



BMR-A: Performance above all.

MAXON®



The first BMR, 1994.

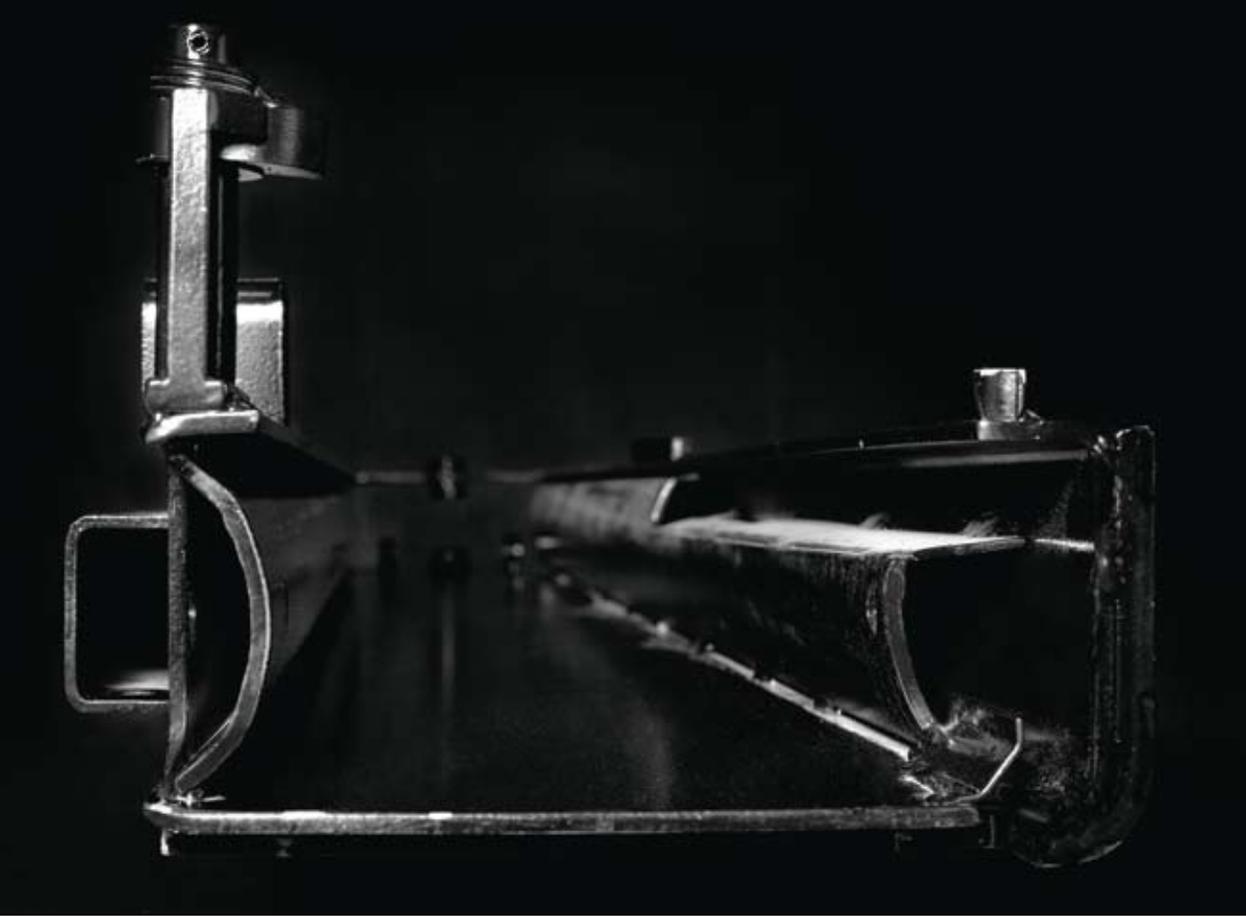


The first BMR, 1994.



Today's BMR-A design.

When we introduced the first-of-its-kind BMR (Big Maxon Rail-lift) in 1994, we redefined liftgate performance. Since then, it has become the workhorse you build company reputations on. In a world where there are no second chances, performance above all is key to your success. To explore all the dimensions of performance, we invite you on a journey through every tiny detail of the BMR-A. Every component that separates it from the rest. Every design aspect that makes your job easier. Every decision that we make to shape its class-leading performance and durability. We're proud to show you what the BMR-A has become over the years, and we hope you enjoy this detailed photographic journey through the Maxon BMR-A Columnlift.



The heart of a Columnlift is its column and runner assembly.

This sounds simple, but engineering a column and runner assembly isn't trivial. Especially when it must deliver solid, reliable performance day after day, night after night, year after year, in the toughest environments in the world. Without jamming. Without running out of power. Without putting the operator at risk. Which is why Maxon starts with a strong, rugged column assembly and makes it even stronger with thick steel sleeves for impact protection at the dock. It's also why we use a unique system of convex column surfaces and concave rollers that self-center and balance the load without introducing additional torque on the assembly—and provides the lowest friction, lowest power consumption lift mechanism available. No detail has escaped our scrutiny. We anticipate the needs of the most demanding applications—and ensure that the Maxon BMR-A exceeds them. And the result is clear: the most-reliable, lowest power-consumption, rock-solid lift that delivers in the real world.



Convex column surfaces that mate with concave roller assemblies self-center and balance the load without introducing additional torque into the assembly.



The BMR-A uses a unique roller assembly to self-center, reduce friction, and provide the lowest power consumption of any Columnlift.



BMR-A columns are protected by 1/2" thick steel sleeves and the toughest paint finishes on the market.



The column must be ready for extreme duty.

