

Introducing
Shuttle-Sync
A Revolutionary Multi-Unit Solution



Shuttlewagon is proud to present Shuttle-Sync, our groundbreaking multi-unit (MU) solution designed to tandem two railcar movers together, delivering from ~1.5 to 1.9 times the tractive effort of a single railcar mover. This innovation mirrors the efficiency of locomotives but with the added flexibility and cost-effectiveness of using railcar movers, setting a new standard in the railcar moving industry.

Specifications

- Tractive Effort: From ~1.5x to 1.9x the individual units.
- Primary unit controls both units from either the cab or Cattron remote control.
- Communication between the 2 Shuttlewagons is through the SAE-J1939 CAN communication protocol.
- Works on 2018 models or newer.
- Can only work with similar Shuttlewagons in terms of Engine, Transmissions and Gearing.
 - **Commander:** SWX525 can only match with itself.
 - **Navigator:** NVX6030, NVX7035 & NVX8040 can work together in any 2-unit combinations. NVX5025 can only match with itself.
- Multi-Unit operation is only accessible in Rail Mode.

Estimated Tractive Efforts Listed Below

Model 1	Model 2	~Total TE
SWX525	SWX525	55,670
NVX5025	NVX5025	68,400
NVX6030	NVX6030	75,810
NVX6030	NVX7035	78,755
NVX7035	NVX7035	81,700
NVX6030	NVX8040	94,335
NVX7035	NVX8040	97,280
NVX8040	NVX8040	112,860



Shuttle-Sync Main Feature Categories

Requirements

- 2 Shuttlewagon units with Shuttle-Sync installed.
- Both connected units must be model year 2018 or newer.

Enhanced Tractive Effort

- Shuttle-Sync harnesses the power of two railcar movers, effectively combining their strengths to achieve significantly higher tractive effort. This capability is particularly beneficial for heavy-duty operations, providing the power of a locomotive with the agility of a railcar mover.

Streamlined Operations

- Shuttle-Sync offers increased mobility and flexibility over a locomotive. Shuttlewagons are bimodal and can travel on both rail and roadways, providing economical and efficient operations. Shuttle-Sync takes this a step further by offering enhanced power without sacrificing maneuverability.

Cost-Effectiveness

- Shuttle-Sync offers a more economical alternative to traditional locomotives, which are often expensive to purchase and maintain. Shuttlewagon Mobile Railcar Movers are known for their cost-effectiveness in terms of lower fuel consumption, fewer crew to operate, and lower maintenance costs.
- Shuttle-Sync is designed to offer these same economic advantages, reducing operational costs while boosting efficiency.

Performance

- Has the highest Tractive Effort of any Road/Rail Railcar Mover.

Flexibility

- Tandem Shuttle-Sync can be operated from the primary cab or remote control.
- The same controls are available in Shuttle-Sync mode or as a single Shuttlewagon.

Safety

- Utilizes not only the power of the 2 Shuttlewagons, but also the combined railcar mover braking as well as the combined compressed air of both railcar movers for train braking.
- Camera view from both Shuttlewagons is visible from the primary Shuttlewagon.
- Near-immediate vehicle response with low latency ~250ms delay between vehicles to allow for safe control of both vehicles.
- All secondary vehicle operator interfaces are locked out when in Multi-Unit mode except vehicle braking and E-Stop.

Shuttle-Sync represents a significant leap forward for Shuttlewagon and the railcar mover industry. By combining the power of two units, it offers an unprecedented level of tractive effort, akin to locomotive capabilities but with the added benefits of flexibility, cost-effectiveness, and safety. This innovation is poised to transform the efficiency and effectiveness of railcar moving operations, solidifying Shuttlewagon's position as a leader in railcar moving solutions.

