

facts about rapid start

This is good...

This is better...



the newest

**FLUORESCENT
LIGHTING SYSTEM**



THE RAPID START FLUORESCENT LIGHTING SYSTEM

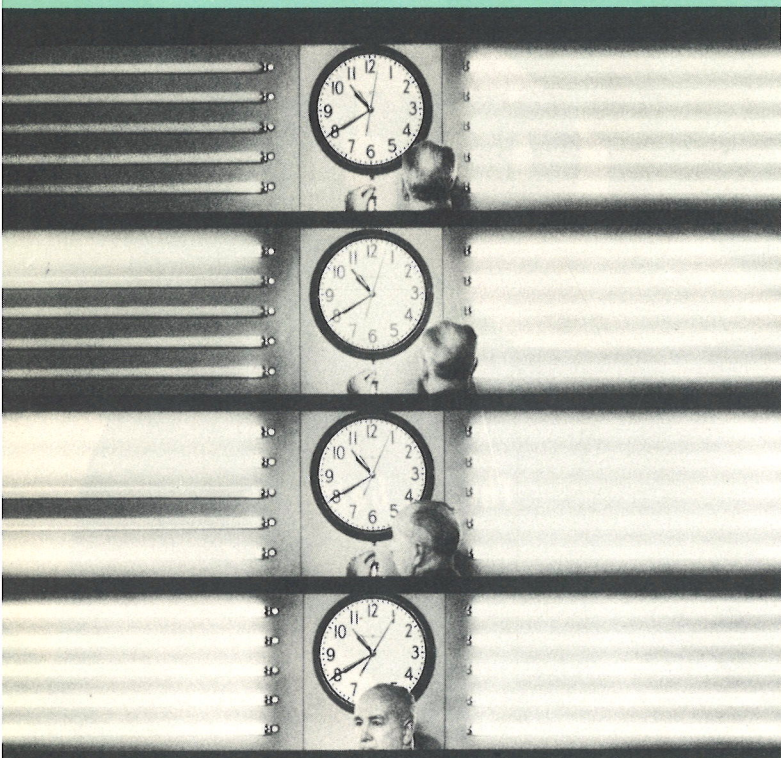
... is made up of a new G-E designed lamp and ballast. It gives you quick, smooth starting, in the popular 4-foot size, **without starters**, and **at no extra cost**. The lamps glow as soon as you flip the switch and come up to full brightness in about two seconds.

