

# 13/15 Battery Handling Equipment

## Portable Gantry Cranes

BHS Gantry Cranes provide safe and efficient vertical extraction for most standard lift truck batteries by utilizing vertical space. The crane environments, gantries can also allow for better utilization of floor space.

While BHS gantries are designed to handle forklift batteries, they are suitable for a wide variety of applications. To choose an appropriate



Ask about custom battery handling equipment for your unique application.

Contact BHS at bhs@bhs1.com to learn more about fully customized solutions for the battery room.





## **Power Drive Gantry Crane**

Power Drive Gantry Cranes (PGC-PDC) are available in 2 ton and 3 ton (4,000 lb / 1814 kg and 6,000 lb / 2722 kg) capacity models. These powered gantry cranes provide smooth transitions thanks to variable frequency drive technology, allowing for safe and productive use in various applications.

These all-electric gantry crane systems from BHS improve battery change-outs in overhead-extraction applications. They're available in a variety of heights, spans, and weight capacities to match any forklift battery fleet. Even the heaviest-duty Power Drive Gantry Cranes are designed for steady travel up and down the line. Meanwhile, a Cable Festoon Kit keeps all cables secure and out of the travel path during movement.

Gantry crane systems from BHS are modular, so they can be easily expanded or reduced as the needs of the fleet change over time.

#### **FEATURES & BENEFITS**

- Provide for a safe and easy vertical extraction for most standard lift truck batteries
- Modular design allows for easy system expansion
- A variety of standard heights, beam spans, and capacities are available for specific applications
- For acceleration/deceleration of the gantry, the latest variable frequency drive technology provides smooth transitions
- High 10' 5" (3.2 m) under beam clearance is standard on all units
- Cable Festoon Kit keeps cables secure during operation of motorized trolley



**PGC-PDC System** 



#### SAFE, EFFICIENT VERTICAL EXTRACTION

A-frame Gantry Cranes designed specifically for the unique working traits of forklift batteries offer the safest and most efficient way to vertically remove forklift batteries from trucks.



#### **SINGLE-WORKER BATTERY CHANGES**

Gantry crane systems allow a single operator to park the truck in the designated area and safely remove a forklift's battery and replace it with a recharged one.

#### **OPTIONS & REQUIRED ACCESSORIES**

#### **MOUNTING - WHEEL/TRACK**

Power Drive Gantry Cranes come standard with V-Groove Track and compatible wheels. Please see below for alternate options. Track Length must be specified when ordering and is sold by the foot.



#### Poly Wheel Drive (PGC-POLY)

10" x 3" Polyurethane wheel drive available for powered gantry cranes utilizing single or dual sided guidance 4" (102 mm) C-channel track



#### Single Guidance Track, 4" C-Channel (SGT-C4)

4" (102 mm) C-channel designed for Power Drive Gantry Cranes that utilize the Poly Wheel Drive option



#### Dual Guidance Track, 4" C-Channel (DGT-C4)

4" (102 mm) C-channel track, dual sided design, for Power Drive Gantry Cranes that utilize the Poly Wheel Drive ption



#### **Dual Guidance Track, V-Groove (DGT-V)**

Standard V-groove track is available for Power Drive and Non-Power Drive Gantry Cranes on a per foot basis, comes in two sections, and V-groove compatible wheels come standard when DGT-V is used



#### Floor Mount (PGC-FM)

Allows for rigid mounting of gantry directly to the floor

#### TRACK END STOPS (Required)



#### Track End Stop (TRK-ES)

Steel stops prevent system from running off guidance track



### Track End Stop with Rubber Bumper (TRK-ES-RB)

Steel stops with rubber bumpers prevent system from running off guidance track

#### **POWER CABLE REEL**



#### Power Cable Reel (PCR-50)

50' (15.24 m) permanent tension mounted cable reel keeps the electrical cord taut and secure during operation



#### Power Cable Reel (PCR-85)

85' (25.91 m) permanent tension mounted cable reel keeps the electrical cord taut and secure during operation



