



D96

Concept Catalog
Lithium/Diesel Dump Truck

D96



Title	40T
Total Power	16x40 kW
Max. Speed	40 km/h
Flat Range	50-200 km
Payload	50 Tons
Volume	24 m ³
Max. Weight	72 Tons
Width, mm	4 000
Length, mm	8 000
Hight, mm	3 500

Agenda



- Features
- Operation
- Specs



Features, Special



Lithium D96 vs Competition:

- 80% Less Accidents for Driver
- 50% Less Vibration vs Diesels
- 80% Less Maintenance Offtime
- 80% Less Noise vs Diesels
- No Fuel Supply problems
- Lower Price
- Zero emissions

Diesel D96 vs Competition:

- 80% Less Accidents for Driver
- 80% Less Maintenance Offtime
- Lower Price



Features, Maintenance

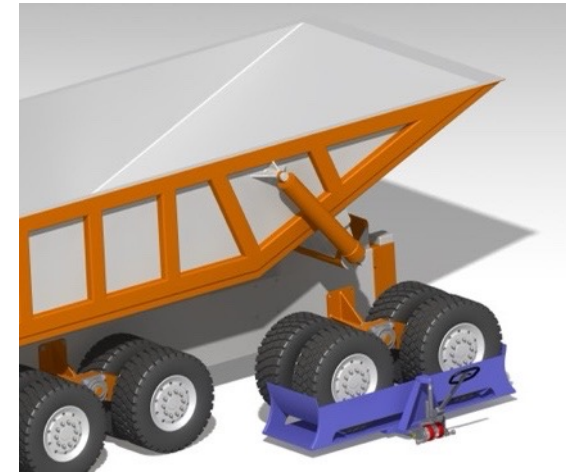


Battery/Diesel Change:
10 min./Box



Tire Change:
15 min.

Corner Module Change:
30 min.





