



The Eimac division of Communications & Power Industries (CPI) was originally founded in 1934 as Eitel-McCullough, Inc. The company's first products were transmitting vacuum tubes which operated at low voltages, a design feature driven by the needs of the Ham radio community. Under the leadership of the founders, Bill Eitel and Jack McCullough, the company grew and expanded to meet the needs of the U.S. military, so that by 1945 it was shipping 3,500 tubes per day from two manufacturing plants. Following the end of the war, the company refocused on the commercial broadcast industry and developed new tubes for that application. Regarded as a technical innovator in the design of gridded power tubes, Eimac became the worldwide leader in the broadcast tube industry.

In 1965, Eitel-McCullough merged with Varian Associates and became known as the Eimac Division. The company continued to advance the technology, and developed high power vacuum electron devices (VEDs) which incorporated innovative Pyrolytic graphite grids for short-wave and UHF television broadcast. In addition, output power levels in excess of 2.5 megawatts mark Eimac as the technology leader in high power gridded VEDs for scientific research.

In 1995, Leonard Green & Partners purchased the entire Electron Devices Business from Varian and formed Communications & Power Industries, Inc. This new company, with sales of \$250 million, consists of the Beverly Microwave Division, Satcom Division, Microwave Power Products Division, Communications and Medical Products Division (located in Canada), and the Eimac Division.

The Eimac Division is headquartered in San Carlos, California, the manufacturing facility they have occupied since 1958. Under the direction of division president Mike Cheng, the Eimac Division continues the tradition of technological advancement and unequalled quality. Today at their ISO 9001 certified facility, Eimac designs and produces power VEDs for broadcast, communications, radar, industrial heating, science and medical applications. Eimac power VEDs are used in FM, shortwave, and television broadcast transmitters, defense communications and radar systems, industrial dielectric heating equipment, MRI scanners, and plasma research, with customers located in virtually every country in the free world. In 1990, as a result of energy efficient performance of the Klystrode® IOT, Eimac was awarded an Emmy by the Academy of Television Arts & Sciences for technological achievement. The Klystrode IOT is today the most technologically advanced high power output device available for use in HDTV and UHF television transmitters, and is being installed in digital television stations across the U.S. and around the world.





Eimac was kind enough to publish a booklet entitled the *Care and Feeding of Power Grid Tubes*, which will be helpful to those who are planning careers in technical aspects of radio and television broadcasting.

The following hyperlinks will take you to a portable document format (pdf) version of this booklet. It is in six sections. You will need Adobe Acrobat or Adobe Acrobat Reader to open these pages, which can be downloaded. To download on a Macintosh, OPTION-click on each link. To download on a Windows pc, right-click on each link, then choose **Save Source As...** from the pop-up menu that will appear.

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