PRO Series® Battery Tugger Range: Technical Data



THE NEXT GENERATION OF **BATTERY HANDLING EQUIPMENT**

The PRO Series® Battery Tugger range is the ideal choice for small to medium duty applications. It will comfortably handle up to 40 battery changes per day.*

Our range of battery tuggers can be end- or side-mounted on the truck and can be configured to suit any battery. This unit can also be used as an emergency back-up unit in a change car system.

*Maximum battery changes per day and per tugger recommended by the manufacturer.









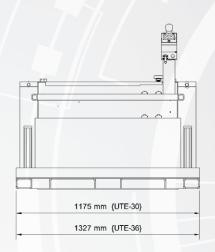
UNI-TUGGER

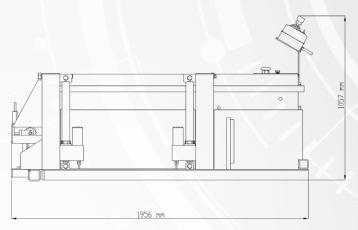
UNI-TUGGER (UTE)

Designed to amplify a standard pallet truck, with its linear actuator system and a powerful 8-pole electromagnet, the UNI-Tugger is the industry's first truly universal battery changer.

Adaptable to your operational needs, the UNI-Tugger is outfitted with logical controls for efficient changing and finished in an acid-resistant powder coating to withstand harsh conditions. The latest addition to our globally recognized Battery Tugger Electric (BTE) series, the UNI-Tugger lowers the risk of material damage and reduces strain on employees, ultimately improving productivity and streamlining changes.







OPTIONS AT ADDITIONAL COST

- Custom colour
- Fold down battery guide for narrow batteries
- Front safety gate, if local regulations specify
- 10-pole magnet available for batteries over 1600 kg







UNI-TUGGER

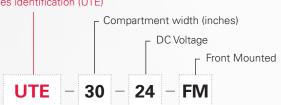
	UTE SPECIFICATIONS				
	DECORIDATION	UTE-30-24-FM		UTE-36-24-FM	
	DESCRIPTION	STANDARD	METRIC	STANDARD	METRIC
1	Maximum battery weight	5000 lbs	2267kg	5000 lbs	2267 kg
2	Powerpack type		Gear reduc	ed electric	
3	Motor type		Permanent magnet DC		
4	System voltage	24 Volt DC			
5	Magnet size / pole	8" × 6" / 8 292 mm × 152 mm / 8 8" × 6" / 8 292 mm × 152		292 mm x 152 mm / 8	
6	Standard color		Blu	ıe	
7	Minimum roll out height (with 85mm closed PPT forks)	4.5"	115 mm	4.5"	115 mm
8	Maximum roll-out height	21.25"	540 mm	21.25"	540 mm
9	Required host truck capacity	1632 lbs + battery weight	740 kg + battery weight	1821 lbs + battery weight	826 kg + battery weight
10	Lift speed	0.033m/s			
11	Lift stroke of host truck	4.8"	120 mm	4.8"	120 mm
12	Magnet reach outside of UNI Tugger	5.4"	138 mm	5.4"	138 mm

	UTE DIMENSIONS				
	DESCRIPTION	UTE-30-24-FM		UTE-36-24-FM	
	DESCRIF HON	INCHES	METRIC	STANDARD	METRIC
13	Overall length	76"	1956 mm	76"	1956 mm
14	Overall width	46.25"	1175 mm	52.25"	1327 mm
15	Overall height	41 5 / 8"	1057 mm	41 5 / 8"	1057 mm
16	Maximum battery compartment depth	49"	1245 mm	49"	1245 mm
17	Battery compartment width	30"	762 mm	36"	914 mm
18	Maximum battery width	29"	736 mm	35"	889 mm
19	Maximum roll out the height	21.25"	540 mm	21.25"	540 mm