D96 transport in 4x40ft shipping container

Container
1



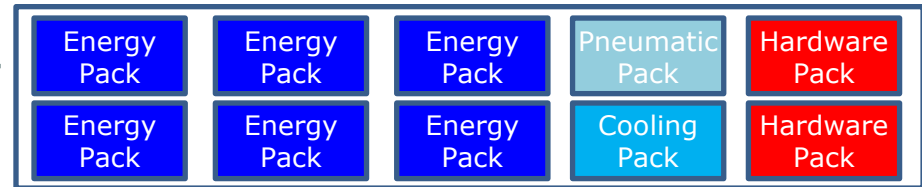
Container
2



Container
3










Container
4

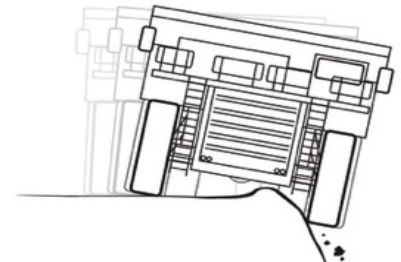
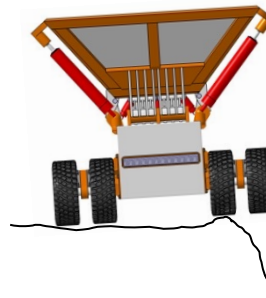
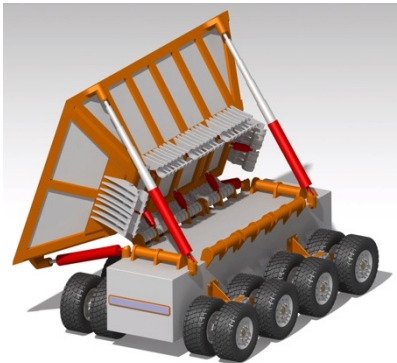
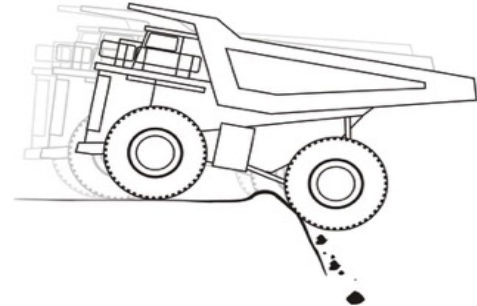
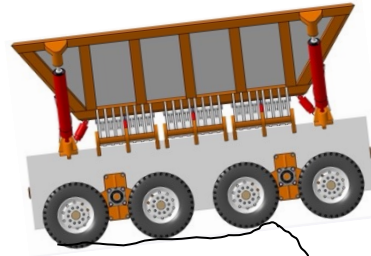
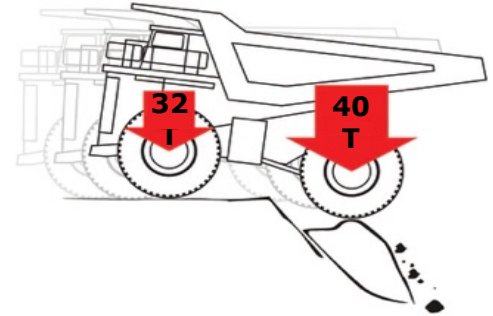
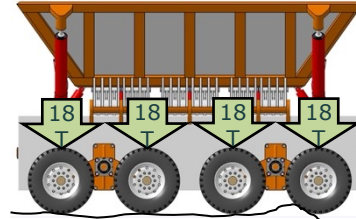
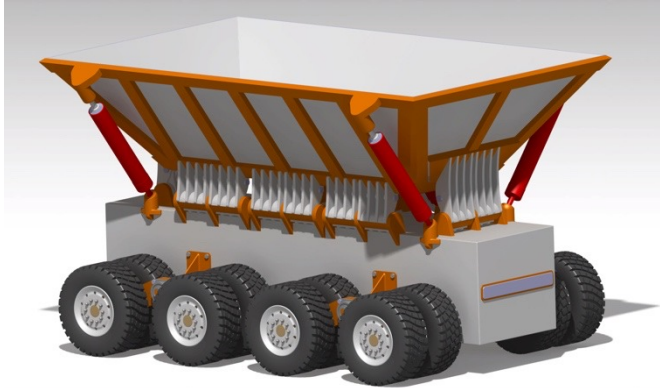


Features



	Special Features	Scheme	Inves.	Energy	Safety	Time	Comfort	Cost	Maint.
1	Multi Hub Motors		✓	✓	✓	✓	✓	✓	✓
2	VCD Inverters		✓	✓	✓	-	-	✓	✓
3	High Cycle Battery		-	-	✓	✓	-	-	✓
4	Swappable Battery		-	-	✓	-	-	✓	✓
5	Small Wheels		✓	✓	✓	-	✓	✓	✓
6	Master & Slaves		✓	✓	✓	-	-	✓	✓
7	X by Wire		✓	✓	✓	✓	✓	-	✓
	Description		Lower initial Investment	Lower Energy consumption in journey	Higher Safety for Driver	Lower Time for journey or charging	Higher Comfort for Driver	Lower Cost/ km	Lower Maintenance cost or time

