

TLC[®] *for* LED[®]

Total Light Control[™]



We Make It Happen[®]

Keeping Good Lighting Affordable

With the emergence of LED sports floodlighting, facility owners are discovering that different manufacturers produce vastly different results.

The LED light source has distinctive challenges and advantages. To realise the full potential of LED lighting, it takes experience and a proven system for controlling and applying the unique characteristics of the diode in a sports setting.

With Musco's more than 45 years of experience—and over a decade of researching LED—our Team has looked at the combination of issues to achieve the best solution to meet your needs from structures, to quality of on-pitch light, to off-site impact, to energy and costs.

The result is a system that makes Musco's great lighting even better.

Better for players...

who want to perform their best and be able to track the entire flight of the ball.

Better for fans...

who want to see the game better and enjoy world-class light shows watching preps or the pros.

Better for neighbours...

who won't have light spill or glare in their homes or lights left on when not in use.

Better for the night sky...

with more light directed onto the pitch and less spilling above it.

Better for your budget...

an affordable system that's built to last and control operating costs.

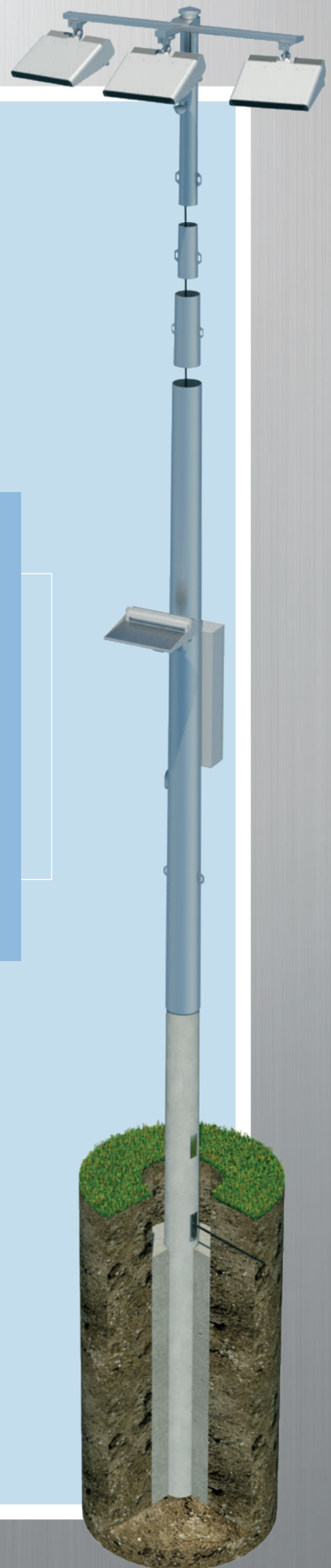
And you won't have to worry about maintenance costs for up to 10 years.

Control

from foundation to poletop...

from the light source to the pitch,
preserving the night sky...

assuring the results you expect,
day 1... year 1... and for 10 years.



A Unique System Design

5 Easy Pieces™ complete from foundation to poletop.

While other manufacturers produce single luminaires, our system approach delivers better long-term reliability and trouble-free operation.

Whether it's Light-Structure System™ complete from foundation to poletop, or SportsCluster™ system retrofitted to existing structures, we include lighting, structural, and electrical components designed to work together.

Our system provides a more protective environment for the LED's sensitive electronics, integrated grounding, surge protection, and remote drivers so servicing can be done from a step ladder, not a lift.

And we guarantee its performance for up to 10 years.