Everyone will claim that their lift is the strongest on the market. In fact, you can't browse an industry magazine without getting deluged with superlatives: *best, toughest, most durable, built for a lifetime*. But we at Maxon invite you to take a closer look, and really discover which column is ready for punishment at the dock. Our BMR-A columns have .5" thick steel sleeves for additional impact protection. They're painted with the toughest paint finishes on the market: MaxPro® and MaxPro Z+®. Add our attention to the tiniest detail, like having the taillights recessed into the column, and you'll quickly see what is "tough" and what's braggadocio. So go ahead. Bring the tape measures. Look critically at the paint. Ask to see samples of what will happen in tough winter climates. And take the time to inspect the overall layout and design of the gate. Is it ready for your dock? Is it ready for your customers? Is it ready to deliver, day after day, year after year?

No detail escapes Maxon's attention: here, taillights are recessed and thus protected from damage.

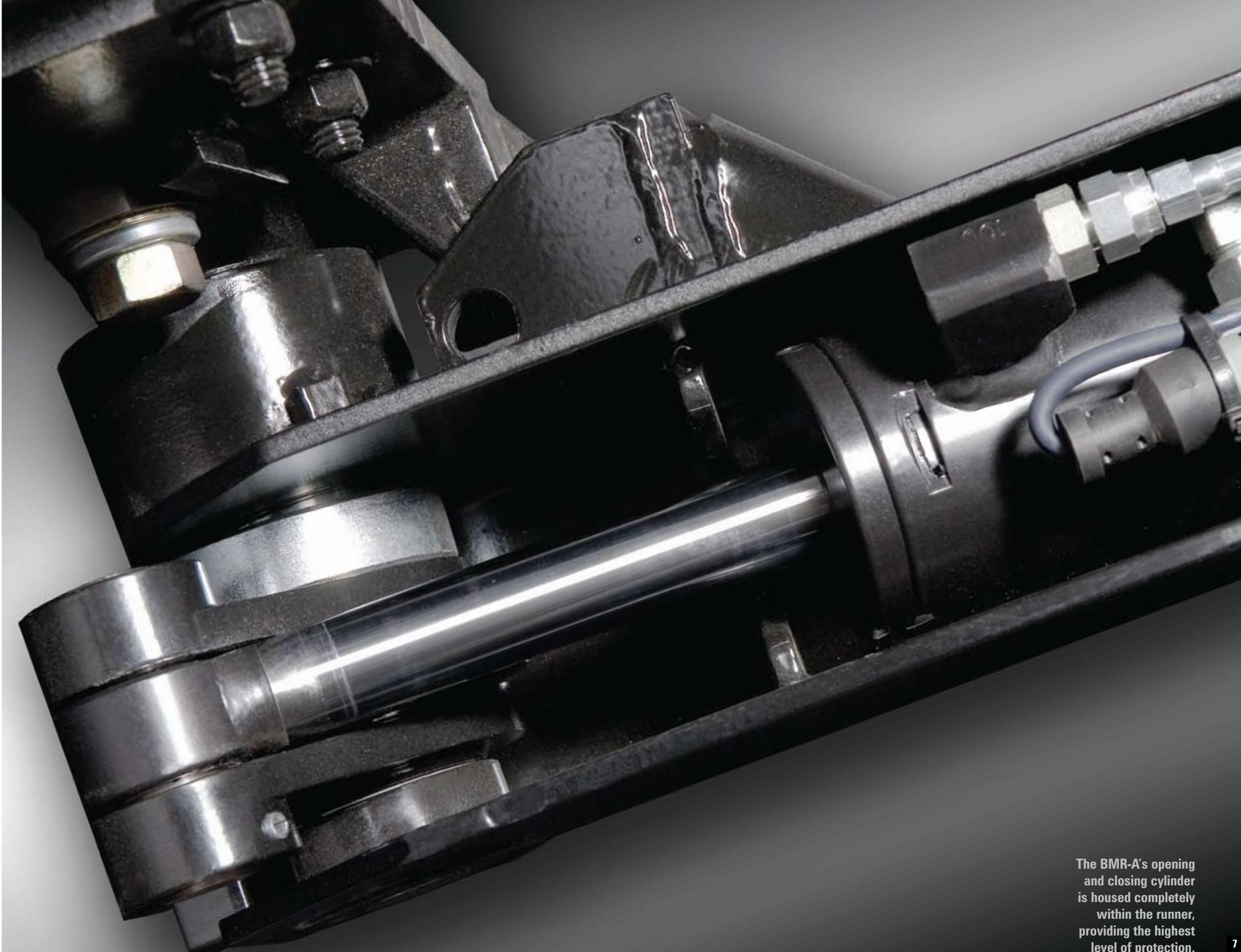


You have to keep everything covered.

Have you ever wondered what happens to all those cylinders and other components exposed to the elements? Hint: it's not pretty. And it's not just the elements. It's also the exposure to damage during operation. Which is why Maxon sought to protect every element of the BMR-A from the start. And the best way to protect everything is to keep it completely covered. When you inspect the BMR-A, you'll see that the opening and closing cylinder is completely housed within the runner—providing the highest degree of protection for this critical part. It also gives you the widest usable gate opening, since the cylinder isn't in the way. You'll also notice the highly sophisticated coupler design that is necessary to make this happen. We chose to put the engineering hours into this part, rather than get by with something that seems simpler—but provides no benefits. As a result of our choice, you get a more reliable gate—which helps ensure you stay on the road, rather than in the service bay.



We invested in a unique coupler design to move the opening/closing cylinder inside the runner.



The BMR-A's opening and closing cylinder is housed completely within the runner, providing the highest level of protection.

