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LATCHES HANDLES LINKAGES HINGES ELECTRONICS LOCKS/KEYS

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Seasons Greetings!

It is once again that time of year where we count our blessings and take a few moments to reflect on the year that is quickly drawing to a close, as well as wishing our customers and friends a very Merry Holiday Season!

From Tri*Mark*'s standpoint, 2017 has been a very challenging year. We were taken by surprise in the dramatic increase in product demands starting in March and from there have been playing catch-up with orders. Planning for 2018 has begun and from what we can determine, barring some unforeseen, large scale economic setback, 2018 looks like it will continue to extend this economic expansion. Any advance planning and forecast information that you can provide, will assist in managing your product requirements. Thank you to all of our customers who allow us the privilege of providing your access hardware solutions.

In the past we've always attempted to alert our customers when we see issues or trends which may have a bearing on the products we produce but, for one reason or another, are out of Tri*Mark*'s control. The availability and cost of raw materials is one of those areas.

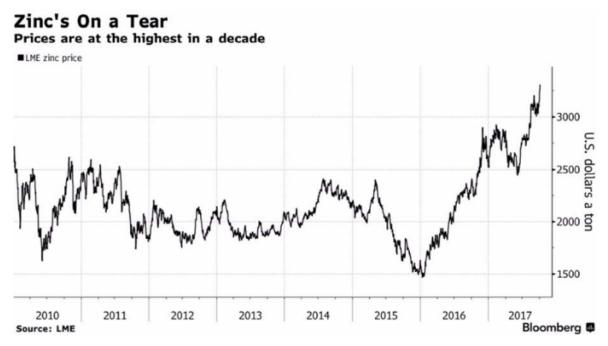
Raw Materials Update

Over the years we've made a sincere effort to be upfront with our customers about the cost of the raw materials that are used to produce Tri*Mark* products. In recent years we've been able to absorb the fluctuations of raw materials, but earlier this year we've seen a rapid run up in the cost of one material which has us very concerned.

The price of zinc has doubled since January 2016, and it is anticipated that these prices may continue to increase for another 6-12 months. Some experts speculate that, at that point it may decline slightly, but may never get back to the pre-2016 levels.

Zinc is not a raw material that normally gets much notice, but the dramatic surge to the highest level in a decade has us wondering what the long term prognosis will be. More than

50% of the global zinc consumption is used for galvanizing and zinc plating and is a common alloy in brass as well as its use in aluminum and zinc die cast alloys.



These cost increases, which come amid rising prices for many other raw materials such as steel and stainless steel, is having a major impact on Tri*Mark*'s product costs. Unfortunately, economic forecasts predict these trends will continue.

While Tri*Mark* cannot avoid passing along some level of price increase due to the sharp increase in raw material costs, we are currently investigating some options for our die cast zinc products. Be assured that Tri*Mark* strives to maintain a leadership role in the markets we serve and plan to supply the industries with cost effective quality products now and into the future.

TriMark Management Team



Innovative Solutions for Tri Mark Customers

Tri*Mark* Has the RIGHT Rotary Latch Solution for You

Tri*Mark* considers the heart of the door system to be the latch and most medium to heavy duty doors will require a Rotary Latch.

You may already know that Tri*Mark* has produced over **37 Million Rotary Latches** making it the global leader in rotary latch solutions. The range and breadth of the Rotary Latch product line has been built on years of careful engineering evolution as well as successful customer experiences with the full range of latch options.

Leading the industry in reliability and durability, rotary latch products range from basic stand-alone designs to integrated linkages for both FMVSS 206 and non-206 applications. Offering a broad selection of rotary latch sizes, versions, features and options to meet virtually any application, all Tri*Mark* rotary latches feature the highest levels of quality, security and strength.

Some of the most important features to consider when choosing a rotary latch are the strength, vibration, door seal loads and space claims requirements, this will assist in the selection whether a single or two rotor latch is required. The majority of Tri*Mark*'s rotary latch platforms are single rotor style, with one rotor engaging the striker. Two rotor latches however, tolerate misalignment and offer even greater strength than their single rotor counterparts, allowing them to withstand higher vibrations and working loads. Rotary latches typically are supplied in handed orientations for left and right hand doors.



