

#### EV SAFETY GAINS

Mine-ready electric Rivian R1T, elevating fleet safety

MEVCO

# The Rivian R1T enhances Light Vehicle fleet safety for mining

Electric vehicles offer significant safety improvements for Light Vehicle (LV) fleets in mining. MEVCO's mine-ready Rivian R1T features advanced safety systems like lower rollover risk, regenerative braking, and enhanced structural strength.

Discover the four EV safety gains in our guide to improving mine safety.





#### Modern vehicle architectures

The architecture of most LV Fleets in mines is based on designs that are several decades old. In contrast, the MEVCO Rivian R1T electric mining vehicle is built on a more contemporary design, providing significant safety improvements.





### 2 Lower rollover risk

Rollovers are a major concern for LV fleets in mining. Electric vehicles, with their lower center of gravity compared to combustion-engine vehicles, have a reduced risk of rollover. MEVCO vehicles also offer increased structural strength and torsional rigidity.





## 3 Increased active safety

MEVCO's vehicles are equipped with state-of-the-art active safety systems, many of which are not present in the majority of mine site vehicles. Systems like Vehicle Dynamic Control, Hill Start Assist, and Electronic Brake Assist significantly enhance on-site operational safety.





## 4 Regenerative braking

Regenerative braking is another significant safety feature. On long descents into mines, the braking systems of conventional LVs can overheat and fail. Electric vehicles, however, use regenerative braking to slow down without the need for brake application, reducing wear on brakes and increasing safety.





#### What is regenerative braking?

#### TRADITIONAL BRAKES

- In a regular vehicle, when you press the brake pedal, the brakes use friction to slow the car down
- This friction creates heat, which wastes the energy used to get the car moving in the first place

#### **REGENERATIVE BRAKING**

- In an electric vehicle, like the Rivian R1T, when you take your foot off the accelerator, the electric motor switches to work in reverse
- Instead of using friction, the motor slows the car down by resisting the wheels' motion
- While doing this, the motor captures the energy from the slowing car and sends it back to the battery to be reused



## Transforming mining safety with EVs

At MEVCO, we are redefining Light Vehicle (LV) use for the mining industry. We provide value to our customers and enhance worker health and safety by leveraging cutting-edge technology to transition diesel LV fleets to electric.

To Learn More visit www.mevco.com