MODEL / PART NUMBER BREAKDOWN

Example: UTE-30-24-FM

Series identification (UTE)









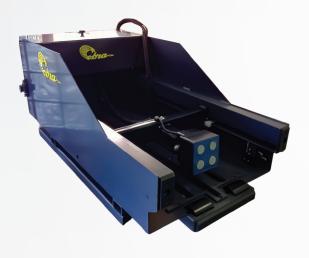


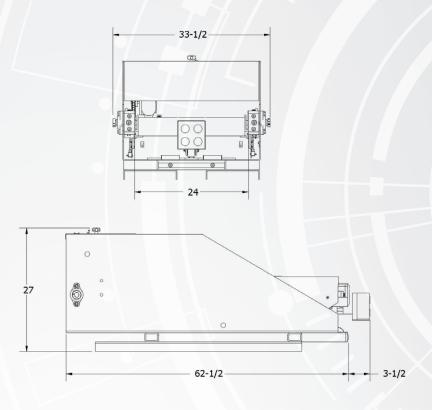
COBRA TUGGER

COBRA TUGGER (CBTE)

The Cobra Tugger offers a safe and reliable solution for light duty battery changing applications. Mounted on a 24 volt pallet truck, the Cobra Tugger is a simple and cost-effective way to manage low volume change requirements with a capacity of up to 1043 kg.

Combined with a fully electric drive system and a powerful 408 kg electromagnet extraction, the Cobra Tugger has the same rugged uni-body construction as the Battery Tugger Electric (BTE) series and is equipped with many of the technologies employed on our larger units, including tough battery sliders, added safety features and innovative slider bed design. The low-profile design and simple user controls allow operators to quickly and effectively perform changes in a safe manner.





MOUNTING OPTIONS		
PART #	DESCRIPTION	
BT-Pedestal	Pedestal Tugger Pedestal Mounting Spacer (Other than standard height of 2")	
BT-QC-PT	F-QC-PT Quick Clamp (Pallet Truck)	
BT-QC-FT	Quick Clamp (Fork Lift Truck)	

CARRIAGE FRAME OPTIONS		
PART #	PART # DESCRIPTION	
BT-CL	Custom Length Battery Tugger	
BT-FP-3.5	BT-FP-3.5 3.5" deep Fork Pockets	
BT-FP-2	BT-FP-2 2" Deep Fork Pocket	
BT-SG Safety Gate Bolt-On (Bar option)		
BT-BGF Fold-down Battery Guide		

ARM OPTIONS			
PART #	PART # DESCRIPTION		
BT-AEX	Tugger Arm Extension (with tugger order) Standard reach is 5.5"		

Note: With every inch of arm length added you will lose battery length capacity in the carriage







COBRA TUGGER

	CBTE SPECIFICATIONS				
	DESCRIPTION STANDARD METRIC				
1	Maximum battery carrying capacity	5000 lbs	2267 kg		
2	Power pack type	Gear reduc	ced electric		
3	Motor type	Permanent	magnet DC		
4	4 System voltage 24 Volt DC				
5	Magnet size / pole	6" x 6" / 4 150 mm x 150mm / 4			
6	Lead-in roller diameter	3" UHMW	76 mm UHMW		
7	Roller shaft diameter	Roller shaft diameter 1 / 2" 12.7 mm			
8	Drive chain type & size	Industr	rial #50		
	Rated drawbar push / pull				
9	Pull on 1 / 4" (6.4 mm) plate	1280 lbs	580 kg		
9	Pull on 3 / 16" (4.75 mm) plate	900 lbs	408 kg		
	Pull on 1 / 8" (3.2 mm) plate	525 lbs	238 kg		
10	Magnet reach past bumpers	3-1 / 2"	89 mm		
11	Service weight	588 lbs	267 kg		