#### Universal Hinge Mount (PCR-UHM)

Wall mounted power cable reel base traverses left to right



#### Pivot Base (PCR-PVB)

Ceiling mounted power cable reel base provides increased range of motion

#### **HOISTS**



#### Electric Hoist & Motorized Trolley Kit (2B)\*

2 ton capacity electric chain hoist with motorized trolley, chain container, and 3 Phase six button pendant Note: Kit is required for PGC-PDC models



#### Electric Hoist & Motorized Trolley Kit (3B)\*

3 ton capacity electric chain hoist with motorized trolley, chain container, and 3 Phase six button pendant
Note: Kit is required for 3PGC-PDC models

#### **BATTERY LIFTING BEAMS**

For more details on the various Battery Lifting Beams listed below, refer to "PL-2900 Forklift Battery Lifting Devices" literature.



#### **Battery Lifting Beam (BLB-6000)**

Hardwood constructed beam has a 6,000 lb (2722 kg) capacity with 27.5" to 42.5" (699 mm to 1080 mm) adjustable clear span



#### Battery Lifting Beam (BLB-6000-48)

Hardwood constructed beam has a 6,000 lb (2722 kg) capacity with 35.5" to 50.5" (902 mm to 1283 mm) adjustable clear span



#### Load Hog Battery Lifting Beam (BLB-6000-LHG) or Super Hog Battery Lifting Beam (BLB-6000-SHG)

Separate options consist of the BLB-6000 with either Load Hog Hooks or Super Hog Hooks designed for Load Hog and Super Load Hog batteries



#### Load-Lok Battery Lifting Beam (BLB-6000-LLH)

Standard BLB-6000 with Load-Lok hooks



#### Slide Latch Battery Lifting Beam (BLB-6000-SLD)

Standard BLB-6000 with Slide Latch hooks



#### **Battery Lifting Beam-Four Point (BLB-4PT)**

Hardwood constructed beam has a 6,000 lb (2722 kg) capacity with 25.5" to 40.5" (648 mm to 1029 mm) adjustable clear span and four hooks for multi-point lifting



#### **Battery Lifting Beam-Four Point (BLB-4PT48)**

Hardwood constructed beam has a 6,000 lb (2722 kg) capacity with 32.5" to 47.5" (825 mm to 1206 mm) adjustable clear span and four hooks for multi-point lifting

#### **ADDITIONAL OPTIONS**



#### 8 Button Pendant Control (PGC-8PEND)

Remote pendant contains eight buttons for multi-directional control and disconnection of system power from one central location



#### 12 Foot Under Beam Clearance (PGC-12UB)

For applications requiring 12' (3.7 m) under beam clearance

<sup>\*</sup> Requires three phase power (240/480 V ac)

## Non-Power Drive Gantry Crane

Change forklift batteries in vertical-extraction fleets with a Non-Power Drive Gantry Crane (PGC) from BHS. These powder-coated, all-steel gantry cranes are available with 2 ton or 3 ton (4,000 lb / 1814 kg or 6,000 lb / 2722 kg) capacities to match virtually any battery fleet.

Manually push the PGC along the optional Single Guidance Track for floor travel, or choose the Floor Mount option, which creates a permanent, highly stable Gantry Crane wherever you see fit.

Non-Power Drive Gantry Crane systems feature a modular design for potential expansion.

#### **FEATURES & BENEFITS**

- Provide for a safe and easy vertical extraction for most standard lift truck batteries
- Modular design allows for easy system expansion
- A variety of beam spans and capacities are available for specific applications
- Large swivel casters are standard to allow for easy mobility of the entire gantry crane
- High 10' (3 m) under beam clearance is standard on all units
- Cable Festoon Kit keeps cables secure during operation of manual trolley





#### **COMPLETE BATTERY CHANGING SYSTEM**

Hardwood Battery Stations, Battery Wash Equipment, and Safety Equipment are available to create a complete Portable Gantry Crane system for forklift battery storage, charging, and maintenance. Contact a BHS Representative for more details.

