



## TD-24-AC-T Portable AC Chassis Dynamometer

The TD-24-AC-T is a fully-contained, portable, motorized, Chassis Dynamometer specifically designed for testing Over-the-Highway (OTH) trucks. Rated to test at altitudes up to 10,000 ft (3,048 m), the TD-24-AC-T is road-legal in the US, Canada and Mexico and offers side loading with ramps. The Portable, AC Chassis Dynamometer takes less than 60 minutes to set up and begin testing. It has an axle weight rating of 20,000 lb (9,072 kg) per axle and a max speed rating of 75 mph (121 kph). The dynamometer is unique in that it provides power-absorbing as well as power-motoring. The motoring function provides downhill simulation.



Image shown is for display only.  
Actual TD-24-AC-T may vary.

### TD-24-AC-T

#### Specifications

|                  |   |
|------------------|---|
| Power:           | Rated at 300 hp (224 kW) per axle (absorbing)<br>Rated at 290 hp (216 kW) per axle (absorbing) at 10,000 ft (3,048 m)<br>Rated at 200 hp (149 kW) per axle (motoring) |
| Rolls:           | Dynamically-balanced rolls 24 in. (0.61 m)<br>Tandem axle space 50 to 60 in. (1.27 to 1.52 m)<br>Tandem axle weight 20,000 lb (9,072 kg) per axle                     |
| Size:            | Length x Width x Height 50-1/2 x 8-1/2 x 13-1/2 ft (15.4 x 2.62 x 4.14 m)   |
| Speed:           | Max speed rating of 75 mph (121 kph)  |
| Weight:          | 56,000 lb (25,401 kg)   |
| Weight on Axles: | From king pin to center line of tandem axles 41 ft (12.5 m)<br>with 33,600 lb (15,241 kg) axle weight   |

**Everything you need to succeed**



### 1 Chassis Dynamometer Rolls

- Roll diameter of 24 in. (0.61 m)
- Dynamically-balanced
- Shaft-mounted torque sensors
- Air-operated truck disc brakes for roll locks
- Belt-driven idler rolls accommodates measuring parasitic losses and simplifies the braking system for the rolls

### 2 Hydraulic Ramps

- Length 21-1/2 ft (6.6 m)
- Accommodates a vehicle (under test) wheel base up to 24 ft (7.3 m)
- Made of aluminum alloy
- Side-mounting, secured with clamps and alignment pins
- Hydraulic system designed for simultaneous lift of both ramps
- Channels for lift rollers to allow for operation without a concrete siting pad
- 3 leg sling lift
- 7 degree angle
- Rigging provided to deploy and store the ramps using the on-board crane
- Convenient storage docking on top of dynamometer (when not in use)

### 3 Generator

- On-board diesel generator provides all necessary power
- Generator load bank 200 kW (to maintain genset health)
- Digital genset controller

### 4 On Board Support Structure

- LED task lighting
- Compressed air hose reel 95 psi, 50 ft (15.2 m)

### 5 Electro-Hydraulic Crane

- Designed for easy placement of the ramps
- Range of 2-1/2 to 20 ft (0.8 to 6.1 m)
- 5,000 lb (2,668 kg) capacity at 3 ft (0.91 m) extension
- 1,250 lb (567 kg) at 20 ft (6.1 m) extension
- Wireless controls
- Powered by on-board electrical system 24 V

### 6 Leveling System

- Leveling jacks
- Level sensor
- Hydraulic pump
- Powered by on-board electrical system 24 V

### 7 High Voltage Electrical Enclosure

- Climate controlled and insulated to maintain the health of variable frequency drives
- Braking resistor for dissipating absorbed power 570 kW
- Convenience outlet 15 amp, 120 V