Operation, Challenges



Operation, Loading

M

2- Master Disconnection



A: Wait to Load

B: Wait to Load

C: Loading

4- Loading

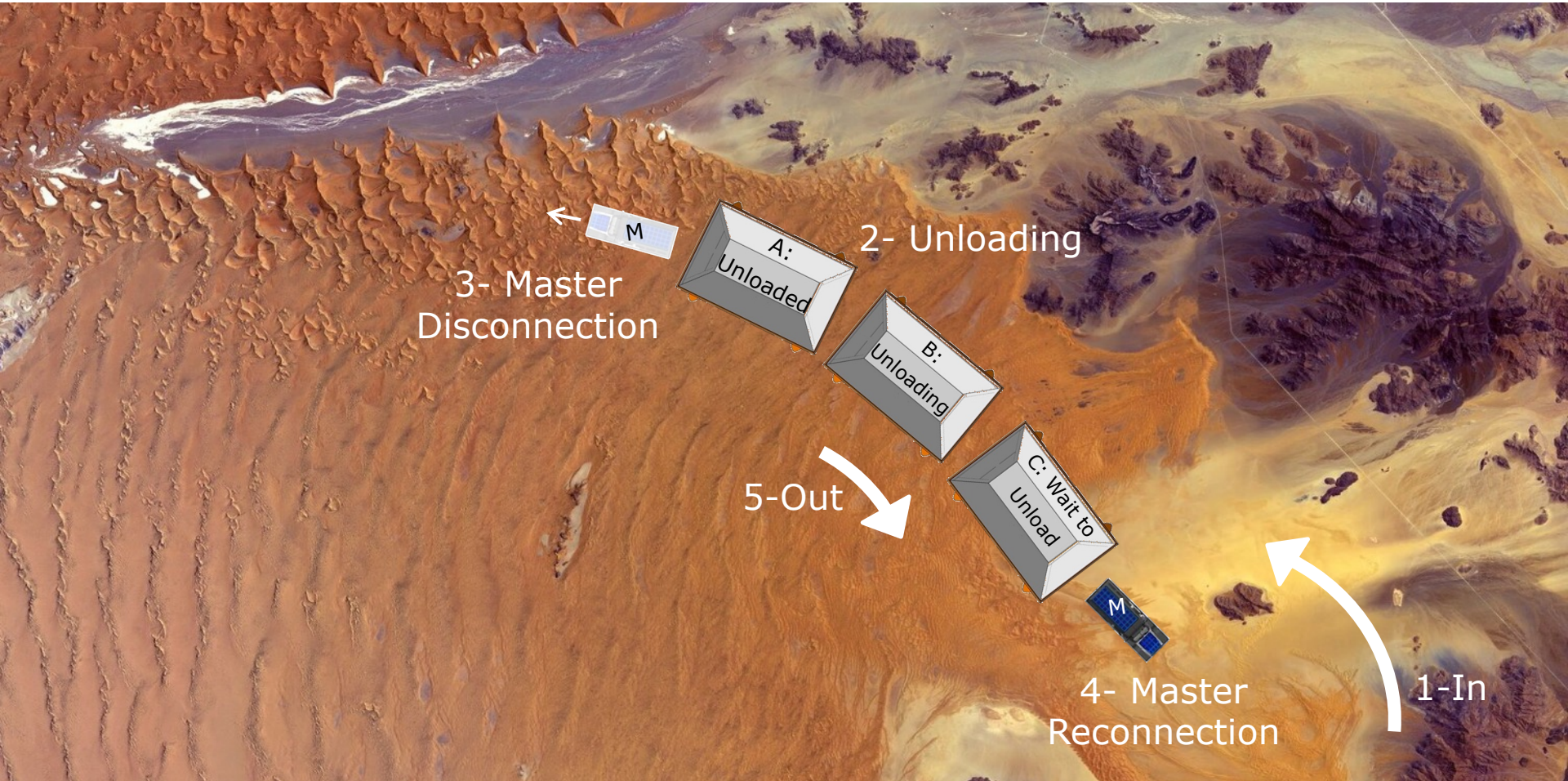
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3- Master Reconnection

1-In

5-Out

Operation, Unloading

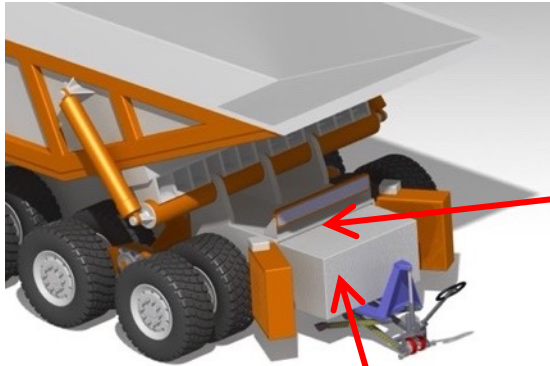


Specs, eMotor



eMotor	
Phase / Voltage	3 / 400 V
Weight	120 kg
Con. Max. Power	40 kW
40s Max. Power	80 kW
Max. RPM	2000 RPM