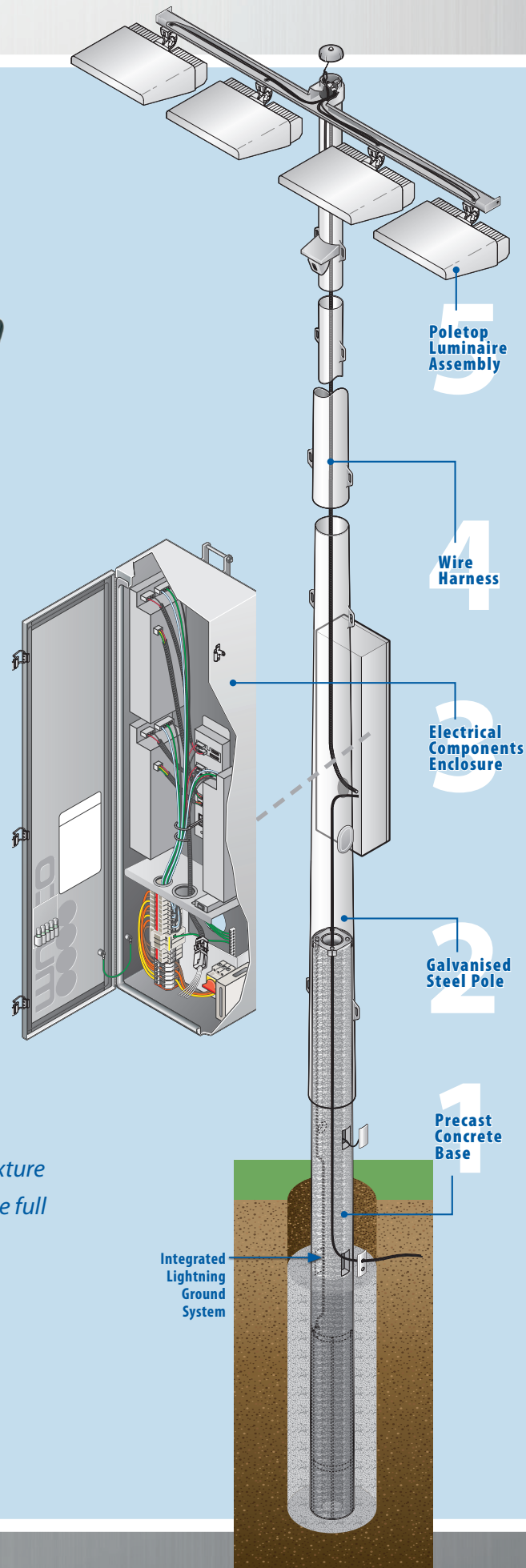


Control from the foundation to the poletop.



TLC[™] for LED[™]

Total Light Control[™]



"Advancements in all aspects of fixture design are critical to achieving the full performance of LED technology."

— U.S. Department of Energy
www.energy.gov/eere/ssl/led-basics

A Better Night Game Experience

The key issues in sports floodlighting haven't changed—how do you put more light onto the field, spill less around it, protect the night sky, reduce glare, and ensure it performs when needed and withstands the elements.

Our TLC for LED® system delivers highly-controlled downward light from the poletop, along with precisely-targeted upward light from our BallTracker® luminaires. Together, this patented system illuminates the underside of a ball in flight, creates better contrast against the dark night sky, and creates unparalleled cut-off, preventing spill and glare from affecting the surrounding area.

And for an enhanced entertainment experience, Musco's strategically located colour-changing luminaires and innovative light-to-sound synchronisation capabilities create Big League light shows for players and fans at pitches of all sizes.

This is why, when you walk onto a pitch lit by Musco, it just looks better.

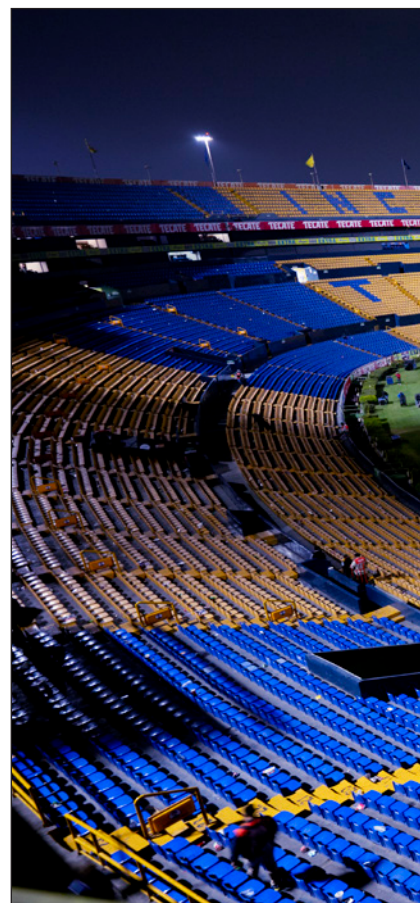
"Now you can actually see the seams of the baseball coming in at you, and you can pick up spin easier. BallTracker is really important because when the ball gets up into the air it keeps the ball white against the dark sky. So it helps a lot."

— Nate Esposito, Wilmington Blue Rocks (MiLB)

Control
from the light source to the pitch.



Sahlen Field - Buffalo, New York, USA



Estadio Tigres - Nuevo Leon, Mexico



With patented BallTracker® technology, players enjoy quality foodlighting, no glare, and better ability to track the entire flight of the ball.



Mount Rushmore - Keystone, South Dakota, USA

Pinpoint control from 335 metres away highlights the target area while preserving surrounding darkness.



University of Notre Dame - Notre Dame, Indiana, USA

Event foodlighting with dimming saves energy for high-usage, multi-use venues.