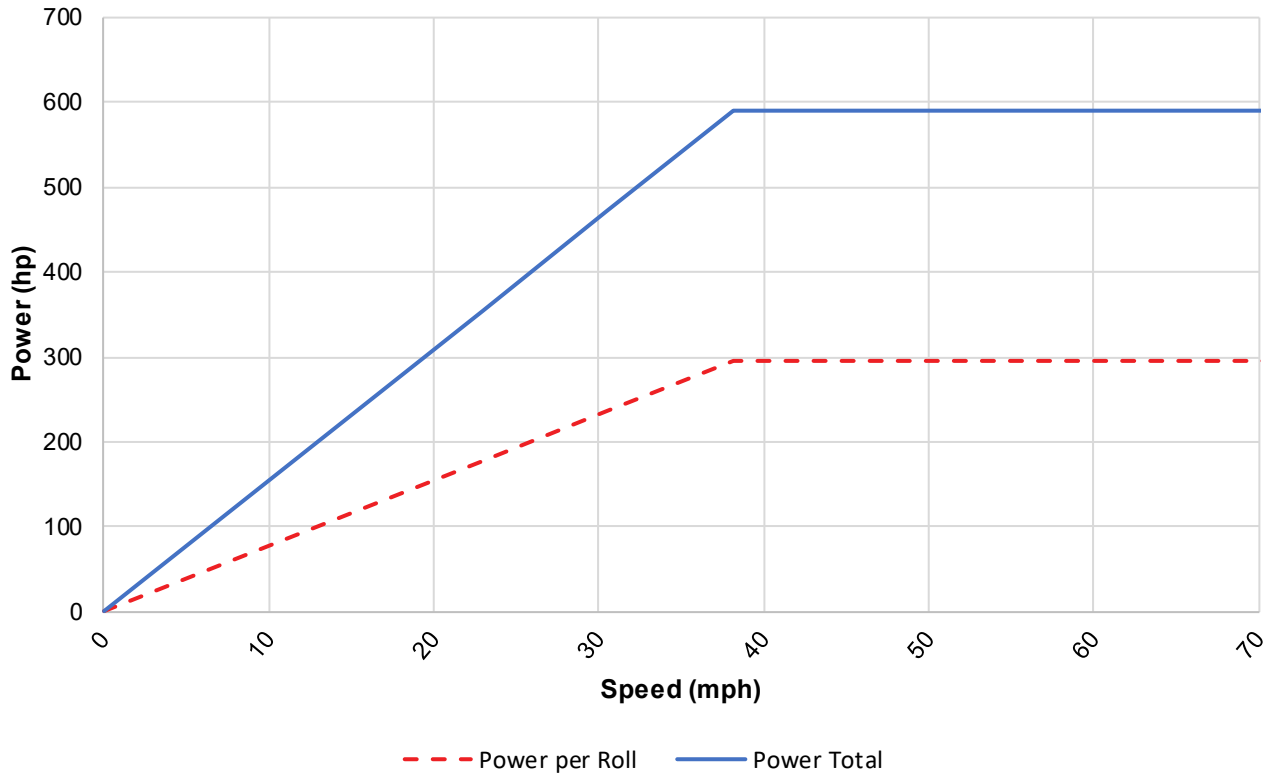
### 8 Trailer

- Slider type suspension subframe
- Capacity air ride axles 23,000 lb (10,432 kg)

