



**ERGO  
ROBOTIC  
SOLUTIONS**

**SkyHook WPI**



## **STANDARD FEATURES AND EQUIPMENT**

### **CHASSIS**

- Counterbalanced fixed boom assembly
- Primary counterweight chassis mounted
- Comes with 1 secondary counterweight
- Built in battery chargers with linear rate control, 110 volt, 60 Hz. single phase
- Electrical circuit breakers

### **VACUUM**

- Redundant vacuum pumps, non-lubricated positive displacement, automatic start-stop control
- Vacuum frame accepts variety of cup sizes, fully adjustable
- Vacuum cartridges include bi-directional coil spring loaded mounts
- Includes 4 standard 20" x 12" rectangular suction cups, 550 lbs. lift per cup in shear at 100% safety factor

### **HYDRAULICS**

- All hydraulic functions are proportionally controlled, with valves for each boom or manipulator function

### **CONTROL**

- 6 direction manipulator motions
- Adjustable cantilever to 48"

### **CONSOLE**

- Controls on unit include
  - Battery isolation switch
  - Battery master switch
  - Hour meter
  - Vacuum gauge
  - Hydraulic power On/Off switch
  - Battery charge gauge
- Wireless remote includes
  - Multi function controls for all manipulator end effector functions
  - Vacuum and release switches
  - Emergency stop

### **SAFETY**

- Strobe light operates with master battery switch
- Low vacuum level alarm, audible horn
- Safety vacuum check valves
- Console-mounted two button safety vacuum release valve



**ErgoRobotic.com**

**518-796-2179**

**SkyHook WPI**



# SKYHOOK WPI DIMENSIONS

SkyHook WPI Characteristic	Specification
Lift Capacity	2800 lbs.
Closed Chassis Length	115"
Width	46"
Unladen Weight	1,600 lbs.
Secondary Counter Weights	450 lbs. each

## COUNTERWEIGHTS VS. LOADS

Counter weights	Status	Max. Load @ Pick Point 48" from load	Max. Load @ Pick Point 36" from load
1	Built in	1100 lbs.	1400 lbs.
2	Included, detachable	1850 lbs.	2800 lbs.*
3	Optional add-on	2700 lbs.*	3800 lbs.*

\* Additional cup assemblies required



## POWERED MANIPULATION FUNCTIONS

Control	Assembly	Direction	Viewed from
1	Counterbalance	In / Out	Side Elevation
2	Under hook Connection	Up / Down	Side Elevation
3	Horizontal to Vertical Tilt	Tilt Up / Down	Side Elevation
4	Manipulator - vacuum cup frame	Rotate - CW and CCW 180°	Front Elevation

- All hydraulic controls use a variable orifice proportional valve.
- The hydraulic circuits are equipped with check and counterbalance valves to prevent leak down and droop under load.
- Actuation is proportional and linear in response to control inputs.