**Without a stable platform,
everything falls apart.**



**Aluminum platforms
use Maxon-designed
extrusions for
maximum strength.**



How strong is your platform? Our platforms start level, stay level, and provide the support you need for your loads—up to 6600 lbs. This is another example of “no detail being too small to escape our attention.” Our steel platforms seem simple, but they aren’t. Under their diamond plate surface (for better traction) is a corrugated understructure that was designed with the latest CAD software to provide the solidity, stability, and long service life you expect. You can also choose a sophisticated aluminum platform made from Maxon-designed extrusions—providing significant weight savings when compared to steel, while still delivering the durability you expect throughout the life of the gate.

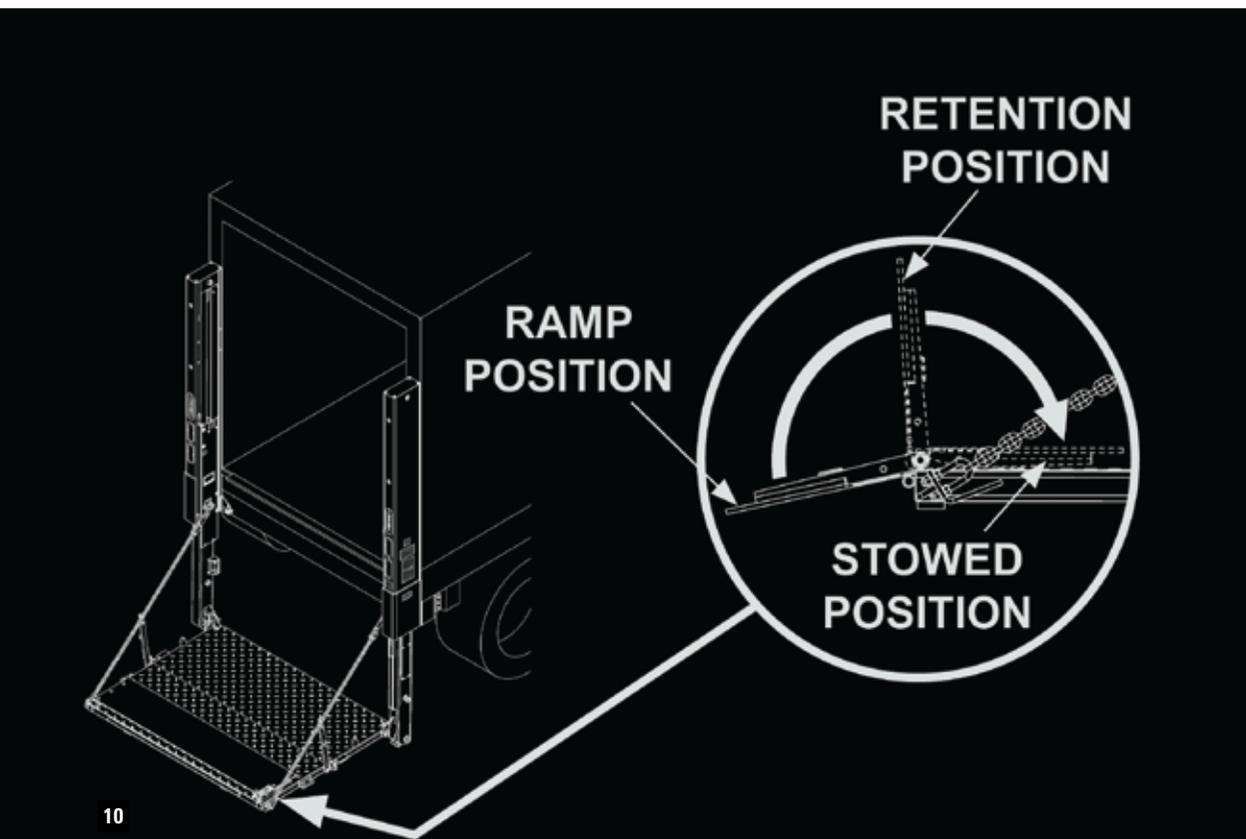
Underneath the diamond plate of our steel platforms is a strong corrugated support structure.