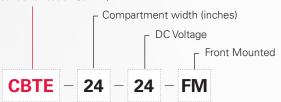
	CBTE DIMENSIONS					
	DESCRIPTION STANDARD METRIC					
12	Overall length	62-1 / 2"	1588 mm			
13	Overall width	33-1 / 4"	844 mm			
14	14 Overall height (body) 27" 686 mm		686 mm			
15 Magnet extension past bumper 3-1 / 2" 89 mm		89 mm				
16 Battery compartment width 24" 610 mm		610 mm				
17 Depressed clearance 8-3 / 4" 222 mm		222 mm				
18	18 Maximum battery length 41" 1042 mm		1042 mm			
19	Maximum battery width	23"	584 mm			
20	20 Minimum battery width 8" 203 mm		203 mm			
21	Minimum battery height	9"	279 mm			
22	22 Ground to roller height (mounted to pallet truck) 6-5 / 8" 158 mm					

^{*} When fitted to a standard pallet truck with 3.35" (86mm) thick forks

MODEL / PART NUMBER BREAKDOWN

Example: CBTE-24-24-FM

Series identification (CBTE)









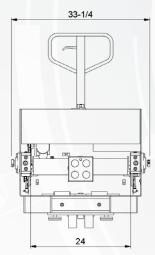
EZ-TUGGER

EZ-TUGGER (EZBT)

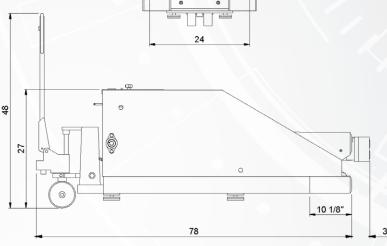
Optimal for small operations, the EZ-Tugger is the perfect budget-friendly battery changing solution. Designed for batteries weighing less than 1,043 kg the EZ-Tugger is ideal for small fleets. A stand-alone unit, permanently welded onto an industry-standard hand pallet truck, it is a small, portable and easyto-use solution. It carries a built-in battery and charger used to power the electromagnet and push / pull mechanism.

All extraction functions are push-button and electrically powered, limiting the operator's contact with the battery.

The EZ-Tugger operates similarly to a standard pallet truck, making it easy to implement into any smallscale operation. With few moving parts and minimal maintenance requirements, the EZ-Tugger is designed to stand up to the harsh environments of todays' battery rooms.







OPTIONS AT ADDITIONAL COST

- AC Power Supply- 120 Volt AC
- Custom color options

5 year magnet warranty

EnerSys will provide a quotation for the battery & charger in the destination country.









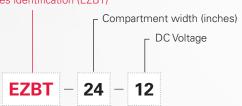
	EZBT SPECIFICATIONS				
	DESCRIPTION STANDARD METRIC				
1	Maximum battery carrying capacity	2300 lbs	1043 kg		
2	Power pack type	Gear reduc	ced electric		
3	Motor type	Permanent	magnet DC		
4	System voltage	12 Vo	It DC		
5	Magnet size / pole	6" x 6" / 4	150 mm x 150mm / 4		
6	6 Standard colors Blue or Orange				
7	7 Battery type and size 12V deep discharge 1-A / H+				
8	Charger	120 VAC, 10A built-in automatic			
9	Lead-in roller diameter	3" UHMW	76mm UHMW		
10	Roller shaft diameter	1 / 2"	12.7 mm		
11	Drive chain type & size	Industr	rial #50		
	Rated drawbar push / pull				
12	Pull on 1 / 4" plate	900 lbs	408 kg		
12	Pull on 3 / 16" plate	580 lbs	265 kg		
	Pull on 1 / 8" plate	420 lbs	190 kg		
13	Magnet reach past bumpers	31/2"	89 mm		
14	Pump truck lift	3 1 / 4"	83 mm		
15	Service weight c / w battery & charger	750 lbs	341 kg		