Specs, Power



Chassis Channel	
Channel H	1530 mm
Channel W	2x750 mm
Channel L	8000 mm



Lithium Box	
Box Energy	72 kWh
Box Voltage	500 VDC
Box Length	500 mm
Box Weight	450 kg
Pack #	28
Nor. Charge	5 Hours
Fast Charge	2 Hours

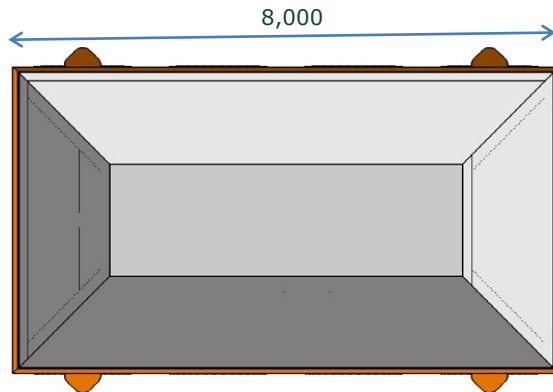
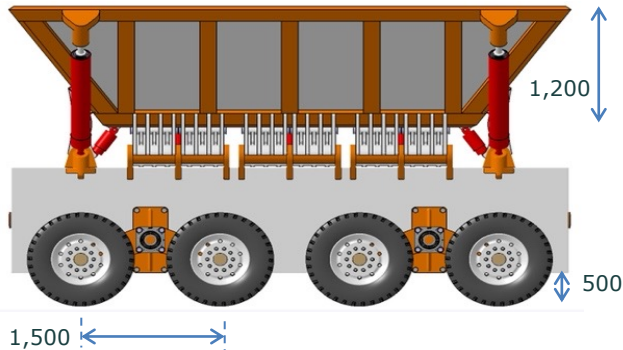
Lead Box	
Box Energy	32 kWh
Box Voltage	500 VDC
Box Length	500 mm
Box Weight	920 kg
Pack #	42
Nor. Charge	5 Hours
Fast Charge	2 Hours

Diesel Box	
Box Power	166 kW
Box Voltage	400 V3Ph
Box Length	3000 mm
Box Weight	1340 kg
Diesel Type	OM355 EU2
0% Grade	30 lit/h
15% Grade	170 lit/h

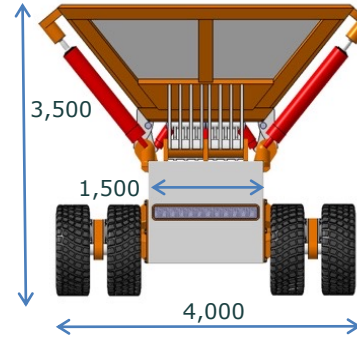
Pneumatic Box	
Box Power	10 kW
Box Voltage	400 V3Ph
Box Length	750 mm
Box Weight	230 kg
Air Delivery	1500 L/min
Air Capacity	300 lit
Air Pressure	8 Bar

Hydraulic Box	
Box Power	50 kW
Box Voltage	400 V3Ph
Box Length	750 mm
Box Weight	620 kg
Oil Delivery	200 L/min
Oil Capacity	200 lit
Oil Pressure	200 Bar

Specs, General



50T



Suspension

Type	Walking Beam
Bearings	Flanged Bearing
Tire	Off 425/65R22.5
Steering	Tank Turning
Turning C	16.0 m

Performance

Max. Grade	15% Loaded
Grade Speed	10 km/h
Max. Speed	40 km/h
Brake System	Air Brake
Brake Type	Disk

Bucket

Cover	Wear Plate
Material	HTSS
Bottom Thickn.	16 mm
Sides Thickn.	12 mm
Heating	Optional