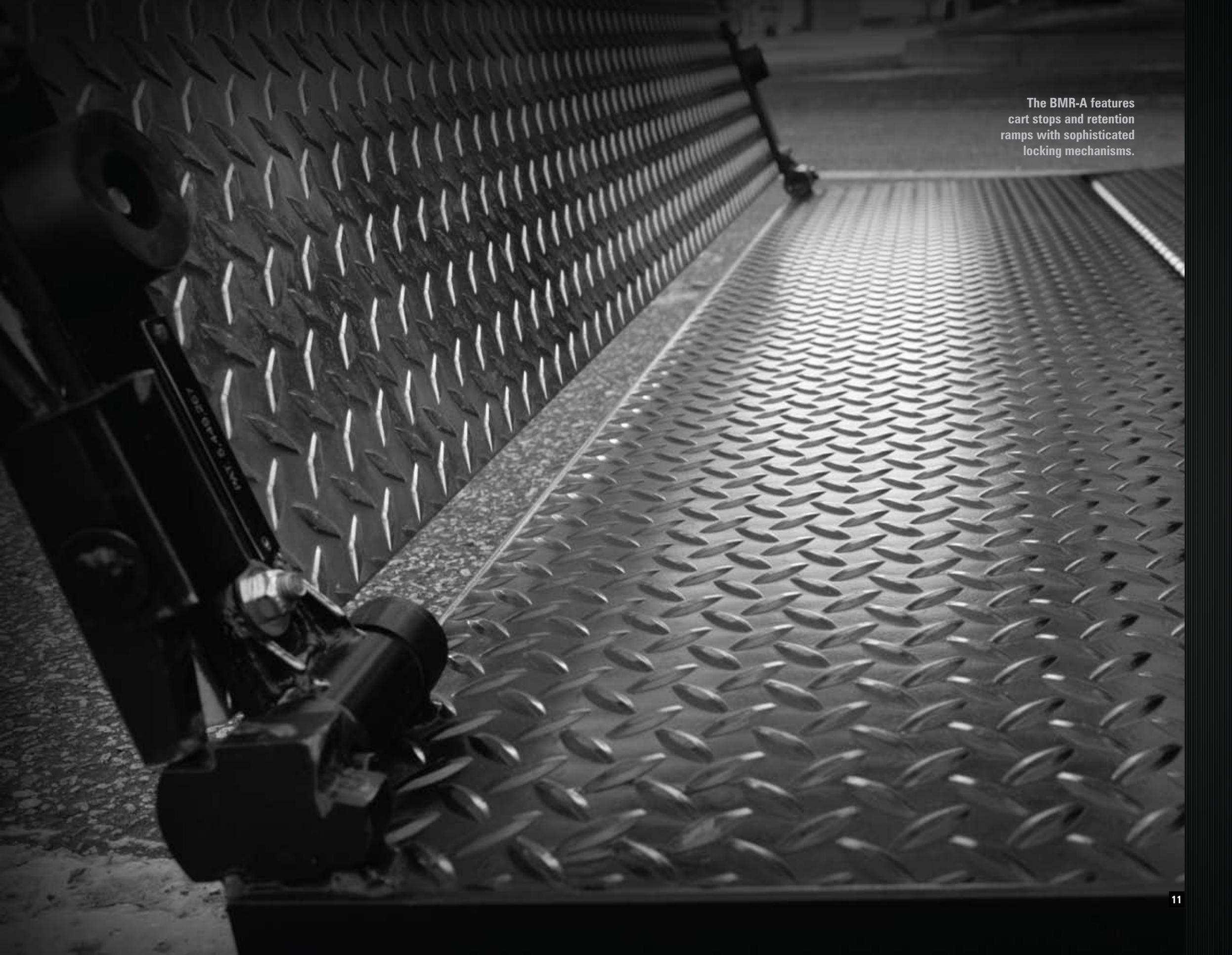
The BMR-A's unique design features protect the operator—and your organization.

Operator safety and efficiency shouldn't be afterthoughts.

Retention ramps and cart stops are things people frequently overlook—but when you're working with heavy loads, they're invaluable. And when you're working with a big load, your hands are usually full. Because of this, we designed the cart stops so they can be deployed and stowed with your foot. Similarly, our retention ramps have a sophisticated locking mechanism to enhance safety and ease of use. The more you look at the details—from cart stops and retention ramps to the inclusion of master safety switches and the robustness of the chain and anchor arm—you'll appreciate that efficiency and safety are always first in our minds.



The retention ramp is easy to operate and locks in place for safety.



The BMR-A features cart stops and retention ramps with sophisticated locking mechanisms.

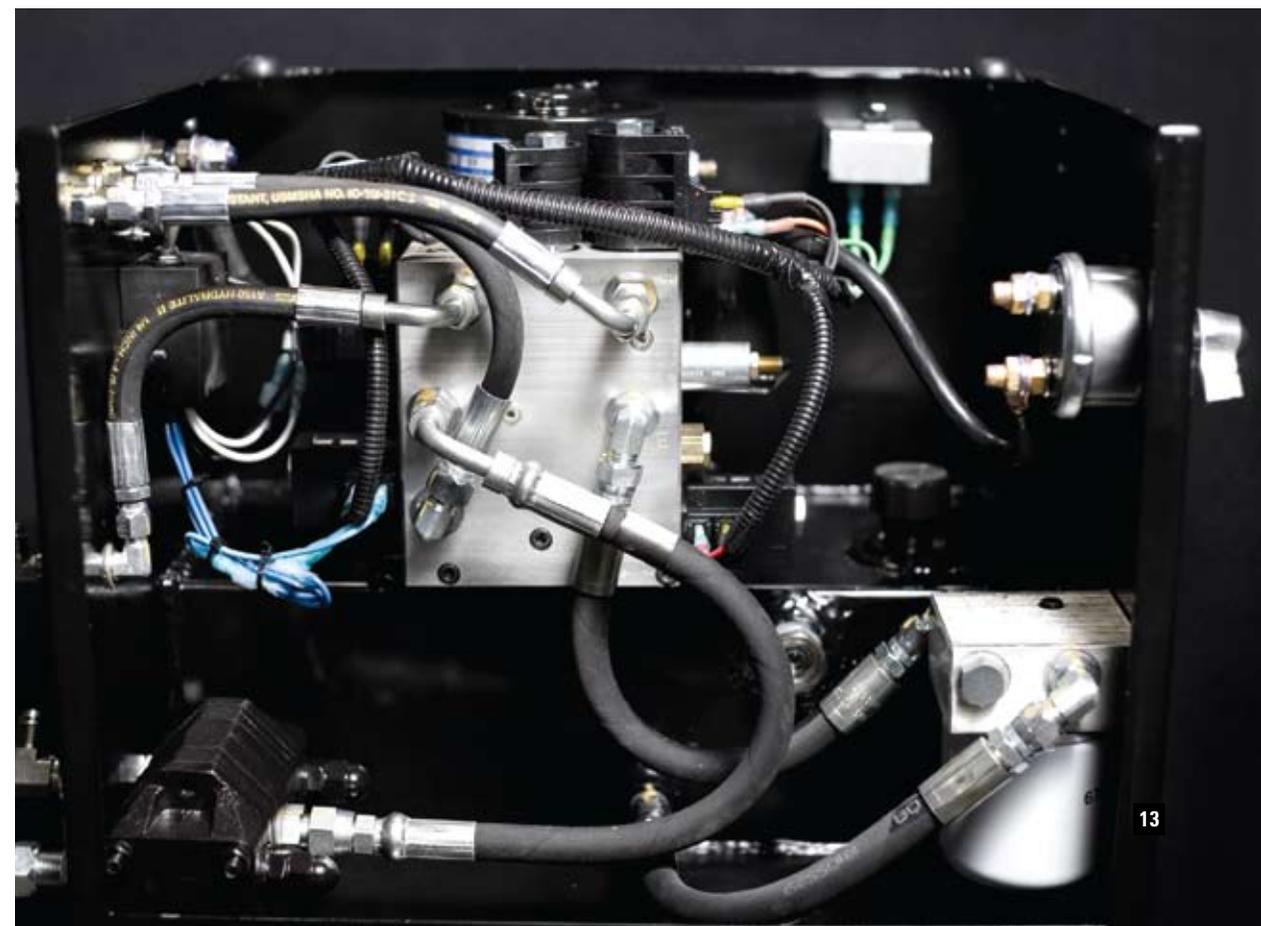
The BMR-A's pump is engineered for reliability and peak performance in operation.