#### **OPTIONS & REQUIRED ACCESSORIES**

#### **MOUNTING - WHEEL/TRACK**

Non-Power Drive Gantry Cranes come standard with swivel casters and floor locks for use without a track. Please see below for alternate options. Track length must be specified when ordering and is sold by the foot.



#### Phenolic Caster (PGC-PHEN)

8" x 2.5" Rigid phenolic casters for use with Single Guidance Track (SGT-C3)



#### Single Guidance Track, 3" C-Channel (SGT-C3)

3" (76 mm) C-channel designed for use with phenolic caster option on Non-Power Drive Gantry Cranes



#### **Dual Guidance Track, V-Groove (DGT-V)**

Standard V-groove track is available for Power Drive and Non-Power Drive Gantry Cranes on a per foot basis, comes in two sections, and V-groove compatible wheels come standard when DGT-V is used



#### Floor Mount (PGC-FM)

Allows for rigid mounting of gantry directly to the floor

#### TRACK END STOPS

If Gantry is track-mounted, track end stops will be required.



#### Track End Stop (TRK-ES)

Steel stops prevent system from running off guidance track



#### Track End Stop with Rubber Bumper (TRK-ES-RB)

Steel stops with rubber bumpers prevent system from running off guidance track

#### HOISTS



#### Electric Hoist & Manual Ball Trolley Kits (2A-1)\*

2 ton capacity electric chain hoist with a manual trolley, chain container, and a 1 Phase two button pendant



#### Electric Hoist & Manual Ball Trolley Kits (2A-3)\*\*

2 ton capacity electric chain hoist with a manual trolley, chain container, and a 3 Phase two button pendant



#### Electric Hoist & Manual Ball Trolley Kit (3A)\*\*

3 ton capacity electric chain hoist with manual trolley, chain container, and a 3 Phase two button pendant

#### **BATTERY LIFTING BEAMS**

For more details on the various Battery Lifting Beams listed below, refer to "PL-2900 Forklift Battery Lifting Devices" literature.



#### Battery Lifting Beam (BLB-6000)

Hardwood constructed beam has a 6,000 lb (2722 kg) capacity with 27.5" to 42.5" (699 mm to 1080 mm) adjustable clear span



#### **Battery Lifting Beam (BLB-6000-48)**

Hardwood constructed beam has a 6,000 lb (2722 kg) capacity with 35.5" to 50.5" (902 mm to 1283 mm) adjustable clear span



#### Load Hog Battery Lifting Beam (BLB-6000-LHG) or Super Hog Battery Lifting Beam (BLB-6000-SHG)

Separate options consist of the BLB-6000 with either Load Hog Hooks or Super Hog Hooks designed for Load Hog and Super Load Hog batteries



#### Load-Lok Battery Lifting Beam (BLB-6000-LLH)

Standard BLB-6000 with Load-Lok hooks



#### Slide Latch Battery Lifting Beam (BLB-6000-SLD)

Standard BLB-6000 with Slide Latch hooks



#### **Battery Lifting Beam-Four Point (BLB-4PT)**

Hardwood constructed beam has a 6,000 lb (2722 kg) capacity with 25.5" to 40.5" (648 mm to 1029 mm) adjustable clear span and four hooks for multi-point lifting



#### Battery Lifting Beam-Four Point (BLB-4PT48)

Hardwood constructed beam has a 6,000 lb (2722 kg) capacity with 32.5" to 47.5" (825 mm to 1206 mm) adjustable clear span and four hooks for multi-point lifting

### ADDITIONAL OPTIONS



#### 12 Foot Under Beam Clearance (PGC-12UB)

For applications requiring 12' (3.7 m) under beam clearance

<sup>\*</sup> Requires single phase power (120/240 V ac)

<sup>\*\*</sup> Requires three phase power (240/480 V ac)

