

high mast lighting poles

stainless steel lowering system

For high mast

reliability, durability,

stability, longevity &

simplicity that's

above + beyond

the rest...

It's **Millerbernd.**



75 YEARS + GROWING.



the lowdown on lowering systems

Not all lowering systems are the same. Consistent problems are an expensive reminder of poor design due to over complicated latching mechanisms, unnecessarily complex centering systems and poor material choices. The three main causes of High Mast Lowering System breakdowns are as follows:



TOP LATCH FAILURE

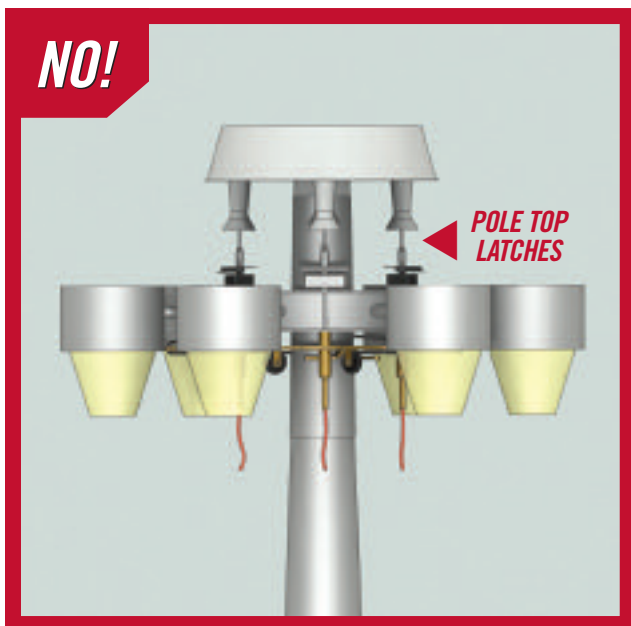
A Maintenance Engineer's Nightmare!

1

Failure of Pole Top Luminaire Ring Latching Mechanism.

NO! Failure to latch or unlatch the luminaire ring is the most common cause of failure in high mast lowering systems. Top latched systems are today's major cause of lowering system failure.

YES! Millerbernd Latching Systems use manually placed latches at the pole base, not high above and out of reach where changes in cable length or prolonged periods of inactivity would likely cause lowering failure. Our insightfully designed bottom latch system has had no recorded failures.



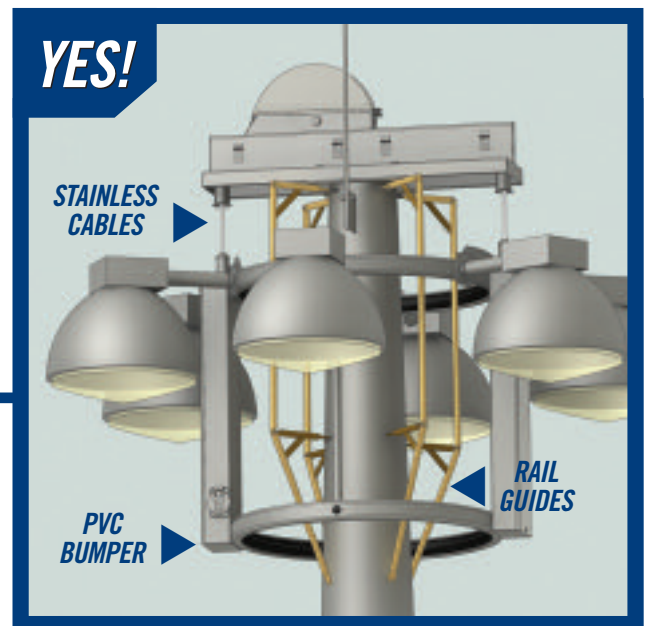
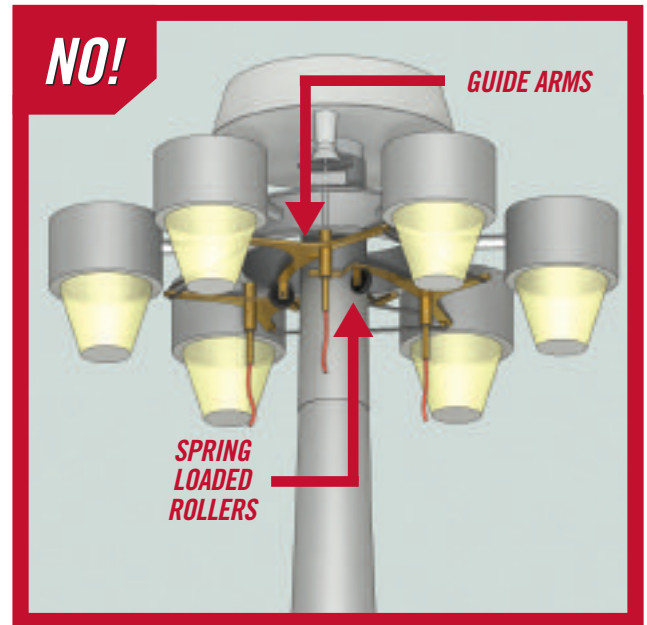
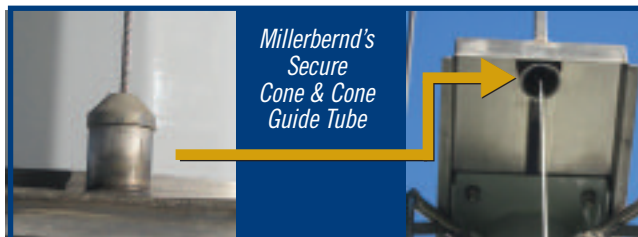
raising the high mast standard