**Powerful motor design
provides reserves for
heavy loads.**

The power of the lift is in its pump and motor.

One look at the BMR-A's pump and motor assembly, and you can see the quality. We use the best components, proven over the years to deliver the long life you need. What you might not see is the concept of redundancy. The BMR-A is designed to accommodate an optional redundant pump and motor system, providing back-up in the unlikely event of a breakdown. A dual pump and motor assembly also pays off through enhanced lifespan, since the components can be used alternately in service. The bottom line: count on your BMR-A to deliver years of safe, reliable performance.



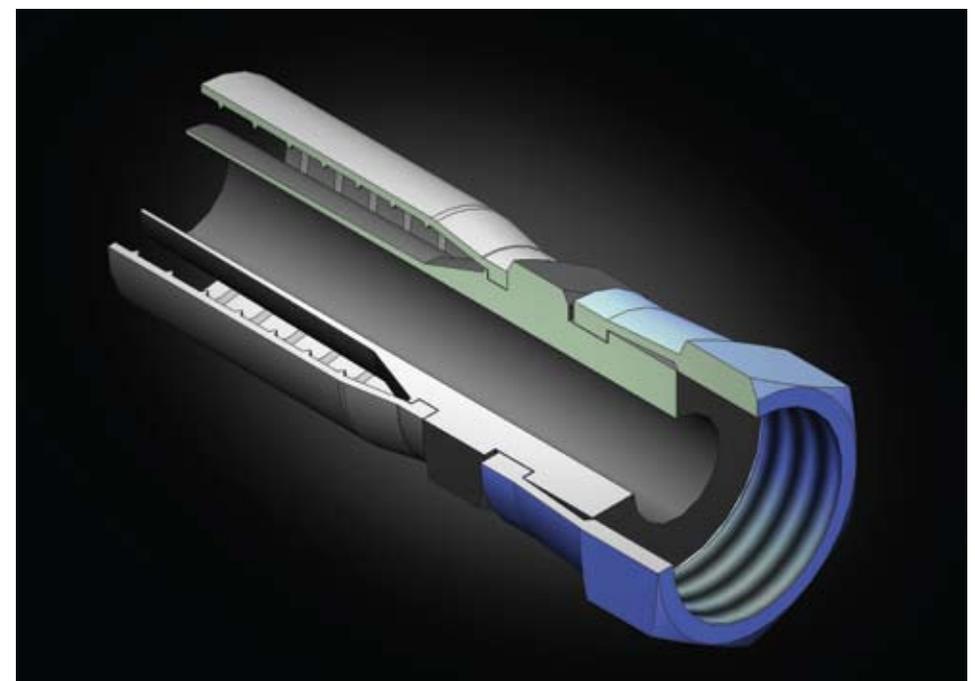
**The BMR-A pump assembly
employs state-of-the-art
electrical and hydraulic
components.**



**A higher standard
for hydraulics.**



Admit it. If your hydraulic systems don't leak, you don't think about them at all. Our engineers think about them all the time—in fact, you could say they obsess over them. That's why we've set higher standards on all aspects of our hydraulic systems. It starts with efficiency: the ability to lift the heaviest load with the least pressure. You'll find that Maxon gates can lift large loads with low overall system pressure. The benefit is longer life: hoses, couplings, cylinder seals all suffer less stress than with a high-pressure system. It's an invisible benefit, but it's very real when it comes to service time. Beyond efficiency, though, is safety. Release the switch at any point in a BMR-A's movement, and the hydraulic system automatically secures the lift with its two cylinder-mounted lock valves. The operator is out of the equation. The benefit is simple: added safety and convenience. And we apply these standards to every hydraulic component, from valves and fittings, to the manifold block and pump, to every single hose in the system.



Every hydraulic component benefits from Maxon's "lowest pressure for maximum lift" philosophy.



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Top left to bottom right: lock valves secure the lift in place at any point of operation. The manifold block is a unique design for extreme duty. Couplings use advanced connecting methods to prevent leaks.

