DATE: September 17, 2013 (revision date)

SUBJECT: Traction Motor Over-speed

RATING: ☒ ALERT (Action is required) (Potential Problem)

Machine Model (s): All Ohio DE Series Cranes

Serial Numbers: Equipped with Two Traction Motors & 14.98:1 or 15.0:1 Gear Ratios.

Summary: Crane travel speed must be limited to 28 mph with the Traction Motors engaged. Travel speed is reduced by 10% to 25 mph, when crane wheels are extremely worn.

Operational Impact:

Traction motor over-speed may result from the following conditions:
1. Self-Propelling down grades in excess of 28 mph travel speed.
2. Unchecked wheel spin. Operators should exercise caution to avoid wheel spin.
3. In-train movement of the crane while the travel gears engaged
4. Attempting to self-propel the crane without engaging the travel gears
Additional Information:

> The maximum allowable rpm for traction motor armatures is 4,500 RPM.
> Armature turns at a rate of 160 revolutions per one mile per hour of crane travel speed.

Traction Motor Rebuilds:

> It is critical that a rebuilt motor is balanced for a 4,500 rpm operation.

**GE-763 Traction Motor ratings**
(Self ventilated, 33" wheels)

IEEE Ratings Continuous - 400 Amperes

- 60 Min. – 450 Amperes
- 30 Min. – 470 Amperes
- 20 Min. – 500 Amperes
- 10 Min. – 580 Amperes
- 5 Min. – 730 Amperes