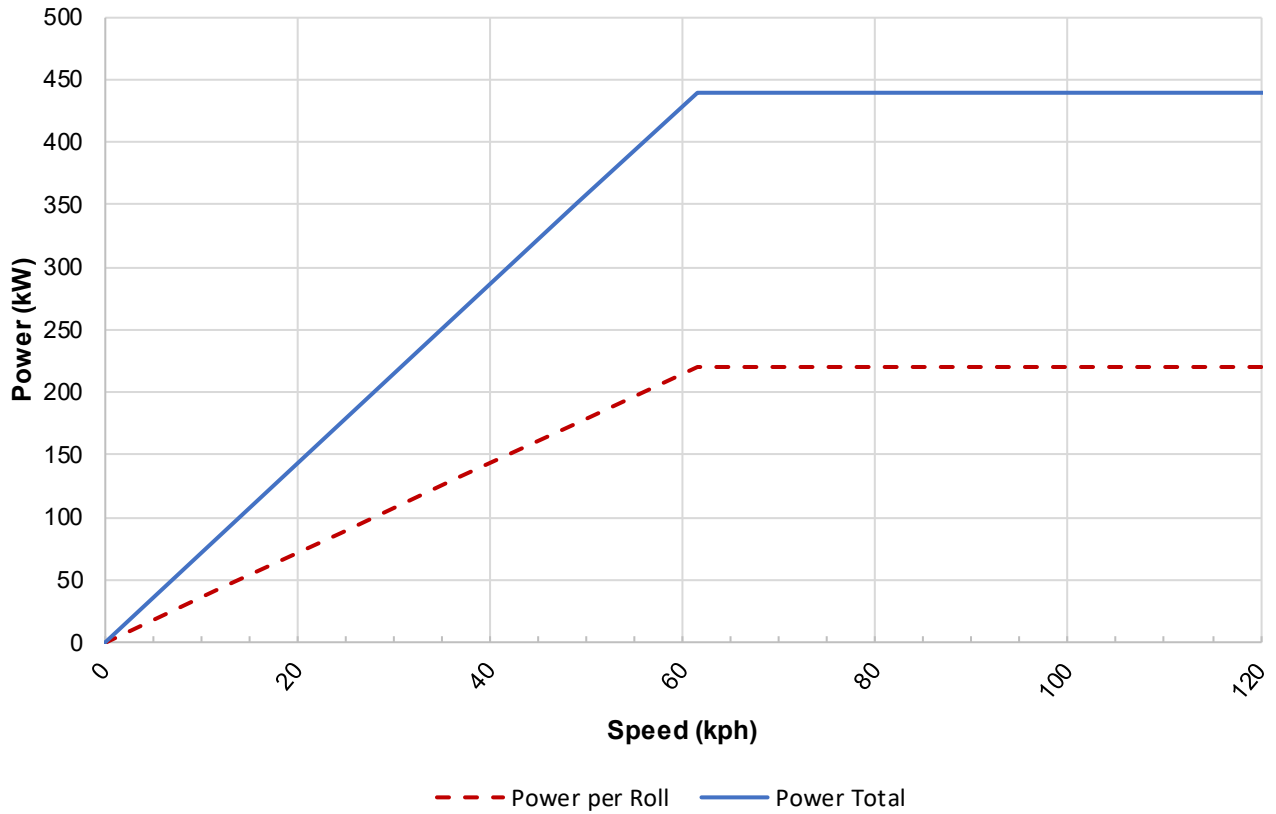
### 9 DynPro<sub>2</sub>

- State-of-the-art data acquisition and control system
- Quick operation - start testing in just 3 clicks
- Fully configurable, yet easy to use
- Wireless or wired communication to tablet or PC
