



EYE Metal Halide Technology



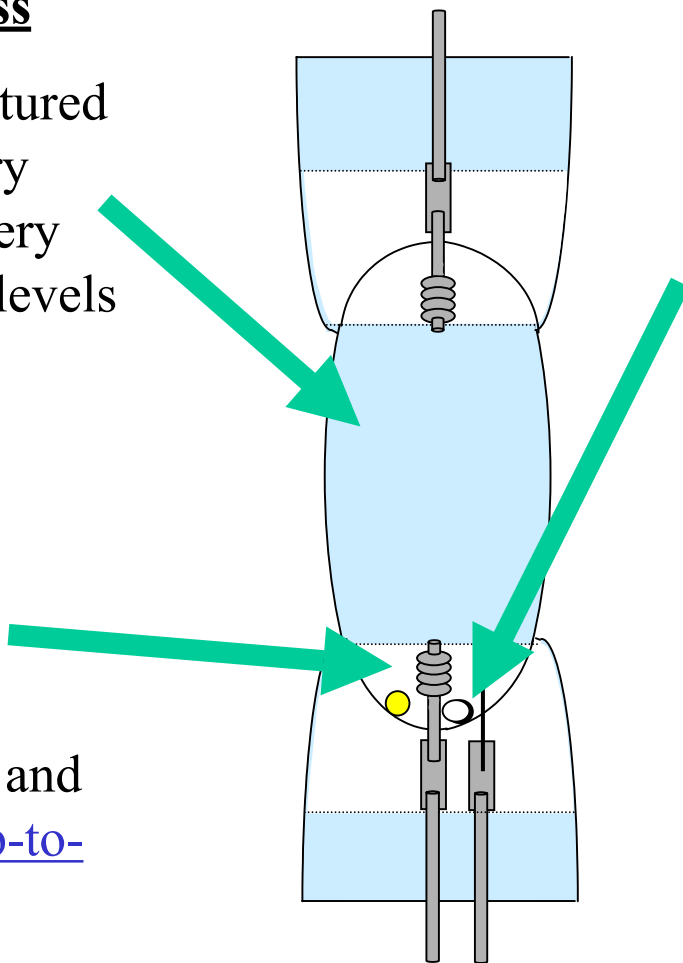
Special Arc Tube Dosing Technology

Extremely Clean Manufacturing Process

Arc Tubes are manufactured in an ultra-pure/ultra-dry atmosphere to ensure very low (parts per million) levels of water and oxygen contamination.

Ultra-pure Materials

Ultra-pure materials maximize performance and provide a superior lamp-to-lamp color uniformity.



EYE Unique Dose

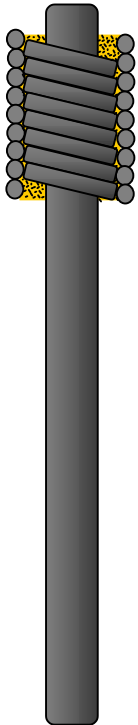
EYE developed unique dose materials which is processed only in EYE laboratories. The payoff is high light output and superior lumen maintenance.



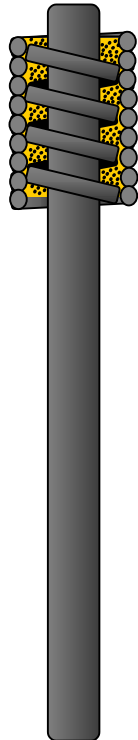
Unique Electrode Design

Electrode Cut-away Showing

Competitive design
electrode filled with
relatively small
amount of Scandium
powder.



