Venture's Technical Center - HID
Frequently Asked Questions

Q. Do you only make metal halide lamps?

A. Venture Lighting is a manufacturer of metal halide lamps, ballasts and controls.

Q. Do the other three lamp manufacturers make a pulse start lamp?

A. Yes, but not as many as Venture, nor as many types or different wattages.

Q. What kind of light bulb is this?

A. Please refer to lamp description information.

Q. Is there a warranty on this light bulb?

A. All Venture lamps are covered by a generous warranty.

Q. What is the rated life of these lamps?

A. This information can be found on Venture's Specification Sheets.

Q. What do the letters and numbers on my lamp mean?

A. Please refer to Venture's Lamp Description Codes.

Q. Can Venture supply formulas for energy savings and energy pay-backs?

A. Yes. Call Technical Service. 800-451-2606

Q. What are the benefits of using Single Voltage Hybrid 277V ballasts over CWA ballasts?

A. Refer to benefits of Uni-Form® pulse start information.

Q. Does a pulse start lamp require a socket with a certain voltage rating?

A. Yes. And this holds true for both medium and mogul sockets. The pulse rating should be 4kv.

Q. Does the ballast immediately begin to send current to the pulse start lamp after the power is re-stored and how much?

A. There is no current flow through the lamp until the lamp starts. When the lamp starts initially, there is a higher current draw because the voltage in the arc tube is low at first; the current draw increases until the lamp reaches its operating voltage range. This information about (line input) open circuit can be found in the Ballast Specification Sheets.

If there is a momentary power outage, the lamps may be too hot to restart. This can possibly cause a line circuit breaker to trip if there is not enough allowance for open circuit current, especially if there has been a retrofit to the same wattage controlled current pulse start reactor gear from the old pinch style CWA. Neither CWA ballasts nor controlled current reactor ballasts should be a problem, if the installation was planned right.. But controlled current reactor ballasts draw approximately 125% more open circuit current than a CWA ballast does. So, if you are retrofitting an installation with reactor gear, be very careful that circuit load is considered and designed correctly.

Q. Is it possible to add an ignitor to a standard CWA ballast to convert the system to pulse start?

A. Not really. Many of the present metal halide ballasts in the marketplace have poor sustaining voltage performance. If you add an ignitor, it does nothing to improve sustaining voltage. All of the pulse start ballasts Venture has designed have approximately 270 volts sustaining which is about 50 volts higher than standard metal halide. In all likelihood, the many lamps available would probably start and operate properly for a while, but who knows how long. Venture's pulse start ballast have a better current crest factor and lower current off-time, which is much better for the lamp.

Q. Do you have any literature comparing compact fluorescent systems to metal halide systems?

A. Yes, for some instances, metal halide is more efficient, less energy and more light compared to fluorescent system. See our "Brighter Idea than Fluorescent" brochure (PDF file).

Q. How does the performance of an electronic ballast compare to the other pulse start ballasts (CWA, reactor, reg. lag)?

A. According to the literature provided by Delta Power Supply (operating the 350 watt lamp), the standard electronic ballast has a total watts loss of 12 when operating the lamp at 340 watts. Current crest factor is 1.5 in the start phase and 1.45 in the run phase. According to Delta Power Supply, the lamp can be dimmed to 30%. However, Venture currently only guarantees a lamp to 50% dimming.

This electronic ballast, with additional features like dimming, is approximately 3 times more expensive than other (magnetic) ballast types. Although Venture cannot verify any claims about performance data, this ballast is currently being tested for proper operation with Uni-Form® pulse start lamps.

Q. What is the maximum distance you can remote the pulse start ballast, capacitor and ignitor from the fixture?

A. If you look at each individual ballast specification sheet, you will notice an ignitor diagram. On the diagram, you will notice the term BTL (Ballast to Lamp) and a distance stated afterwards. Or visit our remote mounting page.

Q. Does remote mounting of a pulse start ballast require any special type of wire?

A. This question must have been generated as a result of the ignitor and the 3-4 kV pulse it must deliver remotely to the lamp. A class wire should be used as it will have the correct insulation properties necessary t prevent voltage leakage.

Q. Is there a standard 400 watt open fixture rated lamp?

A. Yes. Many manufacturers rate a 400 watt lamp, in a base up only position, as an open fixture rated

lamp. But this does not mean that the arc tube could not violently rupture and cause problems. It can, and it has caused damage and injury in he past. Osram Sylvania has offered a 400 watt true open fixture rated lamp for a number of years. They solved the problem by providing the lamp with an extremely thick outer jacket (rather than a shroud) to contain a potential arc tube rupture. The weight of the entire lamp and the cost is much higher than a standard lamp as well.

Q. What is the hot restart time difference between HPS and metal halide?

A. Although Venture has never tested this, since both use an external ignitor, they should be very close

Q. Since the halides burn hotter in the pulse start arc tubes, does this increase the arc tube temperature and outer jacket temperature compared to a standard metal halide lamp? If yes, can we quantify with data? The real interest was any temperature increases with regard to outer glass wall temperature.

A. The benefits of the formed body design vs a standard pinched body is that it allows the arc tube to attain the normal expected operating temperature in much less time. Also there are fewer cold areas in the formed body arc tube. The arc tube does not operate at a higher temperature but the design allows the halides to remain much warmer because of the reduction in cold areas. The formed body arc tube should not increase the temperature of the outer jacket vs a standard pinched body arc tube

Q. Do we have cold start and hot restart “actual times” for the various pulse start lamps by wattage, including open and enclosed rated products?

A. Cold start times should be immediate for all wattages due to ignitor starting. Hot restart times will vary due to a wide range of contributing factors, including lamp wattage, shrouded vs non-shrouded, and fixture design. We do not have actual hot restart data by lamp type or wattage. The lamps hot restrike 60% faster than standard lamps.

Q. Is there a 480 volt ballast available for the Uni-Form pulse start system?

A. Yes, the low current crest factor CWA plus ignitor is available in 480 volts.

Q. Can a standard metal halide lamp be used in the Uni-Form pulse start system?

A. Yes, but all the benefits of the pulse start lamp will be lost. This includes increased efficiency, improved lumen maintenance, longer life, improved color consistency, faster warm-up and hot restrike and cold starting. It may also be difficult to start. To see the benefits of Venture’s Uni-Form systems click here

Q. What are the lumen maintenance factors for the various Uni-Form pulse start ballasts?

A. The lumen maintenance factors for the low current crest factor ballasts are:

CWA + Ignitor 80%

Linear Reactor + Ignitor 83-84%

Q. To insure a Specifier is specifying a Venture® pulse start system correctly, should he include in the fixture schedule or spec book:

a) simply spell it out in words (example Venture pulse start system with linear reactor ballast and 350 watt lamp?)

- or -

b) use exact catalog numbers from the matrix or cut sheets for each of the ballast, ignitor and lamp?

A. Use exact catalog numbers. Otherwise it can become too vague and could be subject to arbitrary change after it leaves the office of the specifier/engineer. Also, the specifier/engineer should indicate that there are no substitutions without his or her authorization.