- Includes wireless tablet
- Dynamometer health monitoring
- Multi-Protocol Interface Device (MPID) for ECM communications (optional accessory)

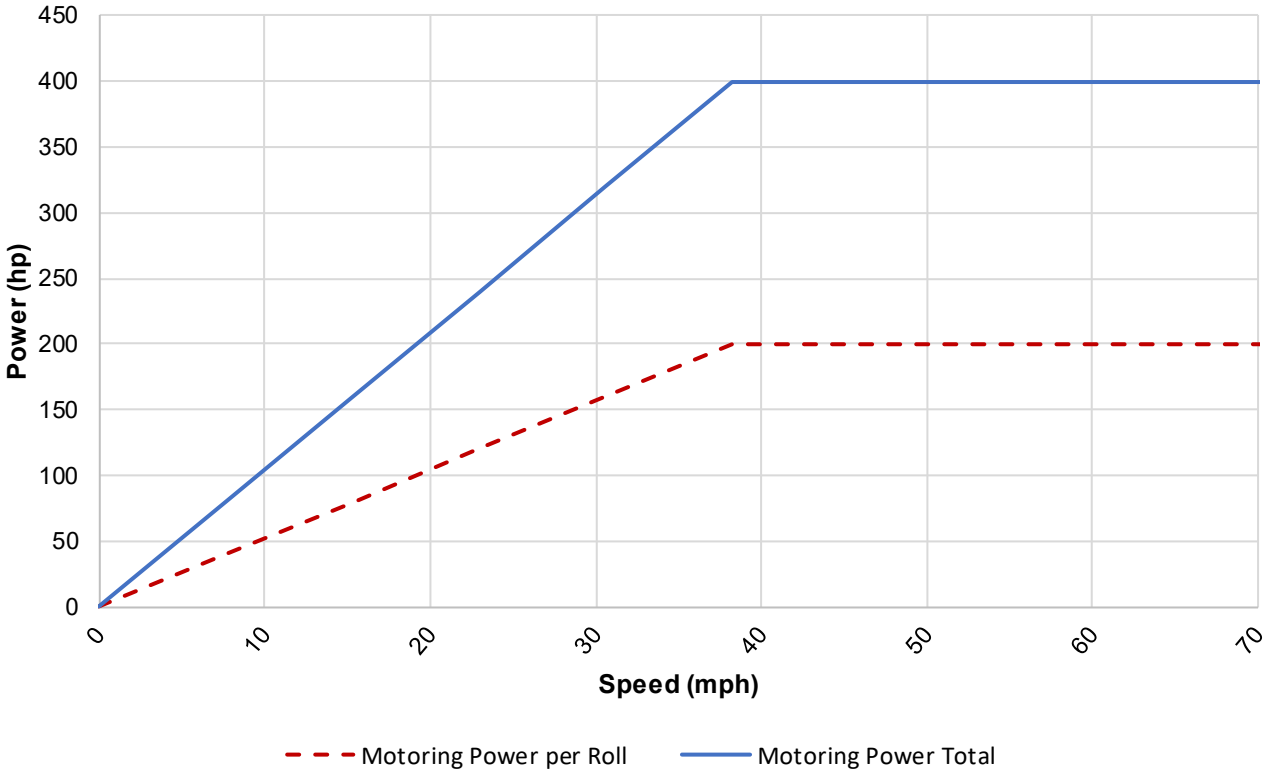
### TD-24-AC-T (US Customary) Absorbing Mode



