

MERCURY
VAPOR
and
NEON
PRODUCTS
in
INDUSTRY



SINCE 1903

Cooper Hewitt lamps have found their way into one plant after another in some 30 different industries. Never have they been bought for beauty of design, low price, or any such abstract reason.

Installations that you see around the country exist because Cooper Hewitt light has brought new economies to production sections. It has made machine and product details easy to see, which in ordinary light were barely visible.

Cooper Hewitt light has always had to prove itself to be better than anything else, not excluding daylight.

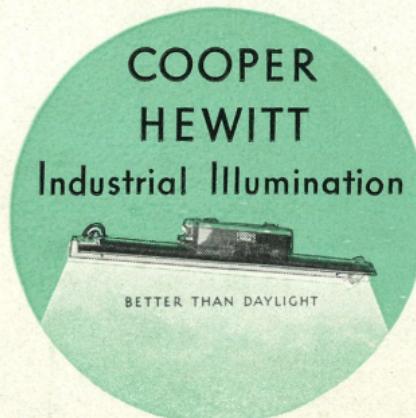
In photographic studios you find Cooper Hewitt lamps on the job day in and day out aiding the expert photographer to turn out quality work. Cooper Hewitt light is accepted by professional photographers as standard equipment for the studio.

Uviarcs and Lab-Arcs—(mercury arcs in fused quartz) are recognized in many quarters as the world's most efficient artificial ultra-violet light source. They have proved to be invaluable in many commercial applications and in the chemical laboratories of schools and colleges.

Kon-nec-tors (mercury contact switches) are comparatively new but they are fast replacing metal contact switches in a great many applications. They are highly efficient and thoroughly dependable.

Neon Glow Lamps, made in $\frac{1}{4}$ to 3 watt sizes, have countless industrial uses as pilots, signals, exit lights, etc. They give 3,000 hours continuous service.

On the pages following you may read some of the accomplishments of these vapor products.



COOPER HEWITT LAMPS and UVIARC

One of the largest and best-known hosiery mills in the South is lighted 100% with Cooper Hewitts. The lamps are on 8' x 8' centers. Mill executives and employees alike claim they have the best-lighted seamless mill in the country. They have been Cooper Hewitt boosters for over eleven years.

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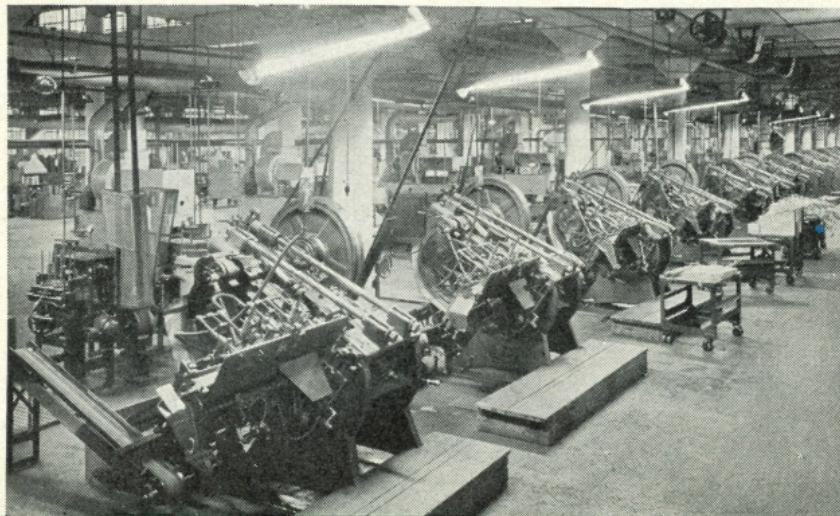
In a leading automobile plant there are six Keller electrically operated automatic die-sinking machines. Each of these \$25,000 machines is lighted at an approximate cost of 2 cents per hour. And that covers current, renewal tubes and periodic cleaning of lamps. Twelve cents per hour represents the total cost of "Better than Daylighting" these machines worth \$150,000.