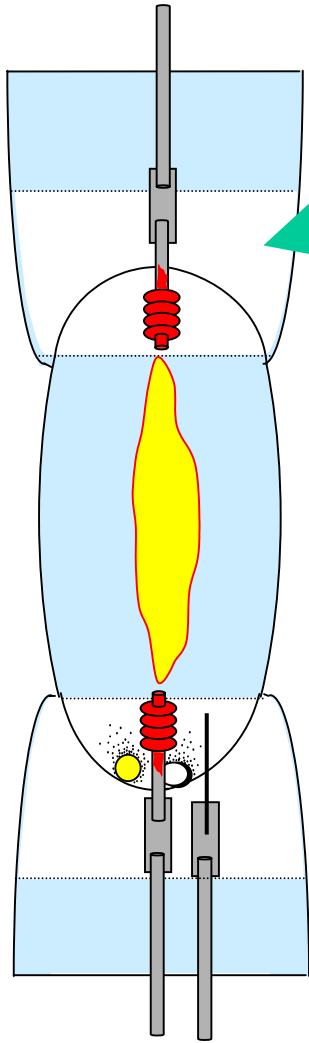
EYE design
electrode has more
space to filled with
Scandium powder.



Scandium powder in the electrode is used to replenish the Scandium in the arc tube dose that has been depleted over the life of the arc tube. This backup source of Scandium assists in maintaining arc tube color consistency and operating voltage over the life of the lamp. The powder also reduces the physical stress to the electrode during starting which increases its life.



Unique Arc Tube Coating



EYE uses unique arc tube coating materials

stays white through lamp life, maintaining optimum end-chamber temperature, resulting in [superior lumen maintenance and color consistency.](#)

Arc tube coating:

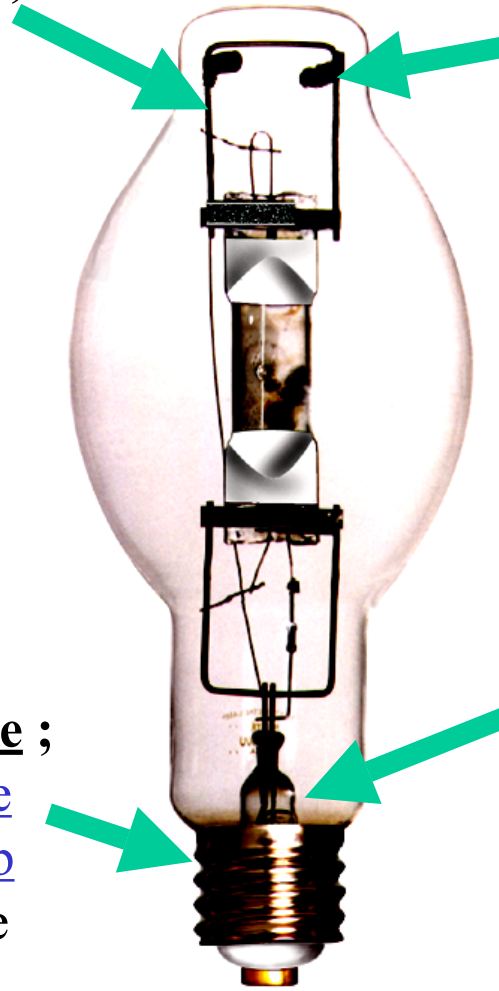
Metal Halide Arc Tubes have a band of white coating surrounding the electrodes on either one, or both ends of the arc tube. The coating reflects the heat from the arc and electrode back into the bottom of the end chamber where the chemicals settle when the arc tube cools. This additional heat helps to vaporize the chemicals into a gas so that they will enter into the arc stream. The vaporized chemicals fuel the arc making it very strong and brilliant.



Sturdy Construction

Heavy duty supporting frames ;

are made from a nickel-plated steel rod that is formed into parallel braces. They are spot welded to both ends of the arc tube to ensure that it will remain properly aligned in the center of the bulb during shipment and rough handling.



Two spring steel, shock-absorbing supports;

in the dome of the bulb provide mount support during shipping or rough handling.

The seal integrity of our high quality stem; ensures long lamp life.

EYE stems are purchased by other lamp manufacturers for their top-end products.

Threaded glass seal locks the base ;

on to the bulb. This ensures that the base will not separate from the bulb when the lamp is removed from the fixture.



Nickel Plated Base & Ceramic Insulator

Competitive Design



Most HID lamps use a base that has brass threads; they are prone to heavy corrosion, and after years of operation, often stick in the fixture socket. Removing the lamp from the socket is difficult, often resulting in socket damage and additional costs for socket or fixture replacement.

