

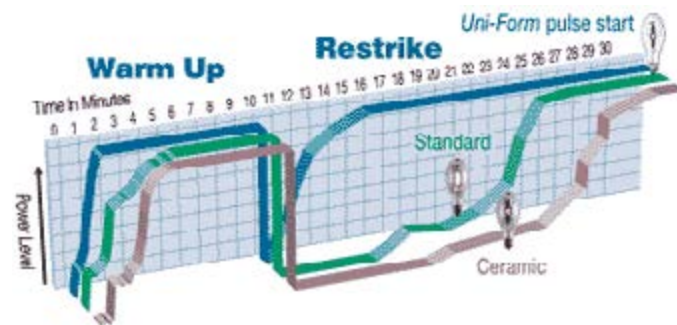
# The Uni-Form® Advantage

## Uni-Form Pulse Start Systems Technology



### Faster Warm-Up/Restrike

Combining our exclusive formed-body arc tube and ignitor starting, with our low current crest factor ballasts, provides faster initial warm-up and hot restrike up to 60% less time.



### UNI-FORM® PULSE START LAMP TECHNOLOGY

Uni-Form pulse start lamps provide superior performance compared to standard probe start metal halide lamps. The specific benefits are higher efficacy, better color uniformity, faster warm-up, improved lumen maintenance and longer life. It all takes place in Venture's revolutionary formed-body arc tube.

### High performance design Formed-Body Arc Tube

The shape of our formed-body quartz arc tube follows the actual curve of the arc stream, preventing uneven temperatures in the arc tube surface. This significantly improves thermal performance allowing more halides to be pulled into the arc and emit more light.

### Higher Fill Pressure

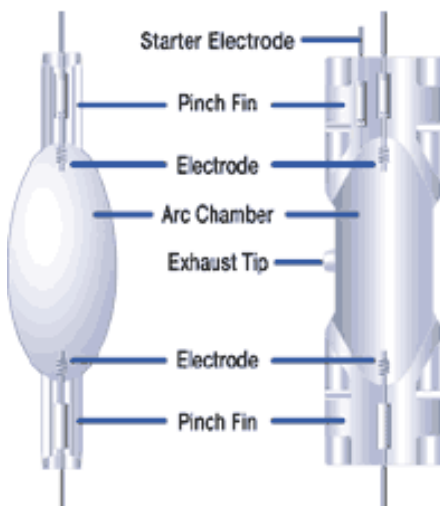
Our formed-body design and pulse ignition support a higher fill gas level that helps to reduce wall blackening caused by tungsten sputtering from the electrodes at each start.

### Weldless Arc Tube Mount

Venture's nearly unbreakable, patented weldless construction is stronger than traditional welded mounts.

### Single Voltage Hybrid and HX Ballasts

The lower current crest factor in the electrical output of our ballasts improves lamp lumen maintenance. Ballast energy losses are reduced by as much as 50% compared to standard CWA ballasts.



### Reduced Pinch Seals

The large pinch fins on standard probe start metal halide arc tubes radiate heat. Replacing them reduces the quartz mass in the arc tube and helps in producing a more uniform thermal profile which results in greater lamp efficacy.

### High Voltage Pulse Ignition

High voltage pulse ignitor starting eliminates the starter electrode, bi-metal switch and resistor of standard probe start lamps. It also provides quicker breakdown of gases; so starting (cold and hot) is faster.



## SYSTEM SOLUTIONS

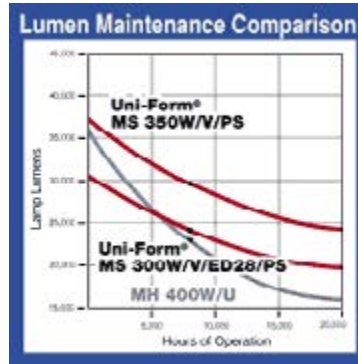
Venture's pulse start system technology, actualized in Uni-Form lamps and Single Voltage Hybrid and HX ballasts, represents advancement as important as the invention of the metal halide lamp. Every change in our arc tube design, lamp construction and ballast enhances overall system performance. This metal halide focus allows us to offer a vast array of integrated packages, providing optimum lighting efficacy and quality for virtually any application.