* * *

In one of the country's most important rayon plants, Cooper Hewitt light is used in the machining, drilling and inspection of the small platinum jets for rayon spinning machines. Operators here must use high power microscopes because the tolerance limits are extremely minute. There are some 60 or more perforations in the nozzle heads which are virtually impossible to see even near a north window. Yet, under Cooper Hewitt light, they are plainly seen. Is it any wonder that more than 60 per cent of the rayon made in the United States is processed under Cooper Hewitt light?

* * *

In a small town in Ohio there is a plant which at last report was running full production, 24 hours a day, 7 days a week. They were producing and inspecting *under Cooper Hewitt light* an average of 17 carloads of glassware and bottles daily. Cooper Hewitts to show up the defects in the glass—the bottles ultimately to satisfy an apparent national thirst for 3.2.

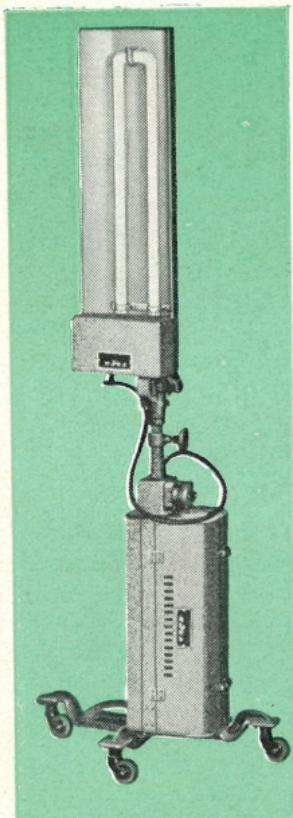


Section of Press Department in the Clearing, Illinois, plant of the Continental Can Company, Inc. Continental uses over 2,700 Cooper Hewitt lamps in 17 plants.

INDUSTRIAL LAMPS.

S . . . bring new economy and

Cooper Hewitt Light Units for every photographic use . . .



U-Tube . . . for lighting copy boards, title work, printing etc.

For photographers, Cooper Hewitt lamps are made in a variety of models, some with mercury tubes alone, others with mercury tubes in combination with Neon tubes or in combination with Mazda lamps. They are used for overhead and side lighting in the studio, copying, title work, enlarging and for special effects. All are high in actinic value and remain so through the long life of the tube.

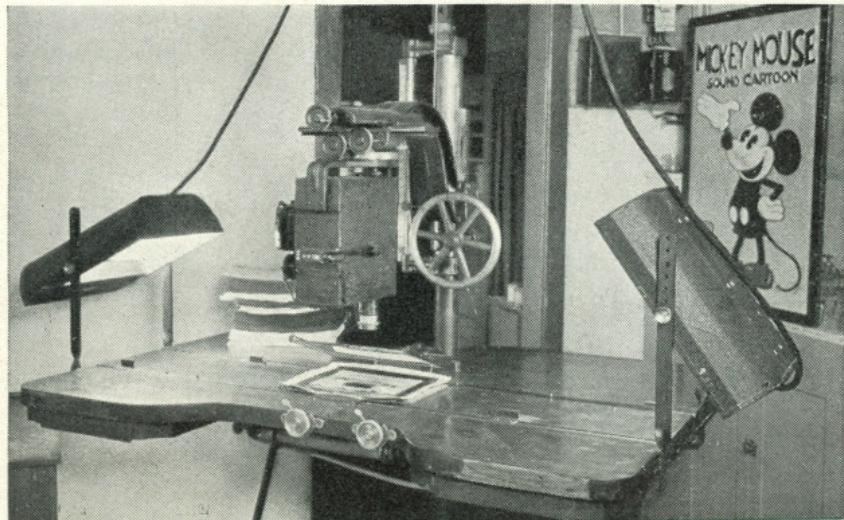
Complete descriptive catalogs sent upon request. But here are a few interesting examples of photographers' experiences:

The photographic department of the Packard Motor Company is equipped with combination mercury vapor-in-candescent units. Mr. J. A. Whitbeck, who is in charge, has had this balanced colored lighting for more than eight years and has worked with Cooper Hewitt lamps for over eighteen years.