	EZBT DIMENSIONS					
	DESCRIPTION STANDARD METRIC					
16	Overall length	78"	1982 mm			
17	Overall width	33 1 / 4"	844 mm			
18	Overall height: Body	27"	686 mm			
19 Overall height: Top of handle 48" 1219 mm		1219 mm				
20 Max. battery compartment depth 42" 1066 mm		1066 mm				
21 Battery compartment width 24" 610 mm		610 mm				
22	Maximum battery length	42"	1066 mm			
23	Maximum battery width	23"	584 mm			
24	Minimum battery width	6"	152 mm			
25	Minimum battery height	9"	229 mm			
26	Ground to roller height	6 1 / 2"	165 mm			
27	Maximum roll out height	9 ¾"	247 mm			

MODEL / PART NUMBER BREAKDOWN

Example: EZBT-24-12

Series identification (EZBT)













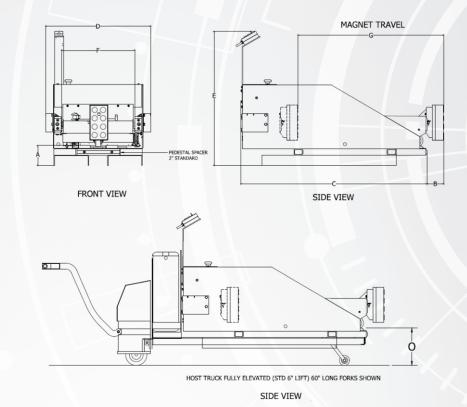


The Battery Tugger Electric (BTE) is the global standard in low-volume high-efficiency battery changing. The reliability, safety standards and changing efficiency are secondto-none and unrivaled in today's battery changing industry.

All BTE models are engineered with a fully welded, unibody construction and finished in premium acid-proof powder coat paint to ensure they'll be delivering reliable and effective battery changes for many years to come.

The BTE series is fitted with our reliable 818kg electromagnetic extraction system that is used extensively on our man-aboard systems. The unit also uses a lead roller to ensure smooth and damage-free exchanges each time and offers optional battery guides to prevent smaller pallet truck batteries from tipping over.

The BTE battery handling equipment uses a UHMW slide bed with lead entry rollers that secures the load for transfer without the need for additional safety locks, simply pull it into the compartment and travel to your destination.









BATTERY TUGGER ELECTRIC

	MOUNTING OPTIONS		
PART #	DESCRIPTION		
BT-Pedestal	Tugger Pedestal Mounting Spacer (Other than standard height of 50.8mm)		
BT-QC-PT	Quick Clamp (Pallet Truck)		
BT-QC-FT	Quick Clamp (Fork Lift Truck)		
BT-QC-PT-D	D Quick Clamp (Pallet Truck)		
BT-4WAY	4-Way Fork Pockets (for pallet truck side mount)		

	CARRIAGE FRAME OPTIONS		
PART #	PART # DESCRIPTION		
BT-CL	Custom Length Battery Tugger		
BT-HS	High sides, extra height added to the shell		
BT-FP-3.5	88.9mm deep Fork Pockets		
BT-FP-2	50.8mm Deep Fork Pocket		
BT-SM-FT	Side Mount w / remote pendant & chain (pallet truck mnt)		
BT-SCC 2'	152.4mm Safety Chain with Clevis (for truck mount)		
BT-FDBR	Battery Tugger Fold Down Bed Raisers		
BT-DIA	Aluminum Drop-in Beds		
BT-SG	Safety Gate Bolt-On (Bar option)		
BT-SC-ARM	Safety Chain-Tugger Arm		
BT-SC	Safety Chains (for truck mount)		
BT-BG	Battery Guide		
BT-BGF	Fold-down Battery Guide		
BT-OHG	OHG Over Head Guard Entry System		

ARM OPTIONS		
PART #	PART # DESCRIPTION	
BT-AEX	BT-AEX Tugger Arm Extension (with tugger order)	
BTS-AEX	BTS-AEX Tugger Arm Ext. Stepped (BTS-With tugger order)	

