



High Speed Weigh Lorry Systems



SPEED • EFFICIENCY • ACCURACY • FULLY AUTOMATED

Load a 9 Compartment Truck, from 9 Different Bins, in 8 to 12 Minutes

The Problem:

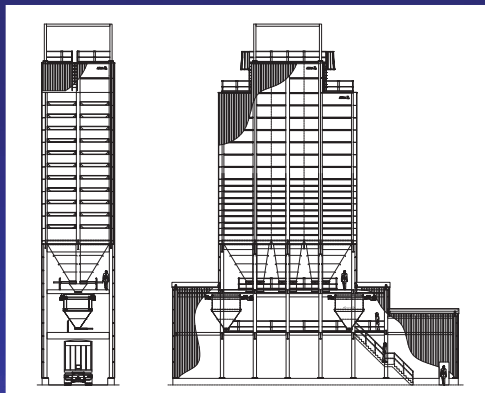
There are a number of traditional options to load bulk trucks, unfortunately, they all have significant limitations. Directly loading a truck using slide gates and a truck scale requires up to 9 time consuming truck moves. Using a truck scale and shuttle conveyor results poor accuracy due to the considerable amount of material that must be purged from the conveyor after each weighment. Multiple outlet distribution conveyors have the same accuracy problems as shuttle conveyors, plus they require all trucks to have the exact same inlet pattern. Weigh lorry systems can solve most of these problems, but with loading times of 20 minutes or more, they've been too slow for higher capacity plants.



The Solution:

Abel's high speed weigh lorry system effectively solves these truck loading issues. By moving 3 to 5 times faster, and by smoothly accelerating and deaccelerating the scale, truck loading times can be reduced by 50% or more. Through intelligent motion control, Abel's high speed system helps to preserve the superior accuracy that weigh lorry systems have over typical truck scales. When combined with a plant's automated control system, Abel's system provides unsurpassed speed, ease of use and material tracking capabilities.

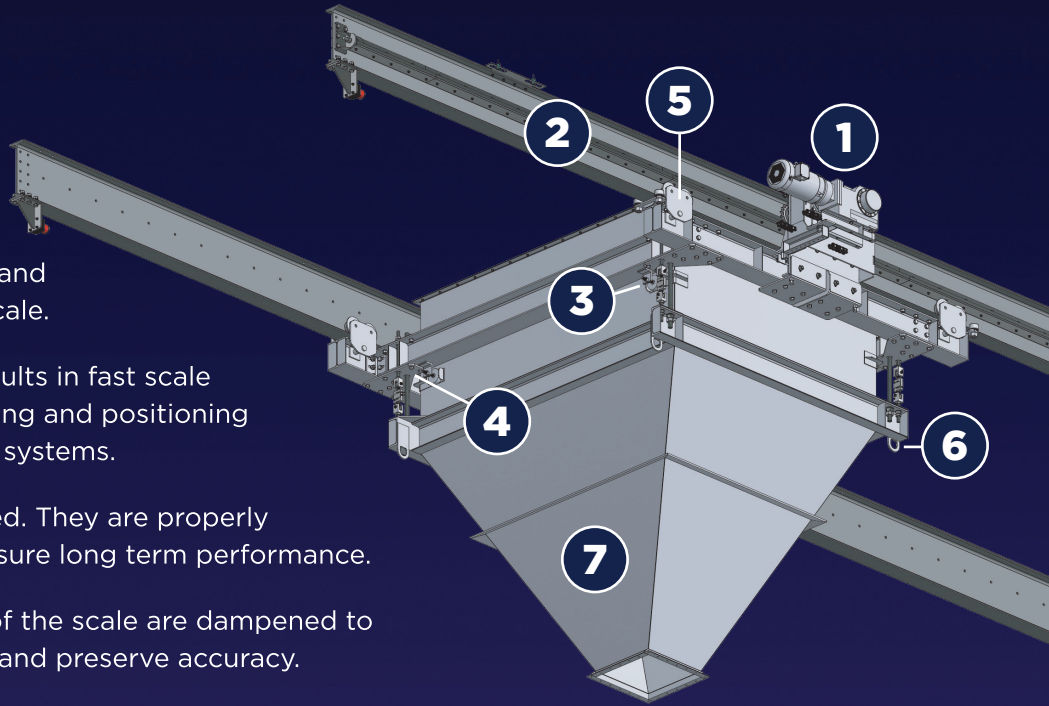
Complete Truck Load Out Facilities



Abel can design and supply complete truck load out facilities. Allow us to put our 50+ years of proven experience to work for you.

System Features

1. A high power drive system smoothly accelerates, moves and decelerates the weigh lorry scale.
2. A positive traction system results in fast scale movements without the slipping and positioning errors of typical friction drive systems.
3. High quality load cells are used. They are properly mounted and grounded to assure long term performance.
4. The mechanical movements of the scale are dampened to help assure long load cell life and preserve accuracy.
5. Oversized trolley trucks are used to deliver long term durability and smooth operation.
6. Test weight hanging brackets.
7. Standard scale capacities range from 3 to 10 tons. Custom capacities are available.