* * *

Mickey Mouse has been photographed under Cooper Hewitt light ever since he was created by Walt Disney, of Hollywood. For each lineal foot of Mickey Mouse projection film more than 16 separate shots are taken.

This means that for 15 minutes of entertainment (approx. 1,000 ft. of film) 16,000 or more pictures are taken, one at a time. The light must be good.



Mickey Mouse cartoon set-up in studio of Walt Disney Productions, Ltd., Hollywood, Cal. Mr. Disney has used Cooper Hewitts since he started his cartoon work nearly twelve years ago.

... PHOTOGRAPHIC

efficiency to industrial plants

Ultra Violet Light Sources for commercial and laboratory use



Uviarc Test Cabinet used for testing 20 to 60 samples of fabrics, yarn, paint, wood, etc.

The UVIARC lamp is the most successful commercial source of ultra-violet radiation available for practical work. It has a great many applications, most of which are described in detail in Bulletin 105B. A copy of this bulletin will be sent to you upon request.

* * *

Most of the large paint and varnish manufacturers use Uviars in accelerated weathering tests. That's because exposing a painted object to Uviarc light for 24 hours is equivalent to exposing it to sunlight for 6 months.

* * *

America's largest maker of yeast uses Uviars for the activation of Vitamin D.

* * *

Most of the leading motor car manufacturers employ Uviars for testing products used in the production of cars. They test, for instance, the durability of lacquer, upholstery and roofing materials, and non-shatterable glass.

* * *

Pharmaceutical laboratories use Uviars for analytical testing of their products.

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LAB-ARCS are designed specifically to combine all the advantages found in other mercury-arc lamps with special provisions for safe and convenient use in the physical laboratories. Bulletin 104B gives full details. There is a copy for you if you want one.

KON-NEC-TORS **and** N

have hundreds of

STURDY KON-NEC-TORS

**made in sizes and types to meet
hundreds of switch needs . . .**

Kon-nec-tors are strongly built, long-lived mercury to mercury contact switches. Made of extremely hard glass with sealed inleads of tungsten which contact the pools of mercury at each end of the glass tube. Operate by tilting which makes and breaks the circuit as the pools of mercury unite and separate.

Reliability, precision and convenience make the Kon-nec-tor the ideal switch for—

Pressure, Temperature, Time and Float Controls—Weighing Machine Controls—Sign Flashers—Safety Switches—Toggle Switches—Street Lighting Controls—Traffic Controls—Flashing Beacons and many other uses.

* * *

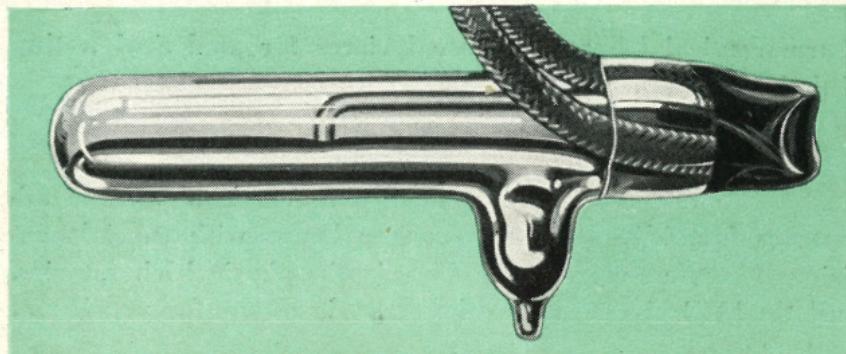
The Takamine Corporation in Long Island City, N. Y., makes thousands of reverse phase relays every year for use in elevators made by Otis, A. B. See and others. For years Kon-nec-tors have been the choice of Takamine engineers to stand guard in this important control device.

* * *

Kon-nec-tors are available for handling currents up to 50 amperes and may be applied to voltages up to 550 A.C. and 250 D.C.