Show-Light® theatrics and special effects enhance fan and TV experience.

A Solution Neighbours Will Love

Emitting light is easy, controlling it isn't. At Musco, we care as much about preserving darkness around your pitch as we do putting high-quality lighting onto it.

Our system's custom optics, designed around the LEDs, control and apply the light precisely where it's needed. And our patented luminaire visoring greatly reduces glare at the light source.

This means no spill light or disruptive glare affecting neighbouring homes, and the preservation of dark skies above. It's why our system could be installed at a large, multi-pitch sports complex located in close proximity to an international airport.

Our light control capabilities have made lighting possible at pitches where, previously, it wasn't allowed due to community concerns.

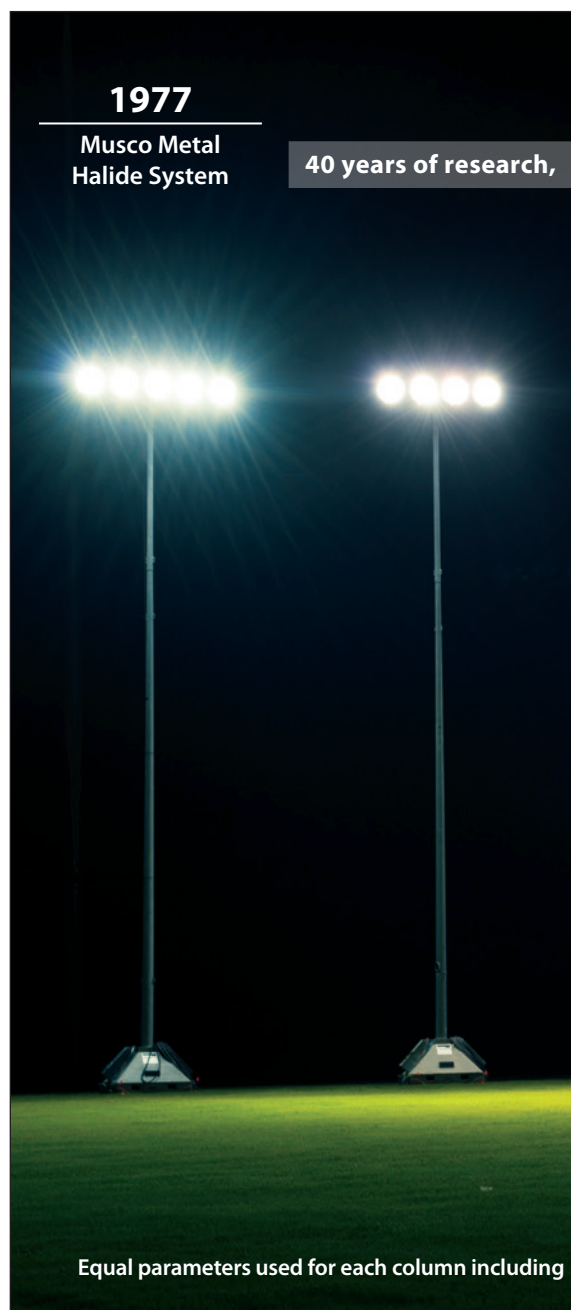
Control
preserving the night sky.

"Glyndon Park is in a naturally wooded residential area. We didn't want to illuminate the homes of neighbours in the area. I initially wasn't supportive of putting in traditional lights. The product Musco has developed allows us to light this field, yet light nothing else around it."

— Parks and Recreation Director, Vienna, VA



Glyndon Park Little League, Vienna, Virginia, USA



1977

Musco Metal
Halide System

40 years of research,

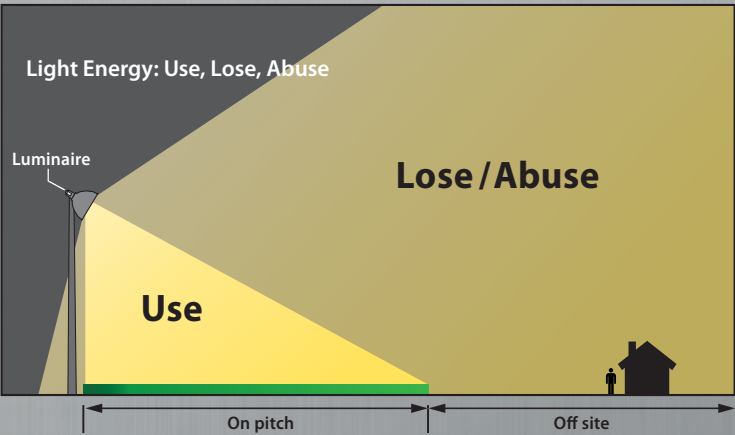
Equal parameters used for each column including

increasing efficiency and minimising environmental impact.