ELECTRICAL OPTIONS					
PART #	DESCRIPTION				
BT-VSJ	Variable Speed Joystick				
BT-VS	Variable Speed Pot				
BT-MAG-003	Upgrade to 10-pole magnet				
BT-12V	Tugger Voltage 12 V (other than 24)				
BT-36V	Tugger Voltage 36 V (other than 24)				
BT-48V	Tugger Voltage 48 V (other than 24)				
BT-MV2	Multi Voltage BT / BTS (24V & 36V)				
BT-MV3	Multi Voltage BT / BTS (24V, 36V & 48V)				
BT-MOL	Lamp Indicator (Magnet Light-On)				
BT-ESTOP	Emergency Stop Button (Mounted to Controls)				
BT-BEEP	Magnet On- Beep				
BT-SM-PT	Side Mount w / remote pendant & chain (pallet truck mnt)				
BT-OBPS	On Board Power Supply (BATTERIES NOT INCLUDED)				
BT-ASL	Amber Strobe Light				
BT-LAS	Laser Alignment System				
BT-ECON	Battery Tugger Euro Connectors (2 male 2 female per unit)				

Note: With every inch of arm length added you will lose battery length capacity in the carriage







BATTERY TUGGER ELECTRIC

BTE SPECIFICATIONS							
	DESCRIPTION	BTE-24	BTE-30	BTE-36	BTE-42	BTE-48	
1	Maximum Load Capacity with 48" forks	3000 lb / 1361 kg					
2	Maximum Load Capacity with 60" forks	5000 lb / 2265 kg					
3	Electric Motor H.P.	1HP					
4	Battery Attachment Mechanism	Magnet					
5	System Voltage	12V / 24V / 36V / 48V					
6	Battery Connector	SB 175 Gray					
7	Standard Model Color (optional colors available)	Orange, Blue, Yellow, Red					
8	Push/Pull Drive Chain Size	#50					

	BTE DIMENSIONS							
	DESCRIPTION	BTE-24	BTE-30	BTE-36	BTE-42	BTE-48		
_	Minimum roll-out height (with no pedestal)*	4.625 in			118 mm			
Α	Minimum roll-out height with standard pedestal*	6.625 in			169 mm			
	Magnet Reach w / 152mm Arm (draw bar fully extended)	3.5 in			89 mm			
В	Magnet Reach w / 203mm Arm (draw bar fully extended) (Option)	5.5 in			140 mm			
С	Overall Length	STD-6	3 in / 1600 mm		CL- 71 in / 18	04 mm		
D	Overall Width (in / mm)	34.5 / 876	40.5 / 1029	46.5 / 1181	52.5 / 1334	58.5 / 1486		
Е	Overall Height		44.125 in / 1121 mm					
F	Battery Compartment Width (in / mm)	24 / 610	30 / 762	36 / 914	42 / 1067	48 / 1219		
G	Magnet Travel (draw bar fully retracted)	STD-4	STD- 42 in / 1067 mm CL- 50 in / 1270 mm					
Н	Maximum Battery Length w / 152mm Arm	STD- 43 in / 1093 mm			CL- 51 in / 1296 mm			
П	Maximum Battery Length w / 203mm Arm (Option)	STD-4	STD- 41 in / 1042 mm		CL- 49 in / 1245 mm			
	If a Safety Gate option is fitted, all maximum battery lengths will be rec	luced by 1.25 in / 3	2 mm					
1	Maximum Battery Width (in / mm)	23 / 584	29 / 737	35 / 889	41 / 1041	47 / 1194		
J	Minimum Battery Width		6 in / 152 mm					
K	Minimum Battery Height	13 in / 331 mm						
L	Maximum Battery Height	32 in / 813 mm						
М	Minimum Required Pallet Truck Fork Length	48 in / 1220 mm						
N	Extraction Height, Mounted on Standard Pallet Truck + Standard 120mm Lift		11.378 in / 289 mm					