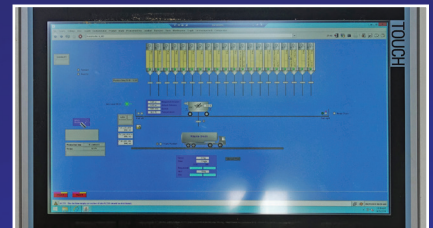
Absolute scale position is accurately determined by an industrial grade laser range measuring device.



A cable management system protects all wiring and hoses. Electrical power cables are separated from signal cables to protect signal integrity.

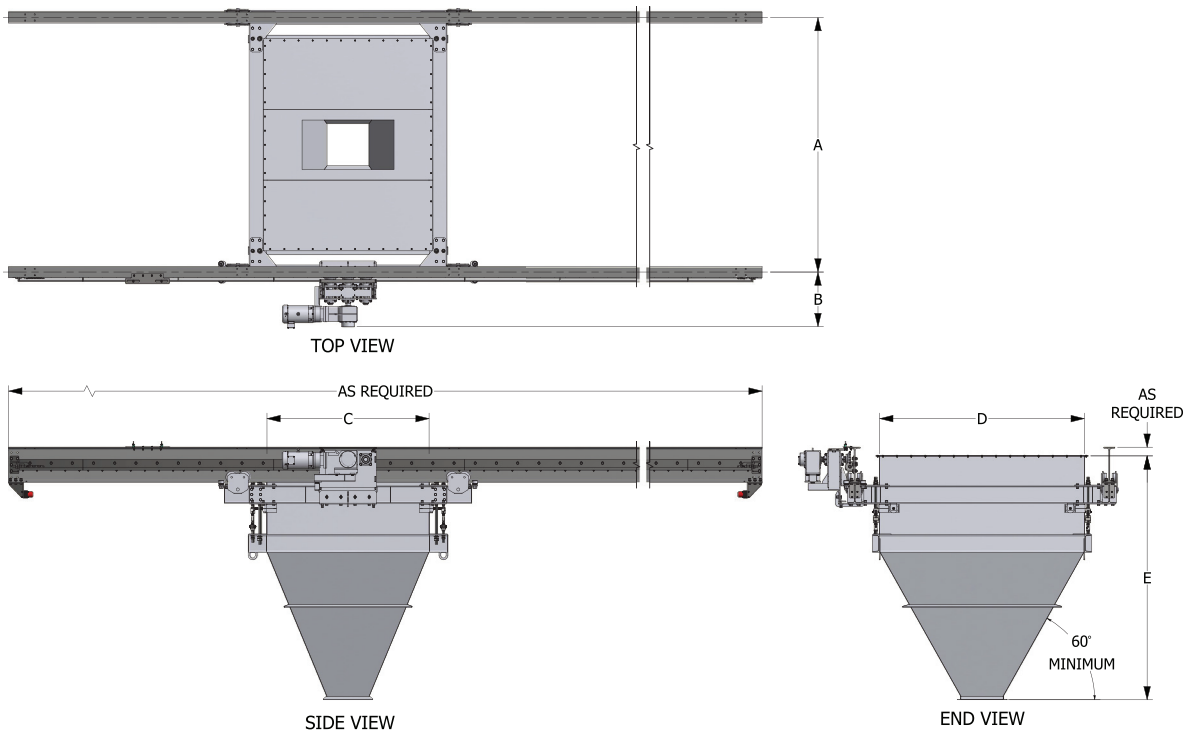


The weigh lorry system is compatible with any size truck regardless of the number of compartments or the compartment spacing.



The weigh lorry system can be fully automated when it's connected to the plant's main control system. Press a button, and an entire truck is loaded automatically.

STANDARD HIGH SPEED WEIGH LORRY SPECIFICATIONS



U.S. UNITS

Usable Capacity (US Tons at 40 lbs/cu-ft)	Usable Capacity (US Tons at 35 lbs/cu-ft)	Usable Volume (Cubic-Feet)	A (Ft-In)	B (Ft-In)	C (Ft-In)	D (Ft-In)	E (Ft-In)
3.6	3.1	178	9'-0"	2'-8"	6'-8"	6'-8"	8'-10"
4.7	4.1	235	10'-0"	2'-8"	7'-8"	7'-8"	9'-4"
6.0	5.3	300	11'-0"	2'-8"	8'-8"	8'-8"	10'-4"
7.5	6.5	374	12'-0"	2'-8"	9'-8"	9'-8"	11'-4"
9.3	8.2	467	12'-0"	2'-8"	9'-8"	9'-8"	12'-4"
10.3	9.0	514	12'-0"	2'-8"	9'-8"	9'-8"	12'-10"

METRIC UNITS

Usable Capacity (Metric Tons at 640 kg/m ³)	Usable Capacity (Metric Tons at 560 kg/m ³)	Usable Volume (Cubic-Meters)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
3.2	2.8	5.0	2740	810	2030	2030	2700
4.3	3.7	6.7	3050	810	2340	2340	2850
5.4	4.8	8.5	3350	810	2640	2640	3150
6.8	5.9	10.6	3650	810	2950	2950	3450
8.5	7.4	13.2	3650	810	2950	2950	3760
9.3	8.2	14.6	3650	810	2950	2950	3910

The dimensions and specifications in this chart are typical but can be economically modified to meet specific customer requirements.



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