* * *

NOTE—This company makes also a complete line of metal to mercury contact switches. Used to make and break circuits controlling lamp, motor, heater, operating coil loads, temperature and pressure devices, etc. Operated by simple mechanical methods, heat responsive elements or electrical devices. Available for handling currents up to 50 amperes . . . voltages up to 550 A.C. and 250 D.C.



8-31KR1 . . . Single Pole Single Throw Kon-nec-tor (size reduced for illustration) equipped with 12" flexible leads. Maximum capacity 50 amperes at 125 volts, 40 amperes at 250 volts.

NEON GLOW LAMPS

applications



3-Watt Bulb S14
Finish—Clear
Sprayed red or yellow



2-Watt Bulb S14
Finish—Clear
Sprayed red or yellow



1-Watt Bulb G10



0.5-Watt Bulb G10
Supplied in 1.0-Watt
for 220, 230, 240 Volts



0.25-Watt Bulb T4½
Supplied with candelabra
base only

NEON GLOW LAMPS **at new low prices reach wider range of uses . . .**

Neon Glow Lamps have these unique features: Low current consumption, distinctive color, rugged construction permitting their use at vibratory points without any hazard, and a low level of illumination. New low prices have made them available for hundreds of applications which heretofore were neglected because of the relatively high cost of the lamp used.

* * *

In a plant of a large automobile manufacturer there is a monorail stock conveyor three miles long driven by 36 five-h.p. motors and controlled by 144 safety switches. The centrally located control board, 7 ft. x 12 ft., has on it 180 one-watt, 220 volt Neon Glow lamps used as indicators for each motor and each safety switch. The designer, electricians and operators say that Neon Glow lamps are ideal for this purpose because they are sensitive, low in current consumption, long-lived, cool and glareless which results in accuracy, economy, safety and comfort.

* * *

In electrical testing, Neon Glow lamps may be used as complete test equipment . . . for resistance and capacity check . . . testing for grounds, shorts, voltage, polarity, frequency, and determination of the grounded leg in a 3-wire system. As an indicator or pilot a Neon Glow lamp is ideal for soldering irons, remote control light, packaging machines, glue pots, coffee urns . . . in connection with any device having an electrical heating element . . . automatic machinery, etc.

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Complete details regarding applications, prices, etc., will be sent upon request.

WHY DON'T YOU USE YOUR TELEPHONE?



It takes no more than a telephone call to the nearest General Electric Vapor Lamp Company office for you to learn of the advantages which Cooper Hewitt Vapor products can bring to your plant. Why not make that call today? There is no obligation.

GENERAL ELECTRIC VAPOR LAMP COMPANY

899 Adams Street, Hoboken, N. J.

Tel.: REctor 2-4553 or HOboken 3-10200

ATLANTA, GA.

187 Spring St., N.W.
Tel.: WALnut 7832

DETROIT, MICH.

General Motors Building
Tel.: MADison 4401

BOSTON, MASS.

250 Stuart St.
Tel.: HANcock 6367

PHILADELPHIA, PA.

424 Chestnut St.
Tel.: LOMBard 4463

BRIDGEPORT, CONN.

955 Main St.
Tel.: 4-3700

PITTSBURGH, PA.

307 Fifth Ave.
Tel.: ATLantic 3172

CHARLOTTE, N. C.

200 S. Tryon St.
Tel.: 3-2798

ROCHESTER, N. Y.

183 Main St., East
Tel.: STONE 4300

CHICAGO, ILL.

37 West Van Buren St.
Tel.: HARRison 0248

ST. LOUIS, MO.

611 Olive St.
Tel.: CHestnut 7593

CINCINNATI, OHIO

First National Bank Building
Tel.: MAin 3464

HOLLYWOOD, CAL.

Keese Engineering Corp.
7380 Santa Monica Blvd.

Tel.: GRanit 1443

CLEVELAND, OHIO

1365 Ontario St.
Tel.: MAin 1302

SAN FRANCISCO, CAL.

Keese Engineering Corp.
557 Market St.
Tel.: SUtter 5328