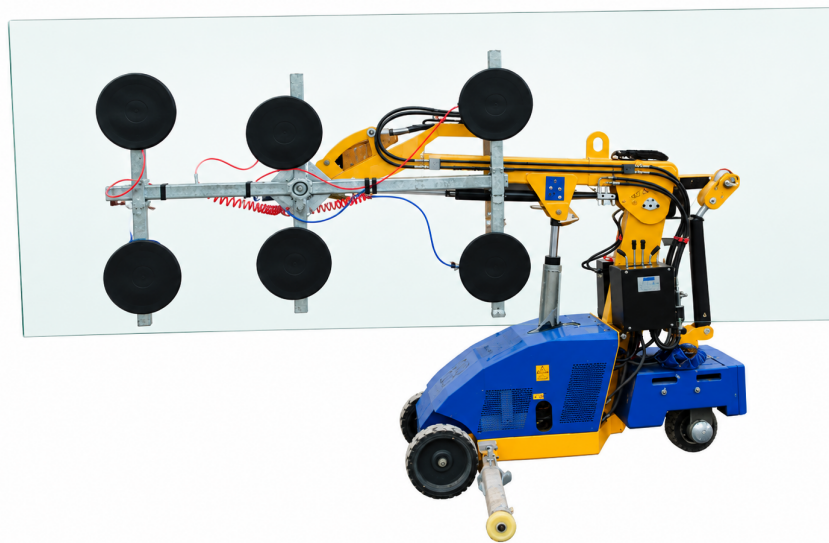


PRODUCT SPECIFICATION

ET-GR-LEG-400S

Compact Glass Lifting Robot

ET-GR-LEG-400S is an Easytech compact glass lifting robot with a maximum rated load of 400 kg (approximately 880 lb), six vacuum pads and hydraulic positioning. Its four parallel-connected 24 V / 55 Ah batteries form a 24 V / 220 Ah bank for hydraulic, travel and dual-circuit vacuum functions. Check the load chart for the actual reach and posture.



Series reference image.

Drive: Configuration-specific

Mounting: Self-propelled

Materials: Glass

Configuration, complete technical data and selection guidance

Read the specified load and movement with their conditions. This document supports purchasing and project definition; the supplied equipment instructions govern operation and maintenance.

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Technical specifications

Parameter	Specification
Maximum rated load	400 kg
Side-shift hydraulic cylinder	Stroke 100 mm / bore 40 mm, 1 cylinder
Tilting hydraulic cylinder	Stroke 200 mm / bore 63 mm, 1 cylinder
Lifting hydraulic cylinder	Stroke 550 mm / bore 63 mm, 1 cylinder
Telescopic hydraulic cylinder	Stroke 600 mm / bore 50 mm, 1 cylinder
Hydraulic power unit	1.2 kW / 6 L
Number of pads	6 pcs
DC vacuum pump	2 units
Vacuum non-return valve, pressure switch, gauge, filter, reservoir & slide valve	2 of each
Powered wheels	1 pcs
Idler wheels	4 pcs
Anti-tip support frame	2 pcs
Battery units	Four 24 V / 55 Ah battery units
Battery bank arrangement	Four 24 V / 55 Ah battery units connected in parallel; total nominal bank rating 24 V / 220 Ah. The bank supplies the 24 V DC hydraulic pump, self-propelled drive motor and dual-circuit vacuum system.
Nominal battery energy (calculated)	5.28 kWh
Battery charger	16 A, 110-240 V
Configuration scope	Maximum rated load 400 kg; match the complete machine to the glass weight, reach and installation position using its configuration-specific load chart.

400 kg robot configuration and working limits

The maximum rated load is 400 kg (approximately 880 lb). The permitted load at a specific reach, height and posture must follow the load chart for the supplied machine; 400 kg is not a rating for every working position.

Selection point	This configuration
Configuration scope	Maximum rated load 400 kg; match the complete machine to the glass weight, reach and installation position using its configuration-specific load chart.
Number of pads	6 pcs
Battery units	Four 24 V / 55 Ah battery units
Hydraulic power unit	1.2 kW / 6 L

Equipment and intended application

The mobile chassis carries the lifting arm and vacuum head. Travel positions the machine; arm movement provides reach and height; the head aligns the glass using the listed tilt, rotation and fine-positioning functions. Each movement has its own limit, and the load envelope changes with reach and posture.

Workpiece suitability and limits

Topic	Details
Access to the work area	Compare the transport envelope with doors, lifts, corridors and turning spaces. Check machine mass plus the transported load against the floor and access route; width alone does not establish access.
Placement geometry	Specify glass weight and size, final installation height, horizontal setback and any overhead obstruction. Maximum height and maximum load are separate values and must not be combined as a single operating point.
Ground and weather	Check surface strength, slope, obstacles and the support arrangement. Gradeability is a travel specification, not permission to lift on that slope. Outdoor work also requires suitable glass, weather and site conditions.