One of Tri*Mark*'s major differentiators is the extensive selection of actuators that provide the connection from the internal and external handles. Some latch platforms have multiple actuation points allowing top/bottom actuation including stacked actuators, providing application flexibility. This is typically an application related decision and can involve a custom designed component. However, Tri*Mark*'s extensive selection of already tooled actuators may provide 'off the shelf' actuators that could reduce or eliminate application engineering and unnecessary tooling requirements.

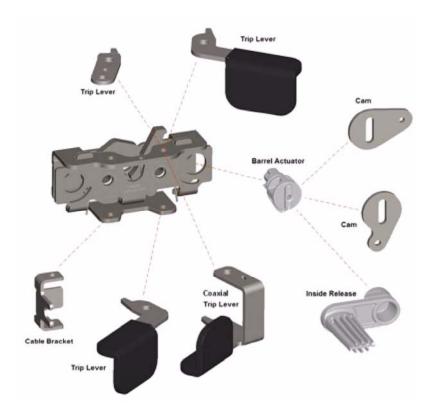
Tri Mark 050-1900 Single Rotor Latch

How Tri*Mark* is raising the bar for Rotary Latches

Tri*Mark*'s newest innovation in rotary latches features a robust, compact design that offers extensive actuation locations and options providing application flexibility. Based on the best features from our extensive portfolio of rotary latching products, the 'base' latch is designed using all non-handed components allowing left/right hand assemblies by positioning the internal latch components in the proper orientation. Designed for medium to heavy-duty applications for on or off-highway applications, this single rotor latch is available in both FMVSS 206 and non FMVSS 206 configurations. Additionally, this product provides for vertical clearance of strike allowing for door sag, misalignment and ease of installation.

Modular Concept for a Global Market

Its modular case is preconfigured with multiple actuation points allowing top/bottom actuation including stacked actuators as well as combinations of actuation points, which provide the most configurable rotary door latch ever engineered. In addition, the platform is designed to reuse Tri*Mark*'s extensive selection of existing actuators, reducing application engineering and unnecessary tooling requirements.



Global Focus

Today's Global operator stations demand ergonomic hardware placement as well as functional positioning of the latch, inside release and exterior handle into door structures. In addition increasingly larger glass areas challenge the door designers for space claims, connectivity and ease of installation and adjustment. This new latch platform's compact size and shape allows maximum use of door space and minimizes visibility issues without compromising strength or robustness. Its innovative barrel release with optional integrated cable bracket for ease of use/installation excels on agricultural and construction applications with massive glass doors coupled with weather tight door seals which demand low operating efforts.





Varied applications for today's vehicles demand application versatility with considerations for

remote release utilizing rods or cable connections, direct release from external handle, on-latch inside release levers with robust pivots, multiple release levers, left and right hand versions and a small footprint to allow for maximum visibility. This product platform delivers on all points in a single Latch family.

Safety was not overlooked either; the Latch demonstrates Industry leading strength, providing a robust structural element and the 8mm diameter automotive style hoop-type striker minimizes clothing snag hazard.



Several actuator return spring options plus optional coaxial actuator mechanisms are available for applications where it is desirable to provide additional support to the actuation levers.



In addition, accessories such as strikers, cage nuts, cables, rods and clips are available. System kits are also available and include handles, brackets and power lock actuators to provide a comprehensive electro-mechanical access solution.

Future provisions are also planned for state-sensing, power release mechanisms and an innovative slam cam door lift mechanism for heavy doors that are prone to sagging. Tri*Mark*'s expertise in system integration has evolved into a system category called Mechatronics, which combines mechanical and electrical elements. Not only is this approach elegant and efficient,

it lowers the combined cost for products and simplifies installation mounting and wiring for the OEM installation. Truly another example of smart design that solves problems and reduces cost while enabling increased functionality.