SIX ADVANTAGES WITH RAPID START

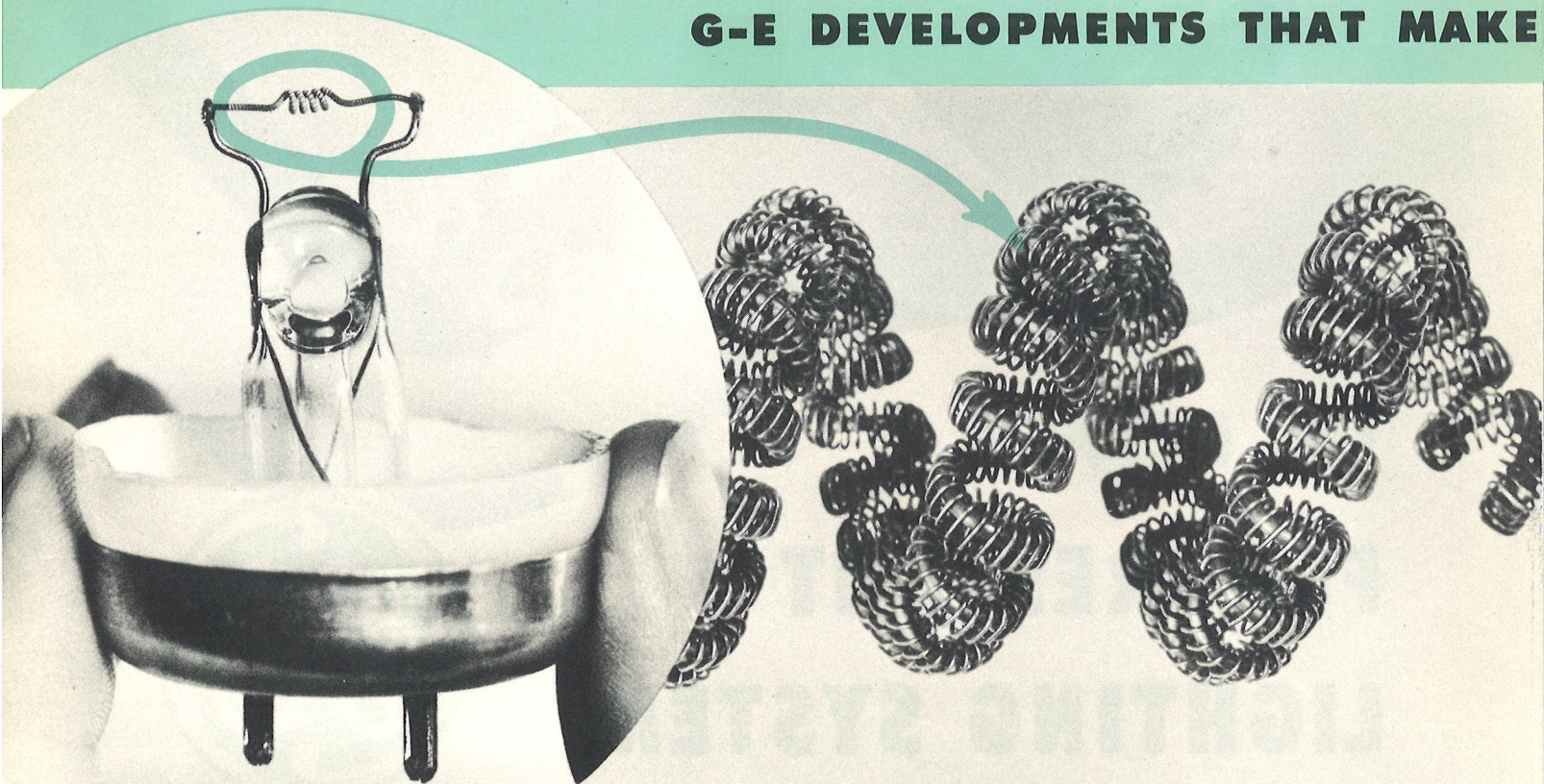
1 ALL LAMPS "ON" IN LESS THAN TWO SECONDS

These four unretouched photos were taken approximately one second apart. On the left — five "starter-type" fluorescent lamps; to the right — five new General Electric **Rapid Start Lamps**.

Notice how all the **Rapid Start lamps** reach **full brightness** in less than two seconds, while the starter-type lamps are just beginning to light. Bottom picture shows time when all starter-type lamps finally reach full brightness.



G-E DEVELOPMENTS THAT MAKE



Heart of the Rapid Start lamp is the triple-coil cathode, now used in G-E Slimline Lamps. It makes possible the fast initial heating and permits a relatively small ballast.

Though complex and more difficult to make than the coiled-coil cathodes found in most fluorescent lamps, the **triple-coil cathode** holds more life-giving chemical, and holds it longer.

2 NO STARTERS

In the new Rapid Start circuit, **starters**, as required for preheating standard lamps, **are not** needed. G. E. has found how to eliminate them, successfully. Thus, you have . . .

- no starters to buy or change
- 50% fewer renewable parts to system meaning
- much lower maintenance costs, and
- fewer maintenance troubles

3 FLICKERLESS STARTING

The familiar, distracting, flickering starts, associated with standard starter-type systems disappear because of the smooth sequence with which the lamps reach full brightness.

4 NO "BLINKING" AT END OF LIFE

When lamp reaches the end of life it goes out and stays out. There's no disconcerting, prolonged blinking because there's no starter to persist in restarting

a burned-out lamp.

- Reduces danger of damage to ballasts near end of lamp life.

5 BENEFICIAL BALLAST CHARACTERISTICS

Rapid Start ballasts have decided beneficial characteristics over instant-start ballasts.