**Electrical components
make or break a liftgate.**



**Maxon harnesses are
all over-molded and use
Deutsch connectors to
seal out the elements.**

Master Disconnect Switch

Since the most visible components of a liftgate are its hydraulics, it can be easy to overlook the electrical system. But Maxon knows electrical components make or break a liftgate. That's why you won't see cheap clamps, crimp connectors, and other half-measures in our electrical system. All harnesses are over-molded for a perfect seal against the elements. Deutsch connectors are used at critical points to seal out water and prevent corrosion. All switches are integral and sealed for longest life. And your productivity is further assured by innovative, high-tech additions like a Low Voltage Thermal Switch, which prevents the liftgate from being damaged if the motor temperature is too high, or the battery voltage too low, for reliable operation.



Heavy-Duty Motor Solenoid



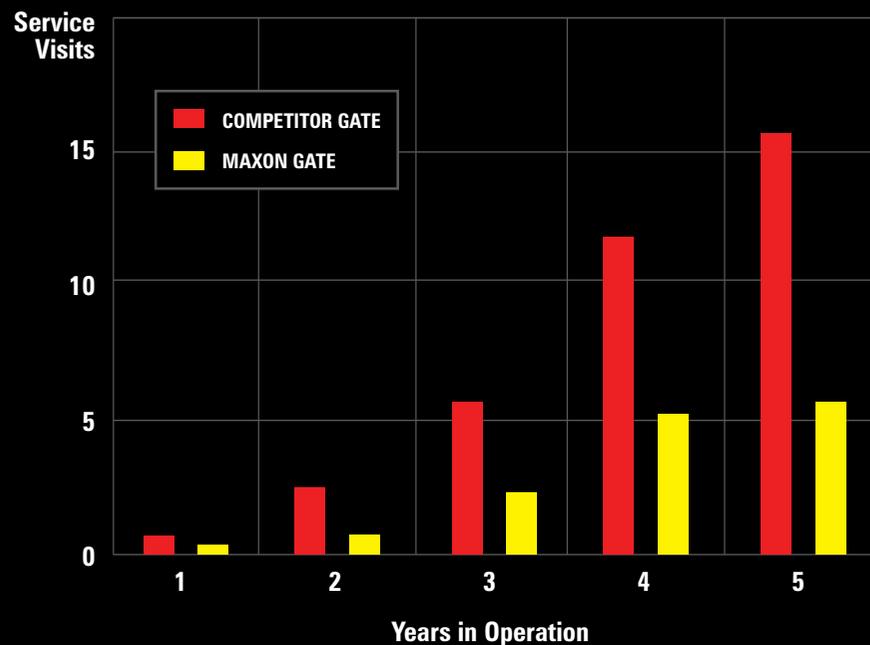


Conserving energy isn't just about the environment.

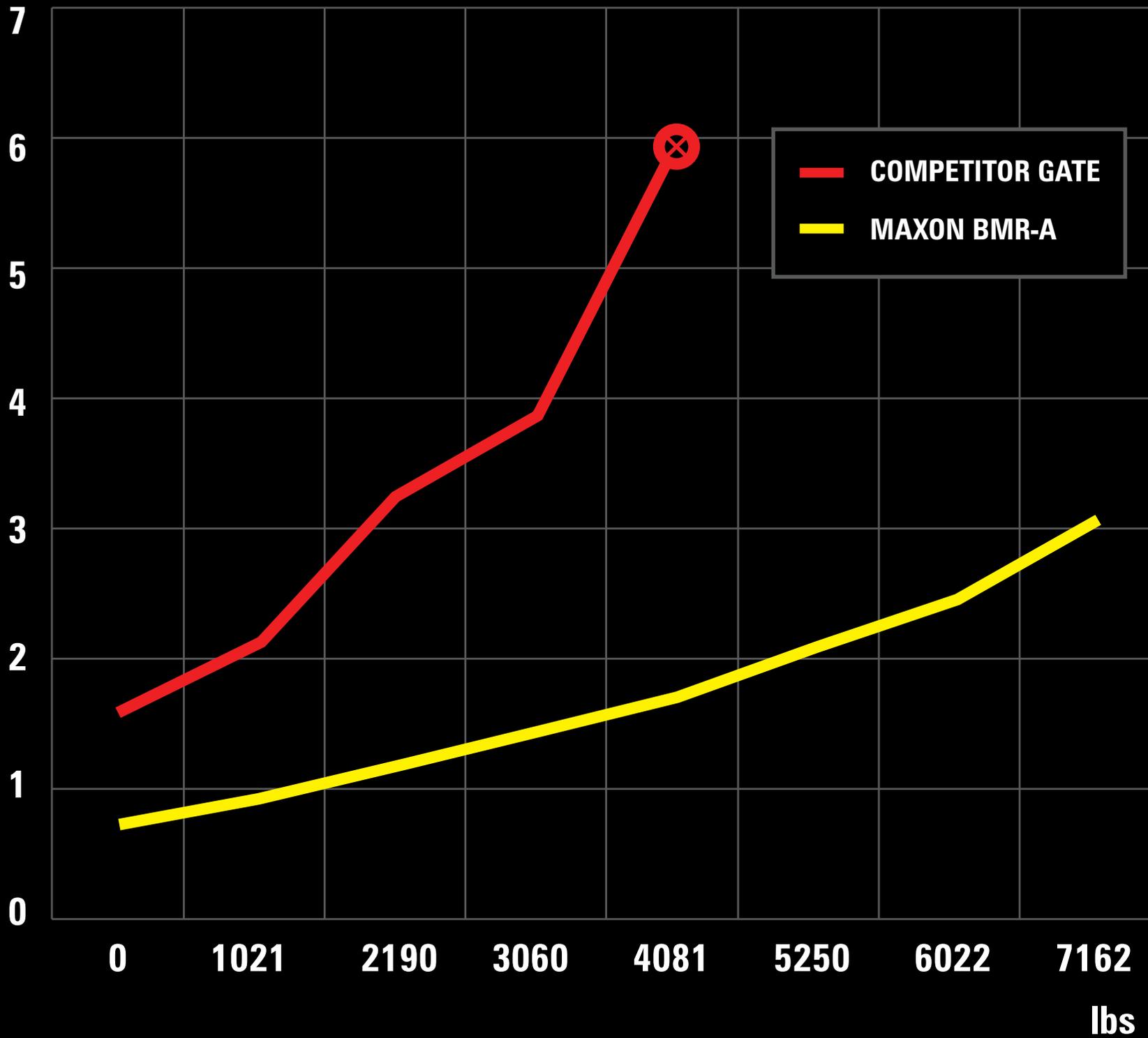
Well, unless we're talking about your business environment. Because the BMR-A Columnlift's low-power-consumption design enhances your bottom line. Low friction design, combined with innovative features like Maxon's Power Down on Demand, delivers up to 4X more cycles* than the competition on the same battery charge. For your operators, this means less idling time, and a lower chance they'll end up with a dysfunctional liftgate caused by low battery power in the middle of a shift. For you, this means more efficient operations, and lower overall operating costs. And the BMR-A's efficiency continues to pay off down the road. Consider this: if the energy used by the liftgate isn't going into lifting the load, where is it going? Into the lift. And this wasted energy prematurely breaks down components like cylinder seals, hydraulic hoses, electrical connections, couplings, motors, valves, and more. Maxon's energy efficiency also means a more reliable gate over time.

