POWERJACKS
PRECISION ACTUATION

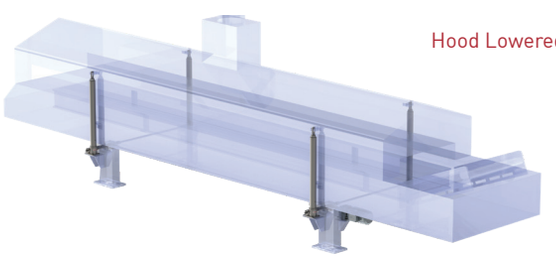
Fryer & Oven Hood Lifting Solutions

Automated Hood Lift
Precision Control
Self-Locking
Easy-Clean
Stainless Steel
Complete Systems

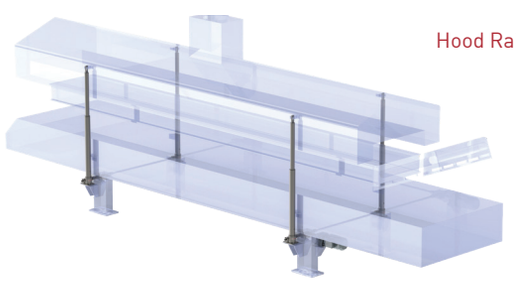
Automate the raising and lowering of the hood and conveyors for easy access cleaning with Power Jacks electro-mechanical actuator systems. The complete actuator system is available so you can just bolt-on and plug-in to complete a machine.

The mechanically synchronised actuators deliver precise and reliable movement that production lines can rely on. Positioning safely thanks to the actuators built-in self-locking feature that means external braking systems are not required.

Stainless steel actuators with easy clean surfaces mean that the systems meet factory hygiene needs.



Hood Lowered



Hood Raised

Precision Automation Providing:

- Total control with synchronised actuator system.
- Stainless Steel actuator housing for anti-corrosion protection.
- Easy cleaning actuator enclosure.
- Food grade grease lubrication.
- Strong, high quality design for reliable and long product life.
- Easy installation.
- Precise repeatable movement.
- Washdown compatible actuators and system components.

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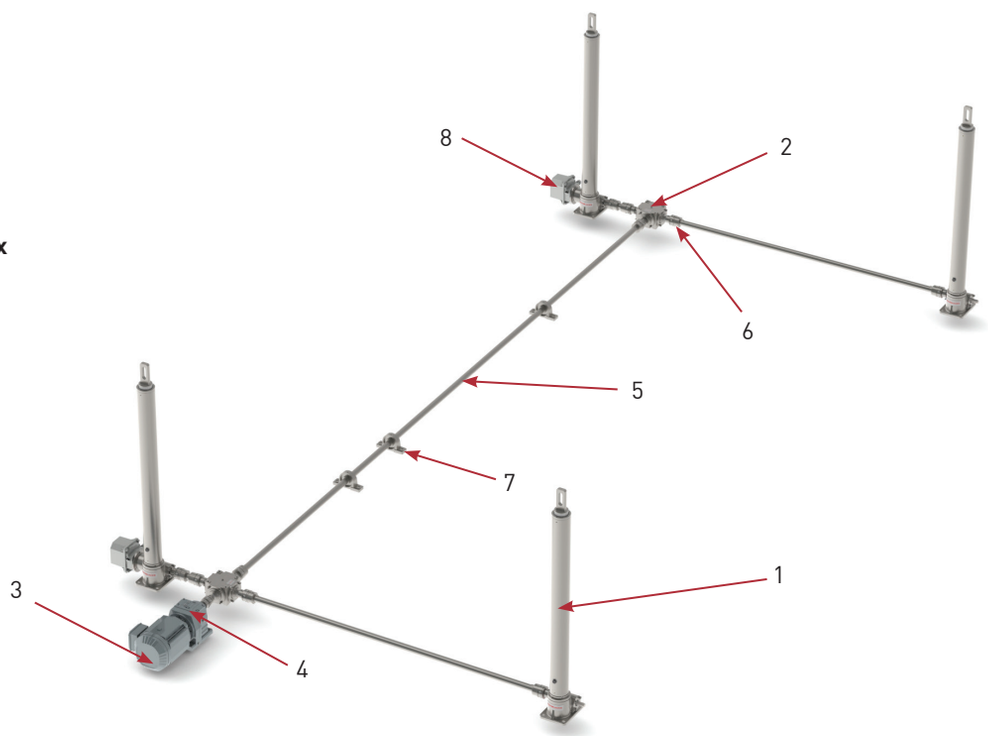
Full Actuator System Supply

Power Jacks can supply the complete actuator system with all gearboxes, drive shafts, couplings, motors and limit switches. Providing trouble-free operation for improved production by making maintenance easier and reliable.