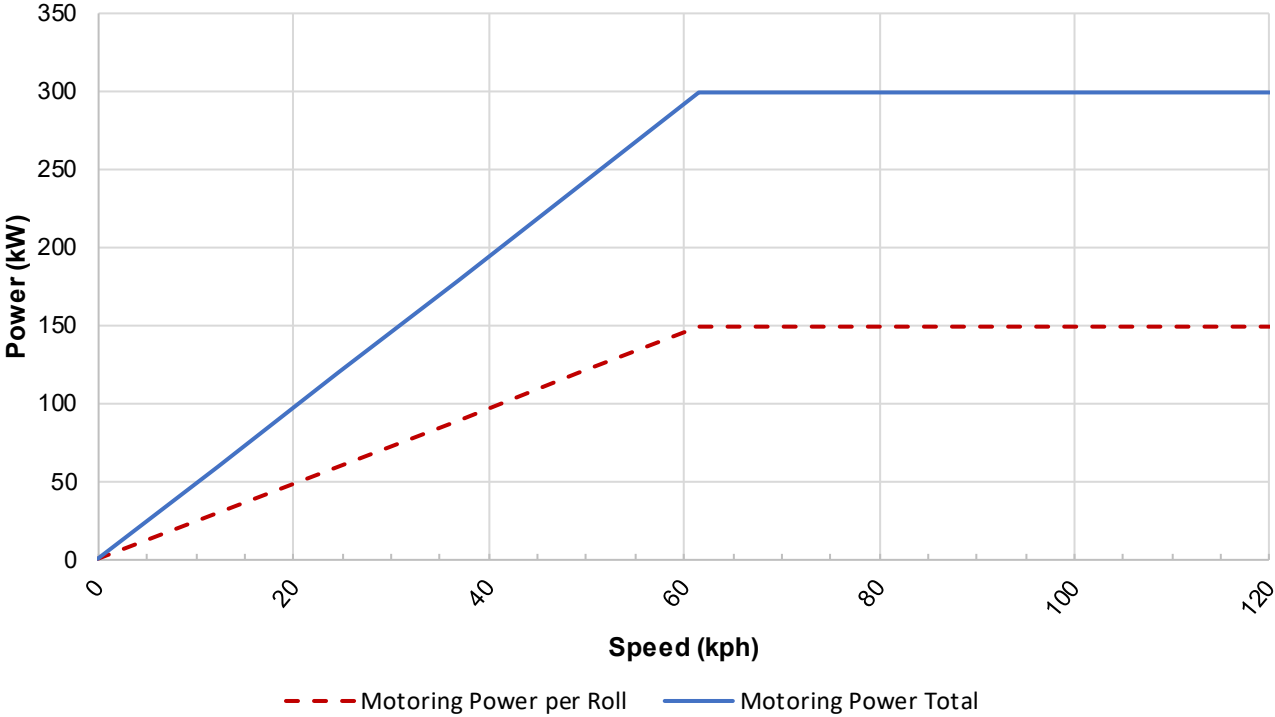
### TD-24-AC-T (S.I.) Absorbing Mode



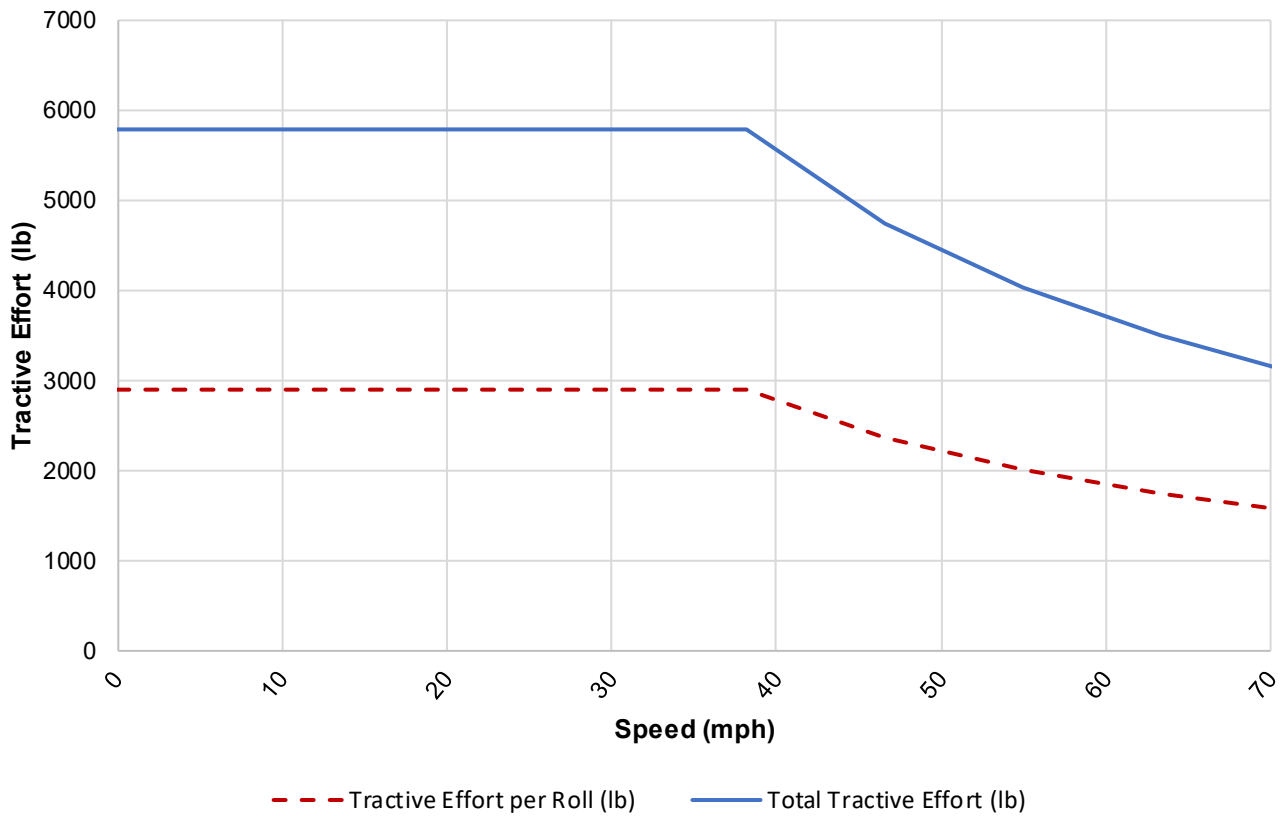
### TD-24-AC-T (US Customary) Motoring Mode