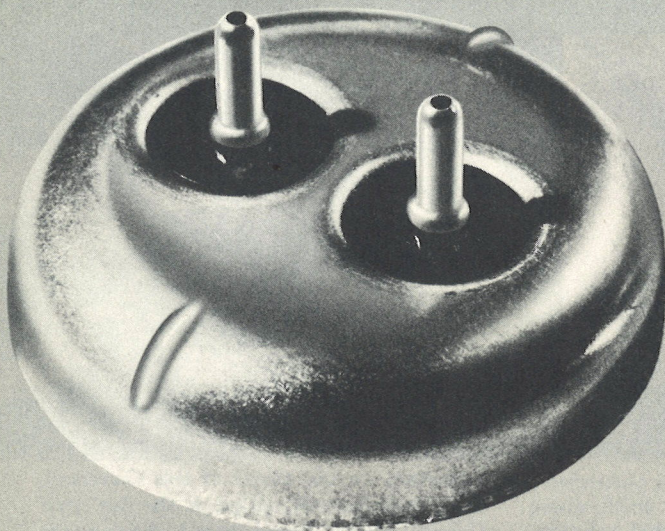
- Weigh less (6¼ lbs. vs. 8¼ lbs.)
- Lower wattage loss
- Cost less
- Less radio interference
- Smaller (2¼" shorter)

6 LIGHT AT LOW COST

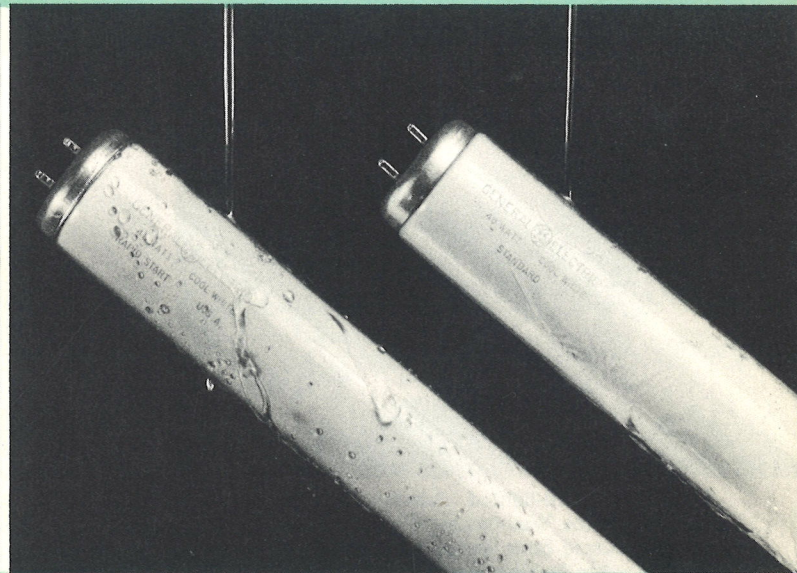
By combining the more desirable features of both starter-type and instant-start systems, G-E Rapid Start gives all these advantages plus light at **low over-all cost**.

- an over-all cost comparable with the economical starter-type system, and
- a cost less than the instant-start system.

RAPID START A BETTER LAMP



All **Rapid Start** lamp bases (and other general lighting bipin base lamps) now have **Indexing Guides** raised in relief, at right angles to base pins. This new G-E feature indicates relative position of pins to socket terminals by glance or touch. It means faster lamp changing, and **positive assurance that pins are in position for proper contact**.



To guarantee reliable starting, even under high-humidity conditions, Rapid Start lamps have a **Dri-Film* Coating**. This external treatment of the tube causes any moisture to collect in droplets, thus avoiding starting troubles.

* Reg. General Electric Co. Trade Mark.

RAPID START QUESTIONS ANSWERED FOR YOU

QUESTIONS GENERALLY ASKED ABOUT RAPID START SYSTEMS

Q. How do Rapid Start lamps work?

A. Rapid Start lamps use short low-voltage cathodes which are automatically preheated by the ballast. The lamps come on right away at low brightness; are fully lighted in about two seconds.

Q. Can Rapid Start lamps be used in fixtures having preheat-start ballasts?

A. Yes, though some lamps may show end darkening somewhat earlier in life.

Q. Could my present starter-type fixtures be "changed over" for Rapid Start lamps?

A. Yes, by substituting a Rapid Start ballast and rewiring the fixture. However, this expense would generally be difficult to justify.

Q. What happens with other lamp and ballast combinations?

- A.
1. Rapid Start lamp on instant-start ballast — lamp will start but life would be very short.
 2. Starter-type lamp on Rapid Start ballast — starting will be unreliable, shorter life.
 3. Instant-start lamp on Rapid Start ballast — lamp will not start. Ballast may be damaged as pins are shorted inside the instant start lamps.