*Calculation based on Maxon R&D test results.

Maxon liftgates require 3X less downtime over the life of the lift, which means lower cost of ownership for your fleet.



Amp-Hrs



The BMR-A has the lowest power consumption of any lift, for up to 4X the cycles on the same battery charge at full lifting capacity.

*Chart based on Maxon R&D test data.

Installation doesn't have to damage your finish.

In the old days, installing a gate was a simple but brutal process: weld it to the rear frame of the truck or trailer, then touch up the paint on the liftgate and truck where it's been burned away by the high temperatures of welding. While this has proven to be a mechanically bulletproof process over the years, it is less than ideal for applications where the factory finish has to be preserved, or with sophisticated anti-corrosive paint treatments like MaxPro and MaxPro Z+. Because of this, Maxon chose to pioneer a new method of attachment: bolting the liftgate to pre-mounted channels on the truck or trailer. Since these channels are attached at the body or trailer production process, they're an integral part of the truck or trailer, and benefit from all the anti-corrosive finish applied to the truck body or frame. Also, bolting the liftgate on preserves all the protection of MaxPro or MaxPro Z+ paint finishes. Finally, it allows you the option of removing the gate from the truck at the end of its service life.

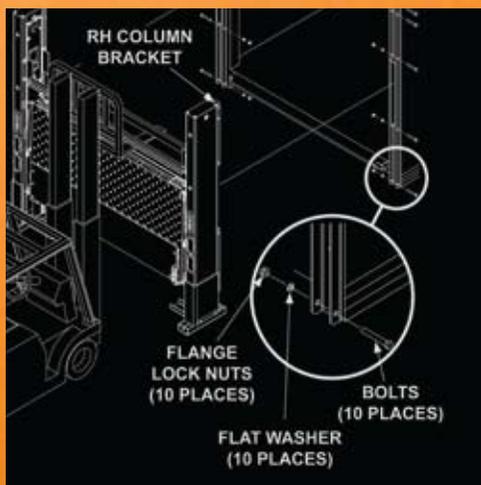
The unique advantage of MaxPro paint is its impact resistance and flexibility (see impact test pictures to the right.)



