

DUAL PIVOT HOOK HOISTS

54" FIXED HOOK HEIGHT **MODELS:** U20, U30 & U3-DPHK

Dual Pivot Hook Hoists are designed for higher hauling capacities and ease of use with the advantage of set hook heights. Ideal for the waste, recycling, landscaping, construction, and roofing industries, Dual Pivot Hook Hoists offer greater versatility and maneuverability than traditional roll-off cable hoists. Dual Pivot Hook Hoists keep containers safely secured to the hoist frames during the dump cycle with rear container hold downs and a rear pivoting hinge. These features allow for greater dumping angles to release the most stubborn loads. With the ease of in-cab controls, the U20, U30 & U3-DPHK models improve operator safety and efficiency through faster cycle times.



Standard Features

- Inside air controls mounted in our ergonomic power tower featuring Plug and Play™ wiring
- Back-up alarm & hoist up alarm with signal light in cab
- Secondary manual controls mounted outside on driver's side
- Outside frame rail pass through rear container hold downs
- Rear flanged rollers w/ rear transition container supports
- · Rear rollers are ductile cast iron with bronze bushing
- T1 steel hook, fixed hook height @ 54"
- Welded & bolted on roller stools with 4" o.d. rollers & bronze bushings
- Rear apron & bumper assembly complete w/ LED lighting & pintle/reese adaptable
- · Steel tank with dual sight/temp gauge and air breather
- · Hoist maintenance/safety prop
- · Warranty: 2-year limited on hydraulic system
- Customized engineering layouts ensure the best fit for each customer

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3 Micron return oil filtration inside tank



20-Gallon steel hyd. tank w/ dual sight/temp. gauge (U20-DPHK)



50-Gallon steel hyd. tank w/ dual sight/temp. gauge (U30/U3-DPHK)



Inside air controls in power tower



T-1 steel fixed hook height @ 54"



Secondary outside manual control valve



Rear container transition supports w/ pass through rear hold downs



Pass through rear hold downs



Flanged rear rollers w/bronze bushings



Rear apron & bumper assembly complete w/ LED lighting & pintle/reese adaptable



Optional Equipment

- · Pioneer® tarping systems
- · Additional container hold downs
- Manually adjustable hook height from 54" to 61 3/4" (U3 & U30 models only)
- · Auxiliary hydraulic hook-ups/wet kits
- Variety of fenders (steel, alum. & poly)
- · Toolbox styles and sizes (steel, alum. & poly)
- · Pintle hook & reese style hitch assemblies
- · Scale systems
- · Add air for non-air trucks
- Rear view/back-up camera systems
- Additional LED safety and work light configurations
- · Lift axles, tires & rims

U30-DPHK-176 shown w/ aluminum tread plate fenders, oil tank mounted on passenger side and custom red painted hook options





Pioneer® tarp systems





Back-up camera systems



Steel, aluminum & poly fenders



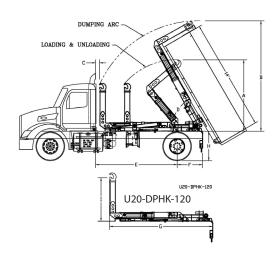
Toolbox styles and sizes (steel, alum. & poly)

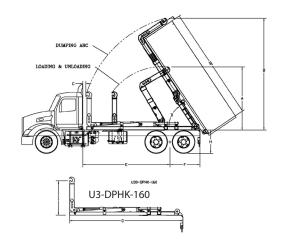


Pintle hook and reese hitch towing packages

U20-DPHK-144 with poly fender option







Notes for chart below:

- 1 When recommending container lengths, weight distribution, fender interference and overhang are factors. Please consult your local ordinances when determining the model of hoist needed to suit your container needs.
- 2 Factory tested with recommended container length and a water level load.
- ${\bf 3}\ \ {\bf Total\ maximum\ height\ will\ depend\ on\ the\ container\ and\ frame\ height.\ Consult\ engineering\ for\ clearance.}$
- 4 Frame Height = Frame Height = Top of truck chassis frame to ground. Using 22.5" tires only. Tested w/ 42" frame height; any truck frame higher than 42" will change hoist capacities, dump angle and its ability to snatch onto the bar. For higher truck frames or using larger tires, consult engineering for clearance and capacity ratings.
- 5 This distance does not allow for a behind the cab (BTC) oil reservoir, tarper platform and or room to add a tarper; must add distance for those items.