Glass insulator is prone to cracking which leads to arcing and socket damage.

Center Contact is shallow which increases the chance of poor contact, arcing and socket damage.

EYE Design



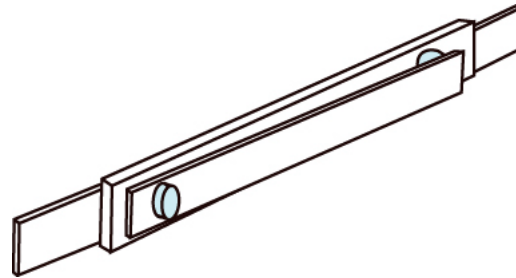
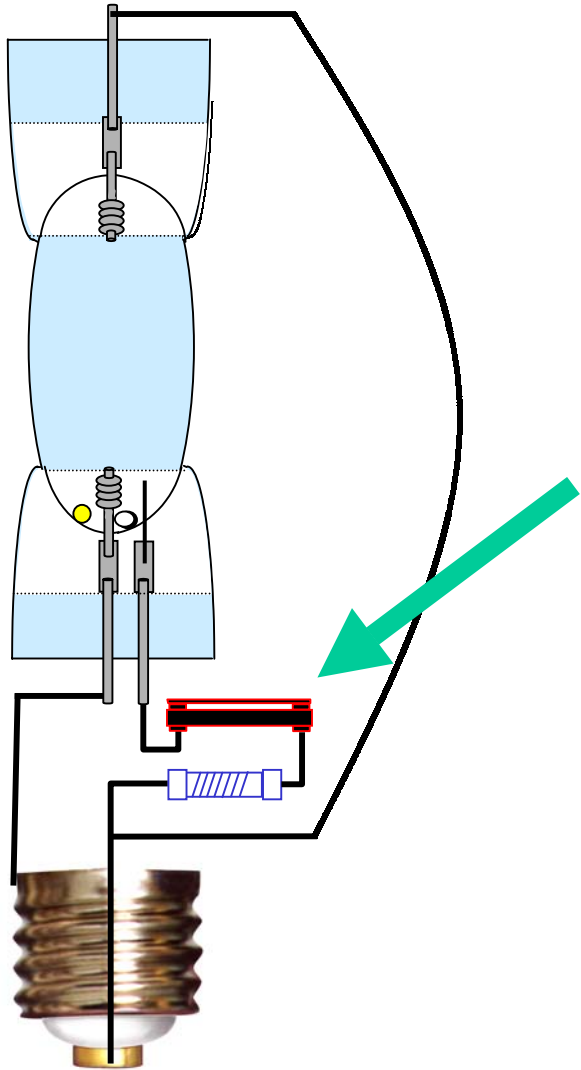
EYE lamp uses a premium nickel-plated brass base that is easily removed from the socket after years of operation.

Ceramic insulator insures against cracking.

The robust eyelet guarantees solid contact.

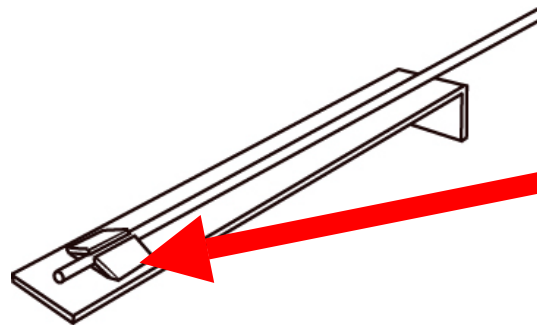


Premium Bimetal Switch



EYE Design

Is composed of sturdy materials fastened together with locking rivets that ensure accurate switching and dependable long life

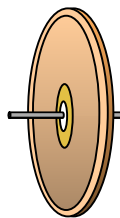


Competitive Designs

Bimetal Switch is prone failure because of its physical construction. The rod and plate are not solidly connected.