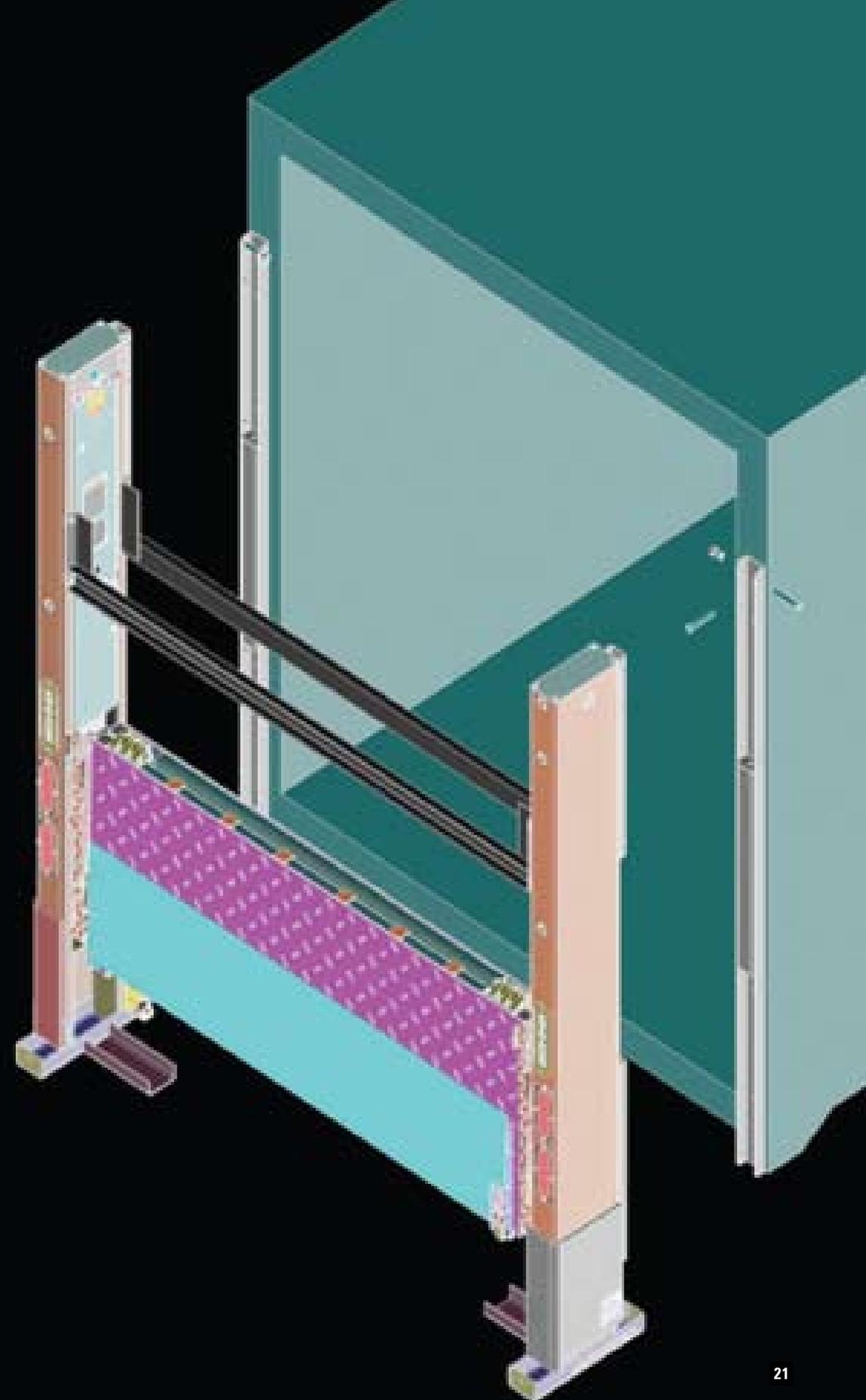
MaxPro Paint



Other Paint Method



The BMR-A is available in bolt-on configurations which preserve your factory finish—and the superior corrosion resistance of MaxPro and MaxPro Z+ paint.



The only factory purpose-built from the ground up for producing liftgates.

A sophisticated product like the BMR-A needs a manufacturing plant just as sophisticated. This is why Maxon chose to build a factory purpose-built from the ground up for producing liftgates. This allowed us to design the layout, tools, and processes to perfectly match our needs. From raw materials to complete machine shop, and multiple line-specific assembly areas, we were able to build a factory like no other. All key processes are in-house under our direct supervision: sheet metal fabrication, stamping, drilling, welding, painting, and final assembly. Even our tooling is monitored on a statistical basis for tightest possible process control. The benefit to you is that we can build more value into every BMR-A—and every gate we sell—due to the unique layout, design, and integration of our factory. We'd be proud to show you around, and to explain exactly how each element of our factory helps us produce the best liftgates in North America.



From design to delivery, every aspect of our production system was created for one reason: to produce the highest-quality liftgates.



Automated processes
are subject to stringent
statistical assessment
for highest quality.

10/10

10 of the top 10 For-Hire Carriers rated by Transport Topics use Maxon liftgates.

Why do the top carriers use Maxon liftgates? The reason is simple: your liftgate decision affects the company for years afterwards. Top carriers know this, and they choose the reliability and low cost of Maxon liftgates: almost 3X less service visits over the course of 5 years, and life-to-date cost less than 1/2 of the competition. The bottom line: Maxon keeps you working, more efficiently and at lower cost, for the long term. Add in the most robust service network for liftgates, and unparalleled flexibility of line, and you have a winning combination.

*Transport Topics 2009: Top 100 For-Hire Carriers



The BMR-A is available in a wide range of configurations to fit virtually every need.



Instant access to business leaders and decision makers.

Even though we're the largest single-brand manufacturer of liftgates, Maxon remains a family-owned company—and the only major North American-owned liftgate manufacturer. The benefit to you is instant access to the business owners and decision makers, for ultimate responsiveness to your needs. We don't need to wait for approval to come from afar, and you don't have to worry that company leaders half a globe away will misunderstand what you need for your business. Simply pick up a phone and talk to Brent, or Maxine, or Casey, and let us know what you need. We promise fast answers, meaningful conversations, hard work to meet or exceed your expectations, and never any statements like "well, let's see what top management thinks." That's the vision that Max Lugash had when he created the first Tuk-A-Way lift in 1957, and it's the vision that the third generation of the Lugash family continues to deliver upon.



Meet the third generation Maxon management team—Casey Lugash, Maxine Lugash Stratton, and Brent Stratton (left to right.)





From the beginning, Maxon (from Max & Sons) has been a family-owned company. This picture shows Max Lugash and sons Larry and Murray in 1959.

Preceding page, bottom left to right: Maxon at the beginning; Maxon's first facility; an early Maxon liftgate in action.

Performance drives you. And performance drives Maxon's design and engineering of the BMR-A Columnlift. In a time of "easy answers," we ask the hard questions. Questions like: how can we set the standard for every facet of liftgate operation, from performance to safety to quality to service life and more? How can we improve the performance of the smallest component, even if it's not immediately obvious to our customers? How do we communicate the benefit beyond quick, surface-level answers that seem so simple? As we continue our pursuit of the best-performing liftgates money can buy, we want you to continue your journey with us—enjoying the best performance of any product at any price, for all of your needs. Thanks for reading.





MAXON®

