Model WL50-HL-BAT
Headless Industrial Transporter

Wheelift®
A DOER•FER Companies Technology

Specifications

Dimensions

Length	13.5 feet / 4115 mm
Width	6.5 feet / 1981 mm
Height – Lowered*	21 in / 533 mm
Height – Raised*	29.5 in / 749 mm
Load Deck Dimensions	
Length	12 feet / 3658 mm
Width	6.5 feet / 1981 mm
Suspension	Hydraulic

Weights

Transporter Empty Weight	12,000 lbs / 5,455 kg
Transporter Loaded Weight	112,000 lbs / 50,900 kg
Rated Capacity	100,000 lbs / 45,450 kg

Power

Type	Li-Ion Battery
Voltage	48 VDC
Current	360 Ah
Backup Power	480 VAC 3 Phase (Wye) 30A

Drive System

Number of Wheel Modules	4
Wheel Diameter	12 in / 305 mm
Wheel Width	6 in / 152 mm
Propulsion	AC Servo
Steering	Joystick Control

Travel Speeds

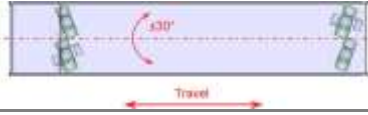|	
Unloaded	0 – 110 fpm / 33.5 mpm
Loaded – Flat Ground	0 – 50 fpm / 15.2 mpm
Loaded – at Maximum Slope (see below)	0 – 40 fpm / 12.2 mpm
Raise (maximum)	6.0 in per min (152 mmpm)
Lower (maximum)	6.0 in per min (152 mmpm)

Environmental Conditions

Maximum Operating Temperature	110° F / 43° C
Minimum Operating Temperature	20° F / -7° C
Relative Humidity	0 - 90%
Maximum Slope	3%

* Travel within ¼" of raised or lowered height is limited to creep speed

Omni-Directional Steering Modes

Normal (All Wheel Steering)	**Lateral** (All Wheel Steering)	**Normal Diagonal**
Travel forward and reverse parallel to the transporter's long axis. Front wheels steer ±40°. Rear wheels steer opposite direction of front.	Travel forward and reverse parallel to the transporter's short axis. Front wheels steer ±40°. Rear wheels steer opposite direction of front.	Travel forward and reverse at an angle to the transporter's short axis. Front and rear wheels steer together.

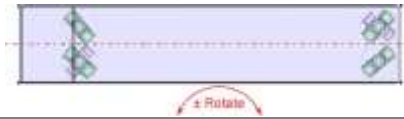| **Lateral Diagonal**	**Rotate**	**RotatePLUS**
Travel forward and reverse at an angle to the transporter's long axis. Front and rear wheels steer together.	All modules align axle centerlines to theoretical center of transporter. Rotate clockwise or counter-clockwise about the center of the transporter.	All modules align axle centerlines to a point along the transporter's short axis. Rotate clockwise or counter-clockwise about transporter's short axis.

Machine Controller	Beckhoff Industrial PC TwinCAT ladder logic running Doerfer's control software.
Operator Interface	Wireless radio joystick control with Beckhoff color touch screen HMI (Human Machine Interface).

Specifications subject to change without notice   REV.03 January 2023

Authorized Wheelift Representative