Tula Technology Enables Rare Earth-Free Electric Vehicles

Efficiency

Permanent Magnet Machines with REE

- Efficiency
- High Cost

- REE needed increases cost of machine
- Concerns with REE supply chain
- REE mining generates 3 tons of toxic waste per EV

REE-free Machines

- Efficiency
- Cost Savings

- Industry looking for REE alternatives
- BMW and Renault in production with EESM (REE-free)
- Tesla announces REE-free IPM
- REE-free machines have lower efficiency

Dynamic Motor Drive (DMD®)

- Efficiency
- Cost Savings

- Tula's patented software solution
- Improves eDrive efficiency by 2-3%
- DMD reduces life cycle upstream CO_2 by 1 ton per EV

DMD
DYNAMIC
MOTOR DRIVE

Cost Savings