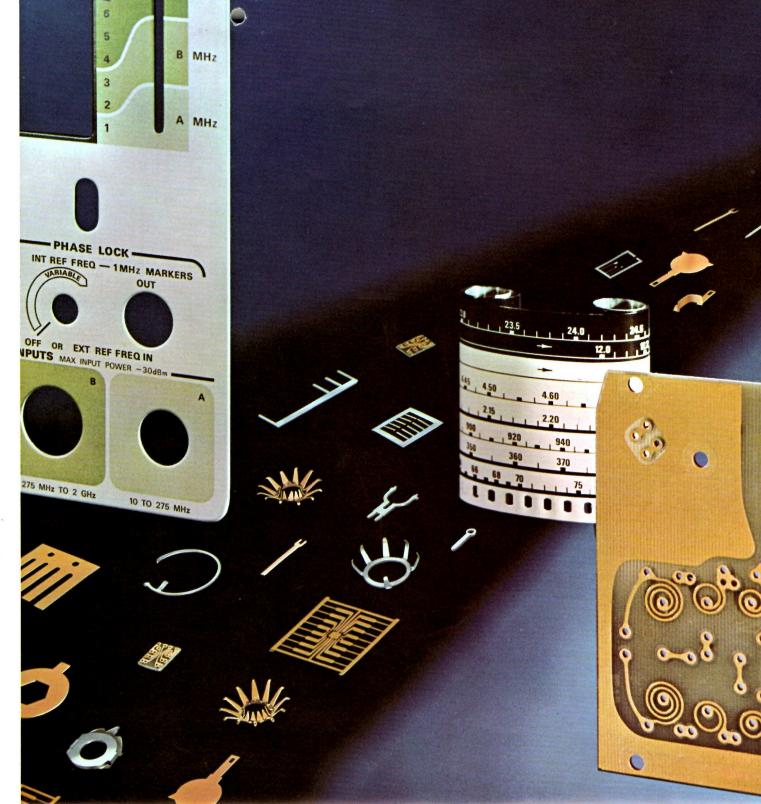
Fabrication of any and all metal parts, from the precision machining required for spectrum analyzers to forming chassis of oscilloscopes, gives Tektronix a valuable tool in the design of new products. Our metals technology and production capability provide design freedom for our engineers.



## **ELECTROCHEMICAL**



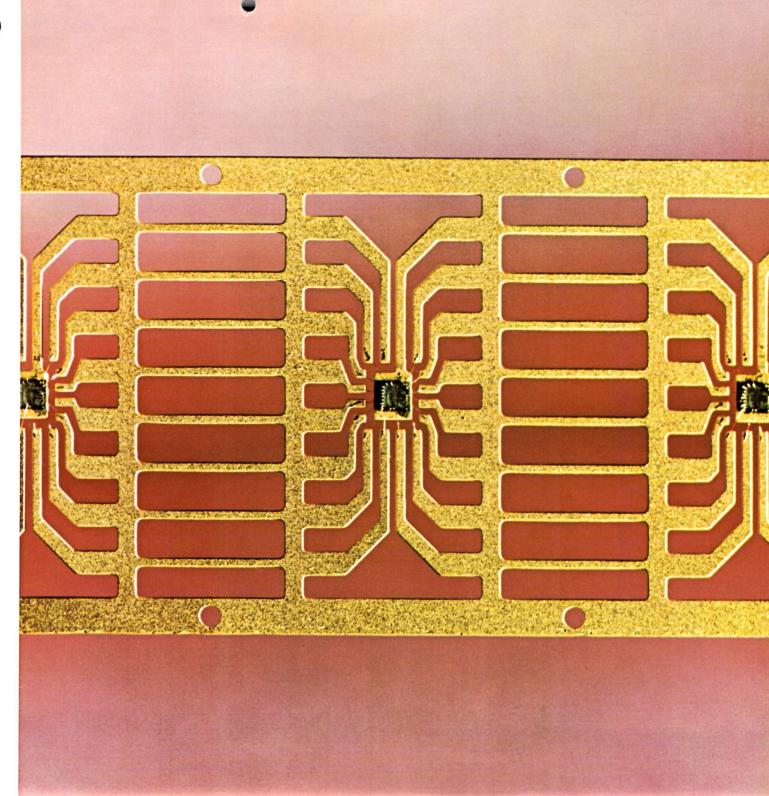
Electrochemical laboratories, engineering support, and a large production capability provide many special parts for today's oscilloscopes. Chemical machining can quickly produce prototype parts for evaluation by design engineers while maintaining critical tolerances. Precision electroplating of plastics and other materials, and electroforming intricately shaped parts are daily tasks of our electrochemical department.



## **INTEGRATED CIRCUITS**



Integrated circuits offer significant new opportunities in instrument performance. Recent developments include a highly-sensitive Hall device for the unique P6042 DC Current Probe and the integrated circuits used in the Type 576 Curve Tracer.



# DECEMBER 1969





The oscilloscope is a basic measuring tool. Tektronix has developed a wide variety of technological disciplines that provide the broad base needed to produce the advanced oscilloscopes required for further development of electronic devices, circuits, and systems.