## Power Drive Gantry Crane-2 Ton Capacity

#### **MODELS & SPECIFICATIONS**

	PGC-10PDC	PGC-12PDC	PGC-14PDC	PGC-16PDC	PGC-18PDC	PGC-20PDC
Capacity	4,000 lb / 1814 kg	4,000 lb / 1814 kg	4,000 lb / 1814 kg	4,000 lb / 1814 kg	4,000 lb / 1814 kg	4,000 lb / 1814 kg
Clear Between "A" Frame	10' / 3048 mm	12' / 3658 mm	14' / 4267 mm	16' / 4877 mm	18'/ 5486 mm	20' / 6096 mm
Overall Beam Length	12' / 3658 mm	14' / 4267 mm	16' / 4877 mm	18' / 5486 mm	20' / 6096 mm	22' / 6706 mm
Overall Length Dimension	12' 9" / 3886 mm	14' 9" / 4496 mm	16' 9" / 5105 mm	18' 9" / 5715 mm	20' 9" / 6325 mm	22' 9" / 6934 mm
Overall System Length <sup>1</sup>	14' / 4267 mm	16' / 4877 mm	18' / 5486 mm	20' / 6096 mm	22' / 6706 mm	24' / 7315 mm
Nominal Track / Wheel Distance <sup>2</sup>	11' 5" / 3480 mm	13' 5" / 4089 mm	15' 5" / 4699 mm	17' 5" / 5309 mm	19' 5" / 5918 mm	21' 5" / 6528 mm
Overall Height <sup>3</sup>	11' 1" / 3378 mm	11' 1" / 3378 mm	11' 3" / 3429 mm	11' 3" / 3429 mm	11' 5" / 3480 mm	11' 5" / 3480 mm
I-Beam Size	8" x 23 lb / 203 mm x 10.43 kg	8" x 23 lb / 203 mm x 10.43 kg	10" x 25.4 lb / 254 mm x 11.52 kg	10" x 25.4 lb / 254 mm x 11.52 kg	12" x 31.8 lb / 305 mm x 14.42 kg	12" x 31.8 lb / 305 mm x 14.42 kg
Weight	1,260 lb / 572 kg	1,285 lb / 583 kg	1,320 lb / 599 kg 1,345 lb / 610 kg		1,425 lb / 646 kg	1,490 lb / 676 kg
Under Beam Clearance Height	10' 5" / 3175 mm	10' 5" / 3175 mm	10' 5" / 3175 mm	10' 5" / 3175 mm	10' 5" / 3175 mm	10' 5" / 3175 mm
Under Chain Container Clearance Height	8' 5" / 2565 mm	8' 5" / 2565 mm	8' 5" / 2565 mm	8' 5" / 2565 mm	8' 5" / 2565 mm	8' 5" / 2565 mm
Max A.C. Amp Draw with Hoist at 480 V / 3 ph / 60 Hz <sup>4</sup>	5.2 Amp	5.2 Amp	5.2 Amp	5.2 Amp	5.2 Amp	5.2 Amp
Travel Speed	45 ft/min / 0.23 m/s	45 ft/min / 0.23 m/s	45 ft/min / 0.23 m/s	45 ft/min / 0.23 m/s	45 ft/min / 0.23 m/s	45 ft/min / 0.23 m/s
A-Frame Base Width	68" / 1727 mm	68" / 1727 mm	68" / 1727 mm	68" / 1727 mm	68" / 1727 mm	68" / 1727 mm