2

Failure of Luminaire Ring Centering Devices.

NO! Elaborate Centering Systems are the second most common failure in Highmast Lowering Systems. Failure is nearly inevitable in other systems as over time, spring loaded rollers, guide arms and other moving parts can become sticky or frozen in place. They then fail to adjust to the tapered pole shaft and can abrade the pole finish or even halt the lowering process.

YES! Simpler is better, Millerbernd Centering Systems use NO moving parts which could fail. They are designed with two stainless steel lowering cables, four fixed pole top railguides, and two cable guided cones on the luminaire ring which fit snugly into the masthead cone guide tubes. The system also includes a protective PVC bumper system to prevent metal to metal contact between the Luminaire Ring and the pole shaft.



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consistency, reliability +
yes, common sense

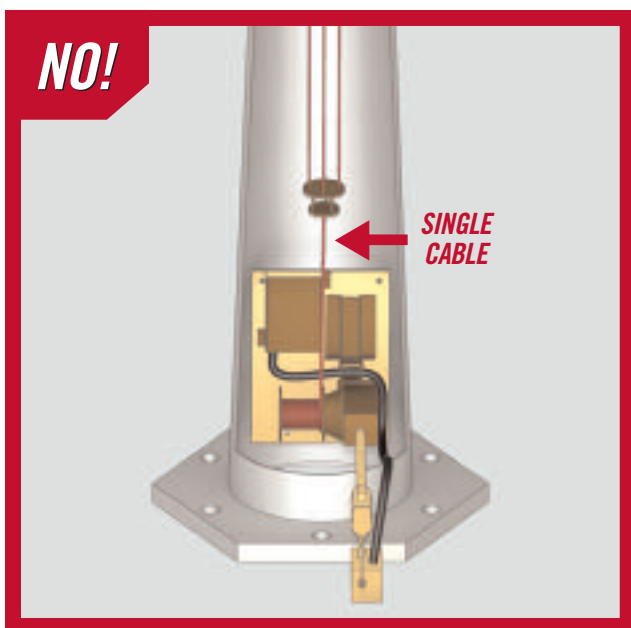
3

One Cable, Less Stable!

Don't be fooled. So called three-cable systems are actually a single cable with three connection points and these single cable systems are prone to catastrophic failure.

NO! All other systems use just a single winch cable to raise the luminaire ring, but describe them as three cable systems. These three cables are actually connected to a single attachment point above the lone winch cable. Wear and tear or latch malfunction may cause a broken winch cable. With no back-up safety feature in place, the luminaire ring will freefall if this happens.

YES! Millerbernd uses two Stainless Steel Lowering Cables, two Stainless Steel Winch Drums and a Friction Brake as one of multiple redundant safety features. Our two stainless steel cables can each support three times the entire load if one should break.



4

Motors and Premature Failure of Lowering System.

NO! Many competitive systems use an intermittent duty motor which could cause the decent/assent to stall when the motor overheats during longer raising and lowerings. These are considerably over powered gear drive motors which can and do break winch or hoisting cables.