FEC (Ferro Electric Capacitor) for Ignitek™



- Iwasaki's Patented built-in ignitor
Ignitek™ has the FEC ignitor built into the lamp to provide Pulse Start technology performance on Standard CWA Ballast without having the additional Ignitor.
- FEC is a Ceramic capacitor that has the capability of operation inside the lamp where it is exposed to high operating temperatures.
Provides very reliable long lamp life
- Starting pulse is completely regulated, minimizing electrode deterioration.
Maximize Maintained Lumen = Longer Usable Life
- At end of lamp life, FEC peak voltage drops to a low level.
Longer ballast life, minimum electronic interference, maximum safety



EYE Metal Halide Technology

EYE Original Ultra-pure Dose

EYE develops and produces original materials that provide [superior light output and high lumen maintenance](#).

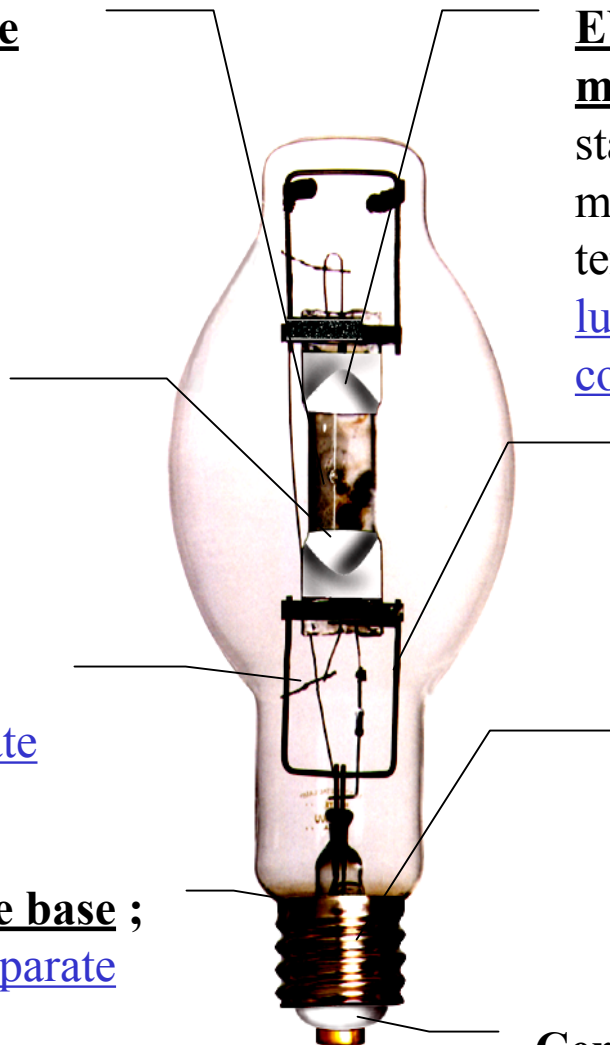
EYE design electrode

contains more Scandium powder to [reduce electrode deterioration](#).

Premium Bimetal Switch

is very sturdy and [assure accurate operation through lamp life](#)

A threaded glass seal locks the base ;
[ensures that the base will not separate from the bulb](#) when the lamp is removed from the fixture.



EYE Unique arc tube coating materials

stays white through lamp life, maintaining optimum end-chamber temperature, resulting in [superior lumen maintenance and color consistency](#).

The heavy duty supporting frames

[reduces structure failure during shipping](#)

Premium nickel-plated brass base

[will not damage socket during lamp removal](#)

Ceramic insulator

[insures against cracking and arcing in the socket](#)



EYE Metal Halide Benefits

- Up to 50% higher lumen maintenance than competitive products
- Very reliable long life reduces maintenance costs
- Superior lamp-to-lamp color uniformity
- Minimal socket failure
- 100% inspected before leaving the factory results in minimal out-of-box failures
- 2 years warranty for lamps with over 12,000 hrs average life
- 1 year warranty for lamps with 12,000 hrs or less average life
- IgnitekTM has the FEC ignitor built into the lamp, which provide Pulse Start technology performance on Standard CWA Ballast without having the additional Ignitor.

Minimal maintenance costs