



RELEASE

SEE NATURAL COLORS
UNDER NEW LIGHTING

---ooOoo---

High Pressure Mercury Lamps in Combination
With Tungsten Filament Lamps Give
Light Almost Identical to
Daylight in Color

167

---ooOoo---

Good vision is in line for more years of enjoyment through the medium of new kind of lighting which is almost identical to daylight in color quality. A new light source, known as the high pressure mercury lamp, has been developed by engineers of the Westinghouse Lamp Company. Used in combination with standard tungsten filament lamps, several hundred of these lamps will supply the illumination in the main exhibit hall and other areas in the Ford Building at A Century of Progress this summer.

By itself, the high pressure mercury lamp emits a light distinctly bluish-white in color. Under this illumination, nature's colors are distorted slightly and do not appear in their true harmony. The reason for this is that some of the color rays which make up daylight illumination are missing in the mercury light. The combined light of tungsten filament and high pressure mercury lamps, however, is surprisingly close to that of daylight in color. The color deficiency of tungsten light is balanced by the presence of these very colors in mercury light.

SEE NATURAL COLORS...

-2-

To one coming indoors from the bright sunshine outdoors, the color of furnishings would assume an objectionable appearance if high pressure mercury lamps alone were used to provide the lighting. But if these lamps were used in fixtures which also were equipped with tungsten lamps, the resultant lighting would bring out the color harmonies just as they are seen outdoors.

FORDS SEEN IN TRUE COLORS

In the Ford Building at the Chicago Fair this year, the color, more so than the intensity of the illumination, was the primary consideration. Henry Ford wanted his cars on display indoors to appear in the eyes of visitors just as they do along the road. Under the combined lighting of high pressure mercury lamps and tungsten filament lamps, the Ford cars on display will be seen in their true color harmonies. New lighting fixtures, especially constructed for this installation, will be used.

In order for the color of this light to approximate that of daylight, an equal number of lumens of incandescent tungsten light and of high pressure mercury light must be combined. From a series of experiments it was found that best results could be obtained by using the 500 watt tungsten filament lamp. In the Ford Building fixtures, two high pressure mercury lamps are to be operated with three of the 500 watt tungsten filament lamps.

SEE NATURAL COLORS...

-3-

High pressure mercury lamps are expected to carve their own field of application in industrial plants. The peculiar color of this light is particularly advantageous for observing small and fine objects. For that reason these lamps should find increasing use in certain industrial operations where inspection procedure is paramount.

CAPTIONS

PROMOTES BETTER INSPECTION

(82-206)

In factories such as those of the Ford Motor Company where great accuracy and care is required in the fabrication and inspection of thousands of automobile parts, high pressure mercury lighting may contribute to greater speed, accuracy, and safety. Under the light of high pressure mercury lamps, manufacturers who demand material of only the highest quality, may impose still greater restriction in their material specifications, particularly those applying to the metal parts. This lighting permits ready detection of flaws and general inspection with greater ease and speed.

Where in the factory one color lighting will undoubtedly improve the conditions for accurate seeing, the effect on the color appointments in the room does not present an objection so great as occurs in the home, store, and office. If, by combining these lamps with tungsten filament lamps to produce light approximating daylight in color, people can step indoors and find there the same color harmonies as nature displays outdoors, then such lighting must soon create a

SEE NATURAL COLORS..

-4-

wide demand. In retail stores, for example, where customers often want to take colored merchandise to the window or to a "daylight" lamp to see how it will appear outdoors, such combination lighting may prove of great value in days to come.

#

CAPTIONS

(WL-906)

Standard 500 watt Mazda lamp and new Westinghouse High Pressure Mercury Lamp which will be operated together in special fixtures -- this combined light is almost the same color as daylight -- in the Ford Building at A Century of Progress this summer.

(PHOTOSTAT)

Chart showing color quality of tungsten lamps alone, High Pressure Mercury lamps alone, these two together, and how they compare with the color quality of sunlight (daylight).

(WL--887)

Special fixture for Ford Building will be equipped with three Mazda 500 watt tungsten filament lamps and two of the new Westinghouse High Pressure Mercury lamps.