YES! Millerbernd uses a one-horse continuous duty motor with a cooling fan for long-running descents/assents. Our unique clutching and drive systems can NOT exert enough force to break the lowering cables.



+

Other Factors That Can Lead to Lowering System Failure.

NO! Lowering System components made of galvanized steel can deteriorate rapidly due to acid rain, smog or exposure to deicing chemicals which cause disintegration.

YES! Millerbernd Lowering Systems are made from non-corrosive stainless steel to prevent any deterioration and extend the life of the system.



Competitor Galvanized Steel



Millerbernd Quality Stainless Steel

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take high mast to new heights



Our high mast design is way above the competition. With a reliable two-cable hoisting system, non-corrosive stainless steel throughout and our superior Millerbernd Stainless Steel Lowering System technology, it will be the clear choice for your next high mast project.

Why the Millerbernd SSLD2 Lowering System is a Better Value:

- Manual latching mechanism at ground level totally eliminates pole top latch mechanism failure
- Passive luminaire ring centering system, without moving parts to fail
- Twin winch design protects operators and equipment ensuring that a single cable failure can't cause freefall
- Stainless Steel components for longer life
- Powered by a continuous duty motor designed to last the life of the system

Standard Safety + Reliability Features

- All Millerbernd Lowering Systems are Third Party Listed and Certified by Intertek (ETL) as meeting the Safety Standards for Motor Operated Appliances ANSI/UL73, 9th Edition dated 12/23/04, Rev. 4/25/2006
- Each cable in the 2-cable hoisting system is independently supported & can carry 3 times the entire weight of the luminaire assembly.
- Centering System has no moving parts to fail
- Friction brake & 72/1 winch gear ratio prevent freefall of luminaire ring
- Magnetic brake on motor locks system in place if power fails
- Motor and clutch combination are incapable of breaking winch cables
- Manual pole base latching system guarantees latching on first try.



High Mast Lighting System

Our unique, reliable lowering system has features which make it the obvious pick for your next high mast project. The sturdy two-cable hoisting system and non-corrosive stainless steel throughout the design give it extended longevity and stability.

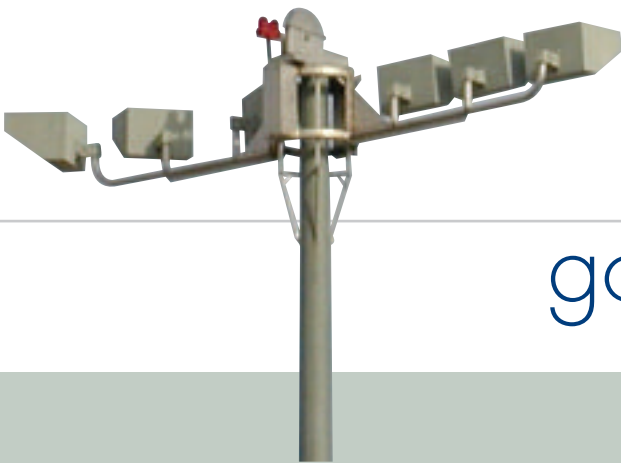


Millerbernd's Stainless Steel Lowering System design makes it much easier to assemble the pole and lowering system. Since it requires less assembly by the contractor it also reduces the cost of installation. Millerbernd is the only major pole manufacturer building both the high mast pole & lowering system as a complete integrated package, which makes Millerbernd the single source of accountability for both items.

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High Mast
Lowering System



go with a design that is

Down Light or Directional Floodlight mountings are both available.



Simplified Operating Procedure

Just attach the portable power unit to the internal mounting bracket, with a single pin, install the drive belt and you can begin the simple process of lowering the luminaire assembly. (Internal drive units are also available). Disconnect the luminaire power cord and it becomes the power source for the drive motor.

Finally, ring support tension latches at the bottom of the pole are manually released by the operator and the assembly is lowered using the push button controls. The lowering ring may be lowered to within four feet of the bottom of the pole.

Positive Positioning

A centering device at the top of the pole is constructed of four stainless steel rods which guide the luminaire assembly into position as it nears the masthead.

For final positioning, the cable guide cone on each cable is seated and the hoisting cables are placed under spring-loaded factory calibrated pressure by the winch until both winch clutches slip. The internal cable compression springs in the luminaire ring junction boxes, keep the luminaire ring assembly secured against the masthead over time and through any rough weather.