Today
Musco LED
System

Today
Other Luminaire
Manufacturer
LED

on-pitch light produced, wattage, height, and aiming angle.



A Pitch That's Always Ready for Play

With the remote facility management of Musco's Control-Link™ service, your pitch will always have light when it's needed.

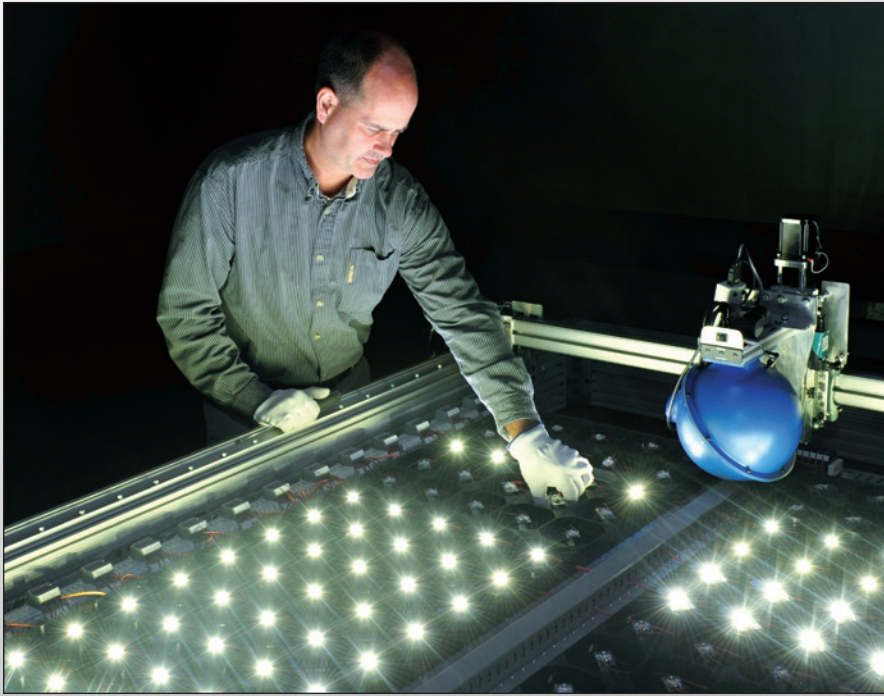
You'll be able to instantly turn your floodlights on or off from anywhere, with the touch of a smart phone. Our Team at Control-Link Central™ will be there for you 24/7 to provide scheduling and monitoring support.

In fact, if a problem arises we'll likely know about it before you do, right down to the luminaire. Here's a look at the service we provided customers in just the past year:

- *Turned floodlights on/off remotely for more than 7,6 million events.*
- *Conducted routine inspections and maintenance at over 11 000 pitches.*
- *Helped with scheduling and answered questions on over 297 000 calls, over 981 000 app sessions, and 1,3 million web site log-ins.*
- *Traveled enough miles servicing pitches to circle the equator 24 times.*

And with our 10-year parts and labour warranty, you'll have peace of mind for the next 3650 days knowing that you'll pay zero maintenance costs, won't have headaches over staffing and managing your floodlights, and will be free from neighbours complaining about floodlights being left on.

Control assuring the results you expect.



Our R&D, customisation, and application capabilities deliver solutions specific to each customer's needs.

"Musco called to let us know there was an issue before we knew we had a problem."

— Stephen Cooke, CPRP, CYSA
Greenville County Recreation Athletics Manager, Taylors, SC



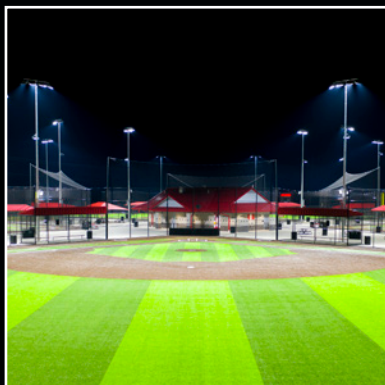
Our Control-Link™ service provides 24/7 proactive monitoring and the support of a fully staffed call center.



Our regionally-based technicians provide prompt service for 10 years.



Musco's Light-Structure System™ performs in real world conditions **for 10 years, guaranteed.**
We Make It Happen.®



Control

from foundation to poletop...

from the light source to the pitch,
preserving the night sky...

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We Make It Happen®

www.musco.eu
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