Models	U20-DPHK-120	U20-DPHK-144	U30-DPHK-176	U3-DPHK-160
FEATURES	SINGLE AXLE	SINGLE AXLE	SINGLE AXLE	TANDEM AXLE
Recommended Container Size ¹	12' to 14'	14' to 16'	14' to 18'	14' to 18'
Rated Hoist Capacity @ Hook Height 2	20k lbs. @ 54"	20k lbs. @ 54"	30k lbs. @ 54"	30k lbs. @ 54"
A – Max. Hook Height (Load/Unloading) 3,4	107 1/16"	107 1/16"	120 5/16″	120 5/16"
B – Max. Hook Height (Dumping) ⁴	166 1/16"	166 1/16"	212 3/8"	212 3/8"
C – Back of Cab to Hoist	4"	4"	4"	4"
D – Dump Angle	61°	46°	57°	57 ⁰
E – (CA/CT) cab to axle/trunnion ⁵	121"	145"	177"	162"
F – After Frame	38 ½"	38 ½"	42"	57"
G – Hoist Length	155 ½"	179 ½"	215"	215"
H – Frame Height ⁴	42" or less	42" or less	42" or less	42" or less
I – Hook Height	54"	54"	54"	54"
Pick Up Hook Below Grade	16"	16"	13"	13"
Lift Cylinders - (2) dual acting	5"x 3"x 52"	5"x 3"x 52"	6"x 3 ½"x 78"	6"x 3 ½"x 78"
Jib Cylinder - (1) dual acting	3"x 2" x 37"	3"x 2" x 37"	4"x 2 ½"x 48"	4"x 2 ½"x 48"
Approximate Weight w/ Standard Features	3,025 lbs.	3,190 lbs.	5,630 lbs.	5,630 lbs.
Cycle Times @ 1,500 RPM	@ 17.5 GPM & 1,500 RPM		@ 37.5 GPM & 1,500 RPM	
Extending Dump	30 sec.		31 sec.	
Retracting Dump	19 sec.		20 sec.	
Extending Jib	4 sec.		4 sec.	
Retracting Jib	2 sec.		3 sec.	

Minimum Truck Requirements (20k lb.)

Axle Rating: 8k Front / 18k Rear Transmission Torque: 212 ft. lbs.

The chart below is an example of how to calculate the chassis section modulus (RBM / PSI = SM). Regardless of the frame YIELD and RBM, the min. SM must be $15.5 \, \text{in}^3$ or more per each frame rail.

Truck Channel Ht.	RBM	Yield (PSI)	RBM/PSI = SM in ³	
10" or More (single wall)	1,860,000 – 3,000,000	120,000 psi	15.5 in ³ – 25 in ³	
10" or More (double wall)	1,550,000 – 3,000,000	100,000 psi	15.5 in ³ – 30 in ³	

Note: The single walled 120k psi with RBM less than 1,860,000 would not be acceptable because its SM would fall below the 15.5 in 3 minimum specification on the U20-DPHK (1,850,000 / 120,000 = 15.42 in 3). For frames less than 10", consult engineering.

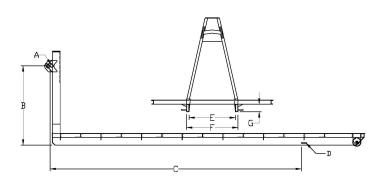
Minimum Truck Requirements (30k lb.)

Axle Rating: 12k Front / 20k Rear Transmission Torque: 418 ft. lbs.

The chart below is an example of how to calculate the chassis section modulus (RBM / PSI = SM). Regardless of the frame YIELD and RBM, the min. SM must be 17.5 in^3 or more per each frame rail.

ı	Truck Channel Ht.	RBM	Yield (PSI)	RBM/PSI = SM in ³	
	10" or More (single wall)	2,100,000 – 3,600,000	120,000 psi	17.5 in ³ – 30 in ³	
	10" or More (double wall)	1,750,000 - 3,000,000	100,000 psi	17.5 in ³ – 30 in ³	

Note: The single walled 120k psi with RBM less than 1,860,000 would not be acceptable because its SM would fall below the 17.5 in^3 minimum specification on the U20-DPHK (1,850,000 / 120,000 = 16.67 in^3). For frames less than 10% consult engineering.



LIFT BAR DIA.	ноок нт.	BAR TO HOLD DOWN	HOLD DOWN LOCATIONS	INSIDE SILL WIDTH	OUTSIDE SILL WIDTH	LONG SILL HT.
А	В	С	D		F	G
2.5 in	54"	127 ½" min.	Outside	36 ½" min.	41 ½" max.	6"