Adaptable Luminaire Ring

The dual luminaire ring assembly is adaptable to either down lights or floodlights. Horizontal stainless steel tenons project from the top ring for down lights, or bullhorns with vertical tenons are attached to the rings for directional floodlights. This unique design is exceptionally stable at the masthead and will not bind.

The two stainless steel junction boxes have ample room for terminal blocks and wire ends. A power inlet on the junction box allows the operator to test the lights at ground level.

HD (Heavy Duty) Luminaire Ring Racks capable of carrying up to 26 luminaires are also available

Base Options

H-Base: Prevents vandalism and enhances the pole's appearance by enclosing the anchor bolts in a tapered housing which is part of the pole. The "H" base is also structurally stronger than a conventional anchor base. In addition to the large access door, a 10" X 15" handhole is provided at 180° for wiring and anchor bolt access.

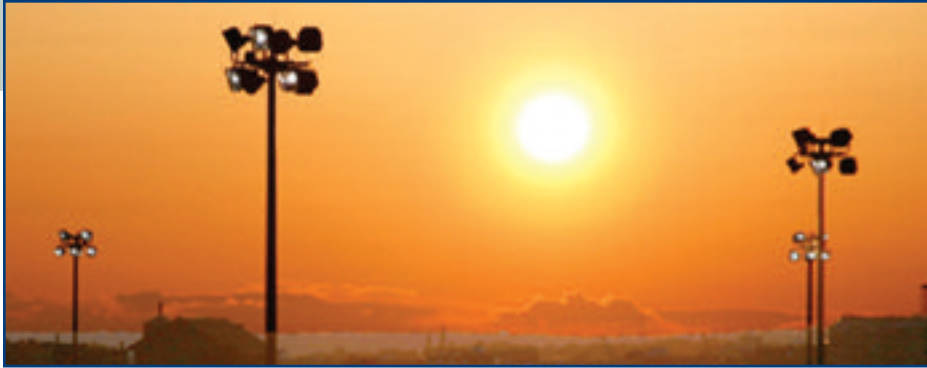
Anchor Base and Handhole: The anchor base is formed from high strength ASTM A588 bar steel stock cold rolled into a ring or flame cut from ASTM A36 steel plate depending on the pole size. In addition to the large pole access door, an optional reinforced handhole 5" x 8" can be provided at 180° for access to pole wiring.



"H" Base Model with Handholes



miles above the rest



Logan Airport, Boston, MA

Pole Construction

High Quality & Reliability also extends to our high mast steel poles. Millerbernd's experienced engineers, craftsmen and AWS D1.1 certified welders provide poles meeting the strict design requirements of AISC (American Institute of Steel Construction) and AASHTO. The Millerbernd high mast pole is normally 16-sided and fabricated of high strength steel sections. These tapered sections are joined at the job site by telescoping them into standard pole heights ranging from 60 to 200+ feet.

POLE FINISHES INCLUDE: Millerbond Factory Finish Paint Coat, galvanized, low maintenance weathering steel or prime coating for field painting.

Pole Specs

For pole specifications, go to www.millerberndmfg.com to get the most current information.

OR

Call and ask for a suggested specification that will best serve your project requirements at **1.320.485.2111**.

HD (Heavy Duty) Versions capable of carrying up to 26 luminaries are available.



75 YEARS + GROWING.

It's Millerbernd.

always raising the high mast standard

With our lowering systems, you will NEVER get the old run around of “It’s the pole manufacturers fault the luminaire ring doesn’t fit the pole shaft” or “The luminaire ring and lowering system are not sized to fit our specified pole shaft”. Millerbernd manufactures the entire package for you and since we build both the pole and the luminaire ring, you are guaranteed there won’t be any compatibility issues. There is no finger pointing with a Millerbernd System.

Compatible Right From The Start

NO! Any time there is a compatibility issue, each vendor will be sure to remind you that their product is the one that is correct and the other is out of line with the specifications. What it means to you is slow downs, missed deadlines and disputes over warranty issues

YES! Millerbernd will never be finger pointing and dancing around responsibility. Since we build both the poles and the lowering system, there will never be any compatibility or responsibility problems. One company, single point responsibility for the product and a 10 year warranty against factory defects.