Configuration and supply boundaries

Topic	Details
Chassis and battery	The model table defines the travel drive, battery and minimum dimensions where stated. Listed operating time is duty-dependent and is not a guarantee for every lift cycle.
Vacuum head	Pad arrangement and vacuum circuits apply to the stated head. A fork or winch option uses a different load path and requires its own attachment instructions.
Positioning controls	Side shift translates the head; side turning swivels it; rotation turns the pane in its plane. These functions must not be conflated when checking access around an opening.
Counterweights and supports	Use the specified counterweight and support arrangement. Removing weights to reduce transport mass changes the working configuration; it does not preserve the same lifting envelope.

Installation and commissioning

- Survey access and placement before delivery: door and lift dimensions, floor loading, turns, unloading space and the installation setback.
- Prepare a suitable charging point using the supplied charger input. Check battery condition and the planned duty cycle before a shift.
- Inspect the fitted pads, vacuum hoses, hydraulic lines, tyres or tracks, counterweights, support devices and emergency stop. Check both circuits when a dual system is fitted.

- Commission controls and travel without a load, then carry out the prescribed checks for the selected glass and working posture. The operator needs the machine-specific operating instructions and load envelope.

Handling sequence

1. Prepare the work area and set the machine to its approved lifting configuration. Keep the pickup and destination accessible for a safe set-down.
2. Position the head on intact glass contact areas, apply vacuum and check the circuit indications before taking the glass weight.
3. Use the load diagram for the selected reach and height. Make controlled travel and positioning movements; use fine adjustment to align the glass without forcing it against the opening.
4. Transfer the pane onto its supports and secure it by the installation procedure before releasing the vacuum. Return the machine to its transport posture before relocating it.

Inspection, maintenance and replacement parts

Topic	Details
Before use	Inspect pads, hoses, vacuum indications, controls, tyres/tracks and the support arrangement. Investigate any alarm or change in movement.
Hydraulic system	Check for leaks and damaged hoses without touching pressurised leaks. Support moving parts and isolate energy before maintenance.
Battery and charging	Keep terminals and charging leads in serviceable condition and follow the fitted battery/charger instructions. Report declining runtime instead of assuming the catalog duration still applies.
Service identification	Record the model and serial number, attachment type, battery specification and affected component. Pad, hydraulic-seal and controller replacements must match the actual installed version.

Troubleshooting priorities

Topic	Details
Arm movement is inhibited	Check overload indication, emergency stop, power and the permitted posture. Do not bypass an interlock to reach the target position.
One vacuum circuit warns	Set the pane down using the prescribed safe procedure and find the cause. A second circuit does not authorise normal operation with a known fault.
Travel or positioning becomes irregular	Stop in a supported state and inspect the route, charge level, controls and hydraulic system. Resume only after the cause is resolved.

Frequently asked questions

What is the maximum rated load of ET-GR-LEG-400S?

The maximum rated load is 400 kg (approximately 880 lb). The permitted load at a specific reach, height and posture must follow the load chart for the supplied machine; 400 kg is not a rating for every working position.

Can it lift its maximum rated load to maximum height?

Only if the model load chart explicitly permits that combination. Select the curve for the actual load and check the complete reach/height path, not just the final point.

What is the difference between side shift and rotation?

Side shift moves the pane laterally without changing its angle; rotation turns it within its plane. Side turning changes the head direction relative to the arm.

Can a narrow machine automatically use a passenger lift?

No. Check the whole transport envelope, turning space, total transported mass and lift loading restrictions. The narrowest chassis width is only one of those checks.

How are the batteries connected, and what is the bank capacity?

Four 24 V / 55 Ah battery units connected in parallel; total nominal bank rating 24 V / 220 Ah. The bank supplies the 24 V DC hydraulic pump, self-propelled drive motor and dual-circuit vacuum system. The calculated nominal energy is $24 \text{ V} \times 220 \text{ Ah} = 5.28 \text{ kWh}$. Usable energy and operating time depend on battery condition, discharge limits and the actual duty cycle; the nominal energy is not a runtime guarantee.

Information for application assessment

- Identify the workpiece material, dimensions, mass, contact surface and centre of gravity. Include the least favourable item in a mixed production range.
- Describe pickup and placement positions, required orientation changes, handling frequency and the site layout.
- Identify the available power or air supply and any host machine, crane, support structure or interface that must be retained.
- State the destination market and required documentation, accessories and packing constraints so the proposed configuration can be assessed as a complete system.

Document scope

This product specification supports equipment selection and project definition. It includes the model data and application guidance presented on the product page. The operating instructions supplied for the actual machine govern commissioning, testing, maintenance procedures and safe use; this specification does not replace them.

[View this model on the Easytech website](#)