## Power Drive Gantry Crane—3 Ton Capacity

## **MODELS & SPECIFICATIONS**

	3PGC-10PDC	3PGC-12PDC	3PGC-14PDC	3PGC-16PDC	3PGC-18PDC	3PGC-20PDC
Capacity	6,000 lb / 2722 kg	6,000 lb / 2722 kg	6,000 lb / 2722 kg	6,000 lb / 2722 kg	6,000 lb / 2722 kg	6,000 lb / 2722 kg
Clear Between "A" Frame	10' / 3048 mm	12' / 3658 mm	14' / 4267 mm	16' / 4877 mm	18' / 5490 mm	20' / 6100 mm
Overall Beam Length	12' / 3658 mm	14' / 4267 mm	16' / 4877 mm 18' / 5486 mm		20' / 6100 mm	22' / 6710 mm
Overall Length Dimension	12' 9" / 3886 mm	14' 9" / 4496 mm	16' 9" / 5105 mm	18' 9" / 5715 mm	20' 9" / 6325 mm	22' 9" / 6934 mm
Overall System Length <sup>1</sup>	14' / 4267 mm	16' / 4877 mm	18' / 5486 mm	20' / 6096 mm	22' / 6706 mm	24' / 7315 mm
Nominal Track / Wheel Distance <sup>2</sup>	11' 5" / 3480 mm	13' 5" / 4089 mm	15' 5" / 4699 mm	17' 5" / 5309 mm	19' 5" / 5918 mm	21' 5" / 6528 mm
Overall Height <sup>3</sup>	11' 1" / 3378 mm	11' 3" / 3429 mm	11' 3" / 3429 mm	11' 5" / 3480 mm	11' 8" / 3556 mm	11' 8" / 3556 mm
I-Beam Size	8" x 23 lb / 203 mm x 10.43 kg	10" x 25.4 lb / 254 mm x 11.52 kg	10" x 25.4 lb / 254 mm x 11.52 kg	12" x 31.8 lb / 305 mm x 14.42 kg	15" x 42.9 lb / 381 mm x 19.46 kg	15" x 42.9 lb / 381 mm x 19.46 kg
Weight	1,260 lb / 572 kg	1,320 lb / 599 kg	1,370 lb / 621 kg	1,455 lb / 660 kg	1,511 lb / 685 kg	1,627 lb / 738 kg
Under Beam Clearance Height	10' 5" / 3175 mm	10' 5" / 3175 mm	10' 5" / 3175 mm	10' 5" / 3175 mm	10' 5" / 3175 mm	10' 5" / 3175 mm
Under Chain Container Clearance Height	8' 5" / 2565 mm	8' 5" / 2565 mm	8' 5" / 2565 mm	8' 5" / 2565 mm	8' 5" / 2565 mm	8' 5" / 2565 mm
Max A.C. Amp Draw with Hoist at 480 V / 3 ph / 60 Hz $^4$	6.8 Amp	6.8 Amp	6.8 Amp	6.8 Amp	6.8 Amp	6.8 Amp
Travel Speed	45 ft/min / 0.23 m/s	45 ft/min / 0.23 m/s	45 ft/min / 0.23 m/s	45 ft/min / 0.23 m/s	45 ft/min / 0.23 m/s	45 ft/min / 0.23 m/s
A-Frame Base Width	68" / 1727 mm	68" / 1727 mm	68" / 1727 mm	68" / 1727 mm	68" / 1727 mm	68" / 1727 mm

- Notes: 1. 12" (305 mm) Clearance recommended on each side
- 2. Dimension should not be used for track installation due to varying crown of I-beams
- Dimension does not include cable festoon
   Consult factory for additional voltage and 50 Hz