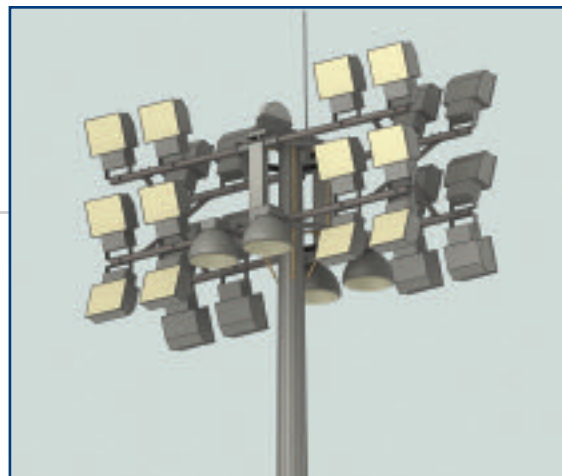
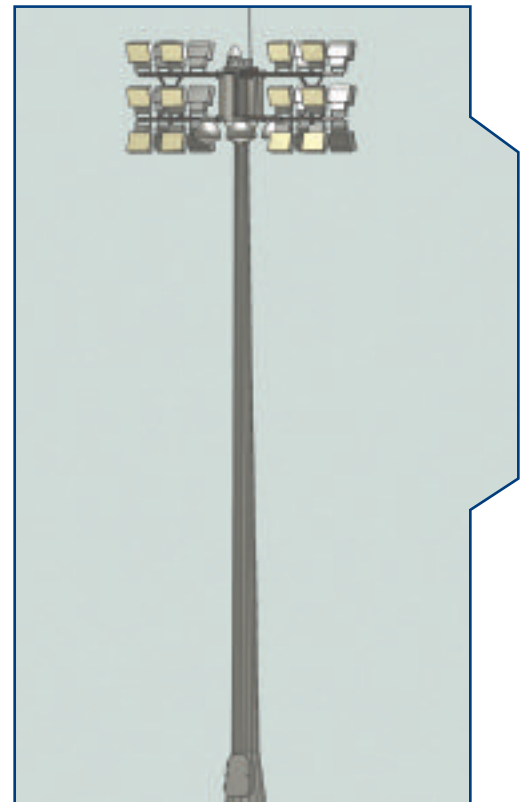
think BIG with our heavy duty lowering systems

Millerbernd's HD (Heavy Duty) Lowering Systems are designed for applications which require large number of luminaires at heights up to 160 feet or more.

Using two 5/16" stainless steel cables rated at 9000 pounds each, a heavy duty winch system and a special stainless steel Luminaire rack, the HD System can carry up to 22 flood-lights & four down lights or any combination of luminaires weighing up to 2000 pounds.

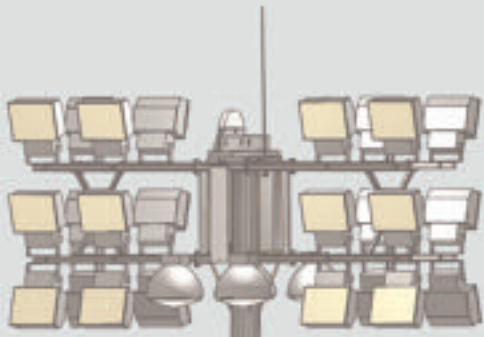
The HD Lowering System utilizes Millerbernd's trouble free Bottom Latching Mechanism and our thoughtfully designed centering mechanism without any moving parts to fail

*The HD Lowering System will accept any commercially available Luminaire suitable for the application



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For uncommon lighting loads, it's the Millerbernd HD (Heavy Duty) lowering system

- Pole heights to 160' or more
- Stainless steel luminaire rack
- Winch cables rated at 18,000 lbs
- Carries up to 26 luminaires weighing 2000 Lbs
- Designed to AASHTO Strength Specifications
- Will accept luminaires from any manufacturer
- Life tested to a simulated 40 years wear
- ETL listed lowering system*
- Pole & lowering system fabricated in an AISC Certified plant
- Fabrication performed by AWS D1.1 Certified Welders.

* All Millerbernd Lowering Systems are Third Party Listed and Certified by Intertek (ETL) as meeting the Safety Standards for Motor Operated Appliances ANSI/UL73, 9th Edition dated 12/23/04, Rev. 4/25/2006

from top to bottom + back again

It's Millerbernd.

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