## HIGH PERFORMANCE RESULTS

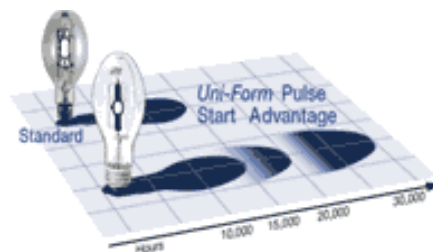
### Superior Lumen Maintenance

Uni-Form pulse start system lumen output does not decay as rapidly over life as standard probe start metal halide. Mean lumens improve dramatically, up to 50% higher, with our lamps operating on our Single Voltage Hybrid and HX low current crest factor ballasts.



### Longer Life

Our Uni-Form pulse start system offers up to 50% longer lamp life along with improved lumen maintenance. This directly benefits end-users by reducing lifetime operating costs.



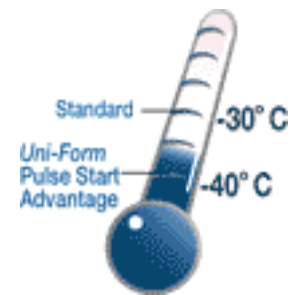
## Color Uniformity

Lamp-to-lamp color variations occur due to arc tube temperature differences and poor power regulation. Venture minimizes variation through consistent thermal characteristics in every arc tube and better power control from our ballasts.



### Better Cold Starting

Uni-Form technology offers more reliable starting at extreme temperatures, down to -40°C (-40°F). It's perfect for winter weather or warehouse freezer conditions.



## More Optically Precise

Our patented weldless arc tube mount precisely centers the arc. It outlasts welded mounts, staying more consistently on spec.

## Improved Lamp Power Control

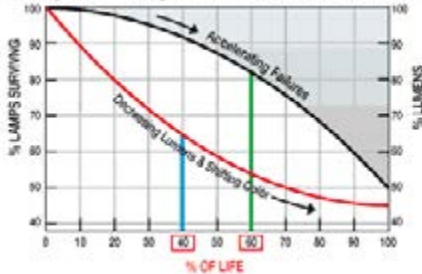
The well regulated output power of our ballasts improves color uniformity and lumen maintenance.

## THE BOTTOM LINE IS MORE LIGHT FOR LESS ENERGY.

### Uni-Form® pulse start technology will exceed your expectations.

More light for less energy makes Uni-Form pulse start the most logical lighting choice for designers and corporate energy managers seeking to drastically cut power bills. Compared to standard metal halide, Venture's revolutionary system offers up to 50% improvement in system mean lumens per watt. In practical applications, the higher efficiency translates into a savings of more than 100 watts per luminaire! And that savings comes while still producing the same, or more, high quality light.

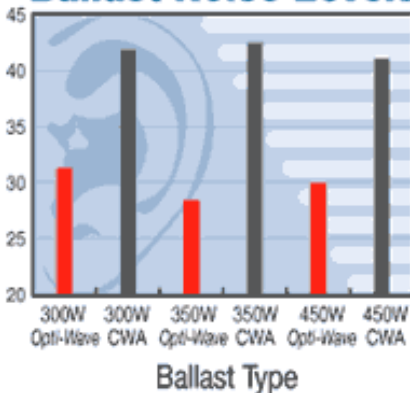
**Lamp Mortality & Maintenance Curves**



## Quieter Operation

Venture's Single Voltage Hybrid and HX ballasts run at least 25% quieter than comparable CWA ballasts due to non-saturation of the core.

**Ballast Noise Levels**



## Single Voltage Hybrid Ballasts For Improved Performance

The Venture® Single Voltage Hybrid family sets the Gold Standard in ballast performance with an optimized current wave form. To maximize your pulse start metal halide system, specify power saving 277V Hybrid ballasts.