## Non-Power Drive Gantry Crane-2 Ton Capacity

#### **MODELS & SPECIFICATIONS**

	PGC-10	PGC-12	PGC-14	PGC-16	PGC-18
Capacity	4,000 lb / 1814 kg	4,000 lb / 1814 kg	4,000 lb / 1814 kg	4,000 lb / 1814 kg	4,000 lb / 1814 kg
Clear Between "A" Frame	10' / 3048 mm	12' / 3658 mm	14' / 4267 mm	16' / 4877 mm	18' / 5486 mm
Overall Beam Length	12' / 3658 mm	14' / 4267 mm	16' / 4877 mm	18' / 5486 mm	20' / 6096 mm
Overall Length Dimension	12' / 3658 mm	14' / 4267 mm	16' / 4877 mm	18' / 5486 mm	20' / 6096 mm
Overall System Length <sup>1</sup>	14' / 4267 mm	16' / 4877 mm	18' / 5486 mm	20' / 6096 mm	22' / 6706 mm
Nominal Track / Wheel Distance <sup>2</sup>	11' 5" / 3480 mm	13' 5" / 4089 mm	15' 5" / 4699 mm	17' 5" / 5309 mm	19' 5" / 5918 mm
Overall Height	10' 9" / 3277 mm	10' 9" / 3277 mm	10' 11" / 3327 mm	10' 11" / 3327 mm	11' 1" / 3378 mm
I-Beam Size	8" x 23 lb / 203 mm x 10.43 kg	8" x 23 lb / 203 mm x 10.43 kg	10" x 25.4 lb / 254 mm x 11.52 kg	10" x 25.4 lb / 254 mm x 11.52 kg	12" x 31.8 lb / 305 mm x 14.42 kg
Weight	850 lb / 386 kg	890 lb / 404 kg	940 lb / 426 kg	995 lb / 451 kg	1225 lb / 556 kg
Under Beam Clearance Height	10' 1" / 3073 mm	10' 1" / 3073 mm	10' 1" / 3073 mm	10' 1" / 3073 mm	10' 1" / 3073 mm
A-Frame Base Width	64" / 1626 mm	64" / 1626 mm	64" / 1626 mm	64" / 1626 mm	64" / 1626 mm

## Non-Power Drive Gantry Crane-3 Ton Capacity

#### **MODELS & SPECIFICATIONS**

	3PGC-10	3PGC-12	3PGC-14	3PGC-16	3PGC-18
Capacity	6,000 lb / 2722 kg	6,000 lb / 2722 kg	6,000 lb / 2722 kg	6,000 lb / 2722 kg	6,000 lb / 2722 kg
Clear Between "A" Frame	10' / 3048 mm	12' / 3658 mm	14' / 4267 mm	16' / 4877 mm	18' / 5486 mm
Overall Beam Length	12' / 3658 mm	14' / 4267 mm	16' / 4877 mm	18' / 5486 mm	20' / 6096 mm
Overall Length Dimension	12' / 3658 mm	14' / 4267 mm	16' / 4877 mm	18' / 5486 mm	20' / 6096 mm
Overall System Length <sup>1</sup>	14' / 4267 mm	16' / 4877 mm	18' / 5486 mm	20' / 6096 mm	22' / 6706 mm
Nominal Track / Wheel Distance <sup>2</sup>	11' 5" / 3480 mm	13' 5" / 4089 mm	15' 5" / 4699 mm	17' 5" / 5309 mm	19' 5" / 5918 mm
Overall Height	10' 9" / 3277 mm	10' 11" / 3327 mm	10' 11" / 3327 mm	11' 1" / 3378 mm	11' 4" / 3454 mm
I-Beam Size	8" x 23 lb / 203 mm x 10.43 kg	10" x 25.4 lb / 254 mm x 11.52 kg	10" x 25.4 lb / 254 mm x 11.52 kg	12" x 31.8 lb / 305 mm x 14.42 kg	15" x 42.9 lb / 381 mm x 19.46 kg
Weight	900 lb / 408 kg	950 lb / 431 kg	1,000 lb / 454 kg	1,110 lb / 503 kg	1,305 lb / 592 kg
Under Beam Clearance Height	10' 5" / 3175 mm	10' 5" / 3175 mm	10' 5" / 3175 mm	10' 5" / 3175 mm	10' 5" / 3175 mm
A-Frame Base Width	68" / 1727 mm	68" / 1727 mm	68" / 1727 mm	68" / 1727 mm	68" / 1727 mm

#### Notes:

- 1. 12" (305 mm) Minimum clearance recommended on each side
- 2. Dimension should not be used for track installation due to varying crown of I-beams