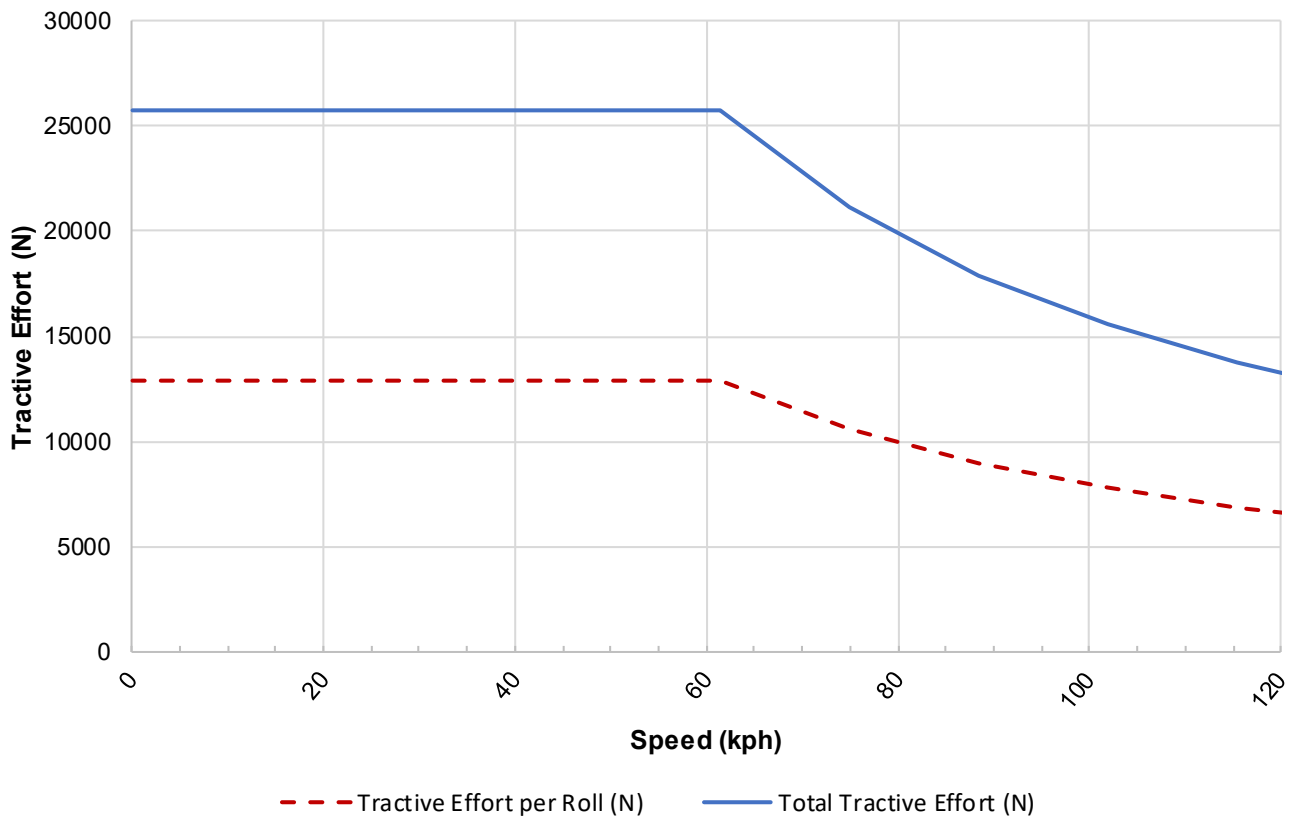
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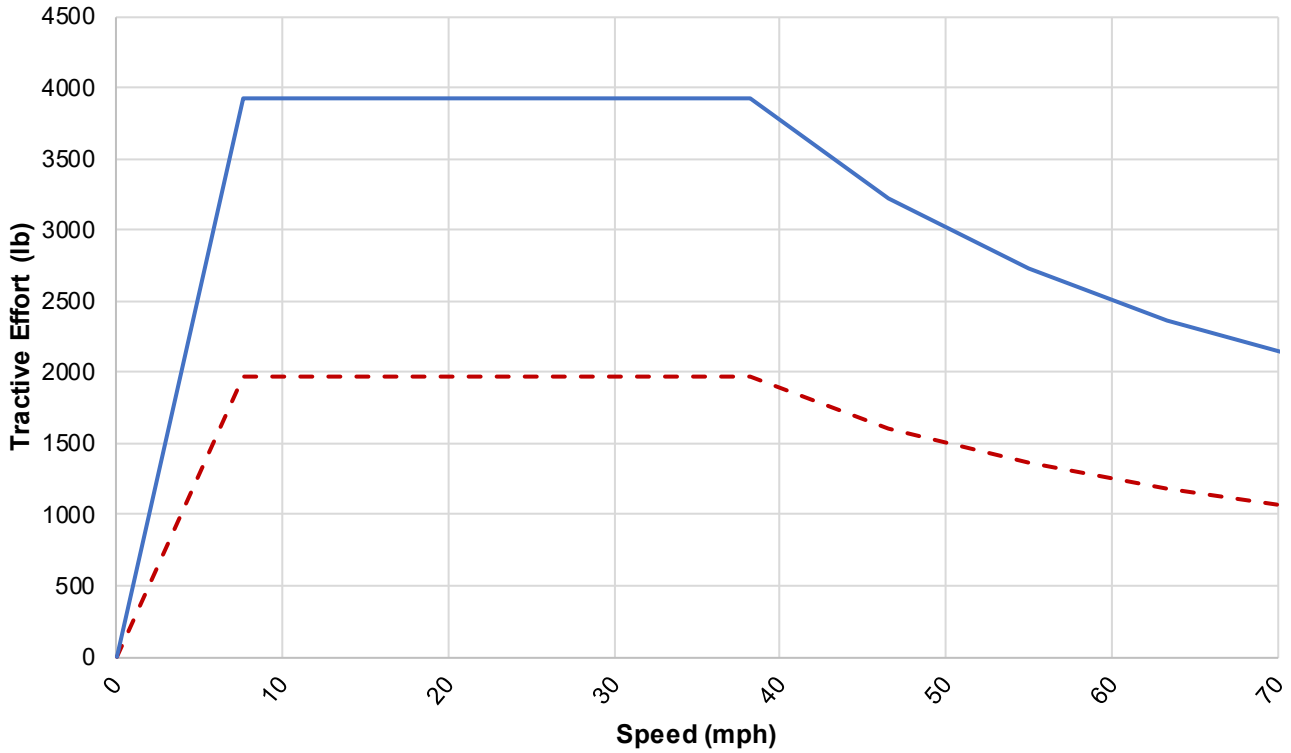
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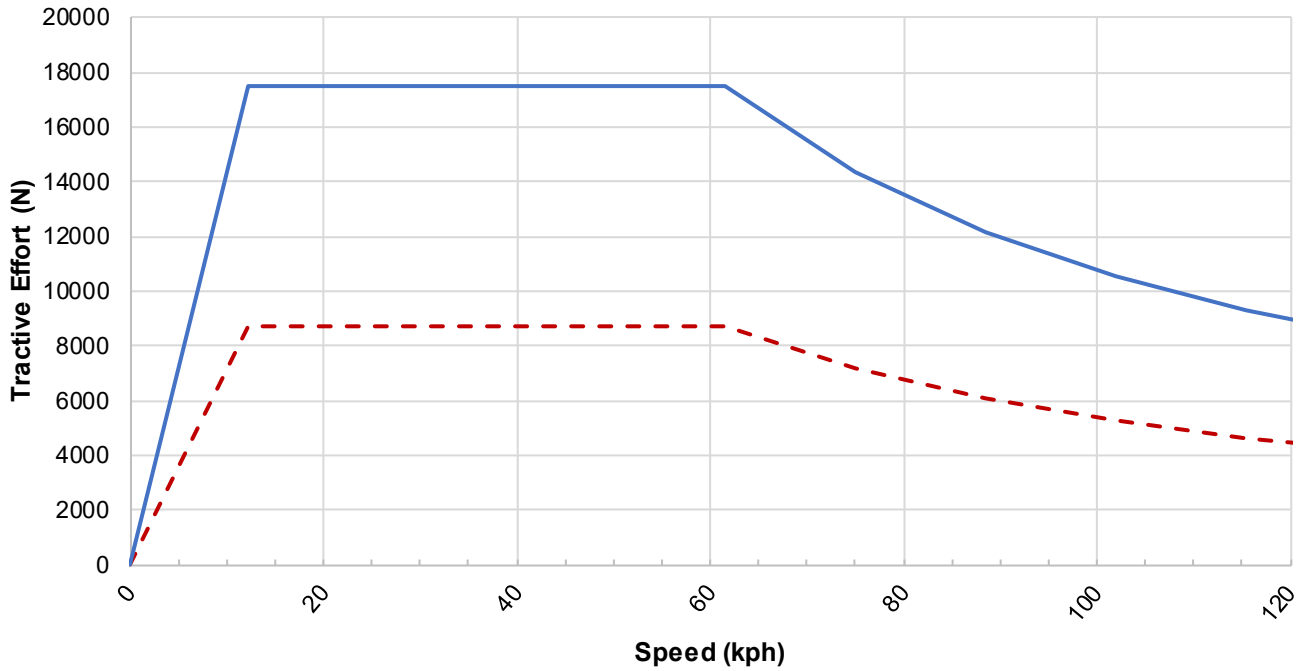


### TD-24-AC-T (US Customary) Motoring Mode



--- Motoring Tractive Effort per Roll (lb)      — Motoring Total Tractive Effort (lb)

### TD-24-AC-T (S.I.) Motoring Mode



--- Motoring Tractive Effort per Roll (N)      — Motoring Total Tractive Effort (N)

*Everything you need to succeed*