Q. What is the life of Rapid Start lamps?

A. Rated life is 7500 hours at 3 hours per start.

Q. What sizes of Rapid Start lamps are available.

A. The 40-watt T-12 and the 16-inch Circline sizes. A special 100-watt 72-inch T-12 Rapid Start lamp is also made for streetlighting.

Q. What "colors" are available?

A. The 40-watt size is available in Cool White, Warm White, Deluxe Cool White, Deluxe Warm White, White, Daylight and several colors.

Q. When will Rapid Start fixtures, ballasts and lamps be available?

A. They are available now.

Q. Does Rapid Start fluorescent lighting cost more to install than standard starter type?

A. No, many manufacturers charge the same price for Rapid Start fixtures as for pre-heat start fixtures equipped with Watch Dog starters.

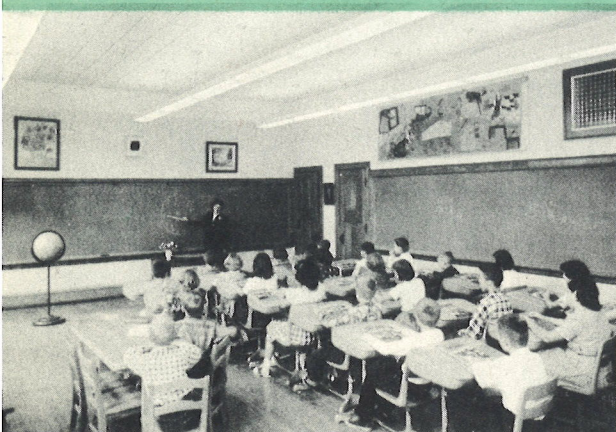
Q. How Does Rapid Start compare with slimline?

A. Rapid Start has the maintenance advantage of slimline in eliminating starters. However, lower over-all lighting costs with the 96-inch T-12 slimline warrants its consideration for new installations and extensions to present lighting systems.

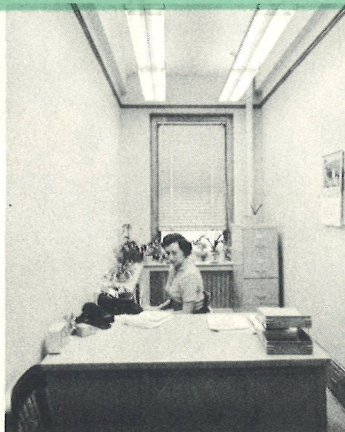
Q. Are Rapid Start lamps going to replace preheat lamps?

A. Probably in new installations of 4-foot fixtures. The temporary complication of another physically interchangeable lamp is far outweighed by the advantages of Rapid Start.

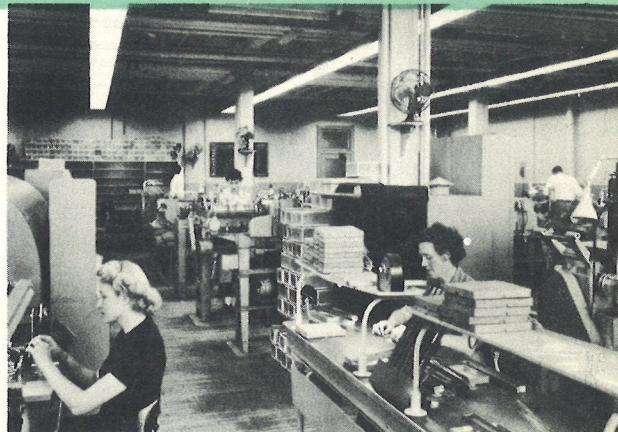
THREE TYPICAL RAPID START INSTALLATIONS



One of 23 well-lighted classrooms in the Lincoln School, Wauwatosa, Wisconsin. Here the new Rapid Start lamps provide 45 foot-candles, offer fewer maintenance headaches.



End-of-life blinking in lamps is particularly disturbing in any office, large or small, where concentration is needed. A good solution: Rapid Start lighting!



Important to the owner of this Cleveland, Ohio manufacturing plant is the fact that General Electric Rapid Start Lamps provide him with LIGHT at low, over-all cost.

**For further information
consult your G-E Lamp Supplier**

LAMP DIVISION
GENERAL ELECTRIC