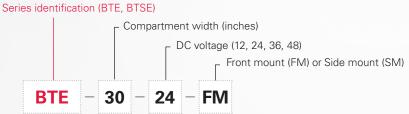
^{*} When fitted to a standard pallet truck with 3.35" (86mm) thick forks

BTE WEIGHTS						
	DESCRIPTION	BTE-24	BTE-30	BTE-36	BTE-42	BTE-48
0	Service Weight Excluding Pallet Truck and Battery	658 lb / 298 kg	700 lb / 317 kg	730 lb / 331 kg	760 lb / 344 kg	790 lb / 358 kg

BTE PERFORMANCE							
	DESCRIPTION	BTE-24	BTE-30	BTE-36	BTE-42	BTE-48	
Р	Rated Draw Bar Pull (1/4" Plate)	1,800 lb / 818 kg					
Q	Arm Travel Speed	38 FPM / 11.5 m / min					

MODEL / PART NUMBER BREAKDOWN

Example: BTE-30-24-FM











BATTERY TUGGER MANUAL

BATTERY TUGGER MANUAL (BTM)

Inspired by the hand pallet truck design, the BTM has been expertly engineered to operate identical to a hand pallet truck that utilizes a positive braking system that allows for zero pushback during the battery change. With precision wheel bearings and large, solid (no compression) wheels, the BTM battery handling equipment allows for easy control and movement for tight turning and maneuverability.

Available in two convenient sizes of 24" and 36", the BTM is a battery transporter with a mechanical loader, ideal for your maintenance shop or for facilities with a small battery fleet.

SPECIALIZED ENGINEERING

The BTM series has been specifically designed to remove batteries from lift trucks for servicing and preventative maintenance, or to change out batteries when necessary.

The unit uses precision steel roller bearings in the oversized front load wheels to reduce static load resistance. This technology allows virtually anyone to push a 1,551kgs battery with little effort.

Its single pin steering mechanism makes the BTM operate like a hand pallet truck, and the compact unit offers convenient waist-high lifting and lowering using hand controls. It also includes an integrated hand pump jack that allows you to raise the roller bed to meet the height of most lift trucks.

The gear reduction mechanical drive aids in pushing and pulling the batteries in and out of the lift truck as the operator manually cranks the handle, similar to a boat winch. The winch utilizes an anti-backlash for added safety if the crank handle slips. The battery compartment is available in two convenient sizes of 609mm or 914mm.









BATTERY TUGGER MANUAL

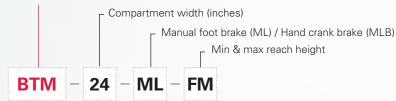
BTM DIMENSIONS									
	BTM-24 BTM-36								
DESCRIPTION		STANDARD	METRIC	STANDARD	METRIC				
1	Lift Range	4" to 22.5"	101.6 to 571.5 mm	4" to 22.5"	101.6 to 571.5 mm				
2	Maximum Battery Length	40"	1016 mm	40"	1016 mm				
3	Maximum Battery Width	23"	584.2 mm	35.5"	901.7 mm				
4	Maximum Battery Weight	3200 lbs	1455 kg	3200 lbs	1455 kg				
5	Minimum Battery Height	20"	508 mm	20"	508 mm				
6	Maximum Battery Height	32"	812.8 mm	32"	812.8 mm				
7	Overall Length	58"	1473.2 mm	58"	1473.2 mm				
8	Overall Width	41"	1041.4 mm	53"	1346.2 mm				
9	Overall Height	55.5"	1409.7 mm	55.5"	1409.7 mm				
10	Shipping Weight	708 lbs	322 kg	778 lbs	354 kg				



MODEL / PART NUMBER BREAKDOWN

Example: BTM-24-ML-4-22

Series identification (BTM)





Working in Parnership with Carney Battery Handling Ltd

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