(1) Linear Actuator
(2) Bevel Gearbox
(3) Electric Motor
(4) Reduction Gearbox
(5) Drive Shafts
(6) Couplings
(7) Shaft Supports
(8) Limit Switch.



Specially designed for fryer and oven applications, Power Jacks actuators systems are available in configurations and sizes to meet your needs. Typically used in 2, 4, 6 or 8 actuator system arrangements, however others are available. These actuator systems can be individually customised to suit your exact machinery needs, providing you with the best performing system that will improve useability for the end user.

The electro-mechanical solution simply and easily integrates into your machine automation controls.

Standard Features:

- Stainless Steel Actuator Design
- Self-locking actuator system

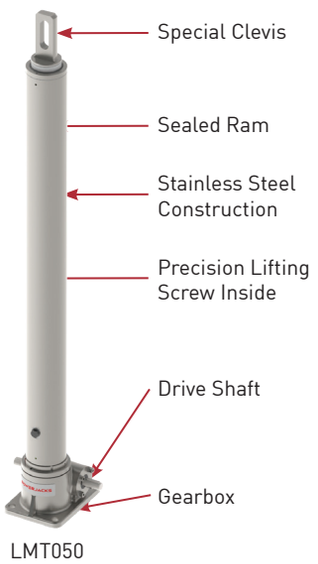
Optional Features:

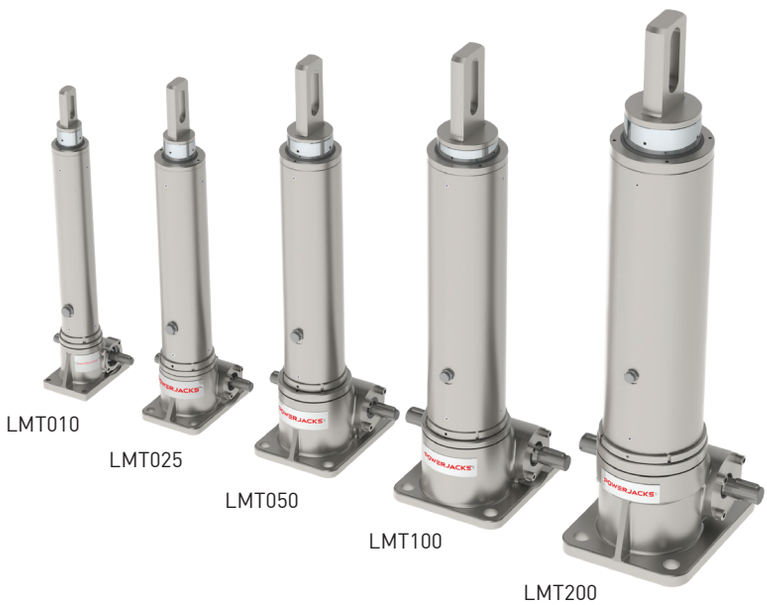
- Upgraded Anti-Corrosion Protection with: - Stainless Steel Bevel Gearboxes
  - Stainless Steel Couplings
  - Stainless Steel Drive Shafts

- Auxiliary drive for manual operation in emergency conditions.
- Hand wheel for auxiliary drive.
- Self-supporting drive shafts so no need for any plummer blocks to support shafts, which means no plummer block brackets on superstructure simplifying design and helping cost reduction.
- Individually or paired motorised actuators suitable for electronic synchronisation.
- Encoder (incremental or absolute) feedback for speed and position.

Actuator Design In Focus

Benefit from the stainless steel design which as well as being proven in the food industry has also met the demanding requirements of applications in subsea, offshore, nuclear and paper.





Standard Features:

- Precision worm gear set and lifting screw drive mechanism.
- High quality 316 Stainless Steel as standard for actuator construction.
- Food grade grease lubrication for actuator gear set and lifting screw.
- Specially developed clevis end to accommodate any hood misalignment so hood is rested and sealed on its supports before actuator stops.
- Easy clean design.
- Sealed for washdown.

Actuator Options:

- Clevis with standard or slotted pin hole.
- Removable safety cover (stainless steel) for non-drive shaft.
- Blanked and sealed non-drive shaft end.
- Safety nut.
- Stop nut.

Performance Overview

Type	Screw Lead (mm)	Gear Ratio	Stroke Range (mm)	Maximum Linear Speed (mm/mm)	Sustaining Capacity (kN)*	Operating Capacity (kN)*	
						316 Worm Shaft	Unplated, Plated or Duplex Worm Shaft
LMT010	5	5:1	0 — 2000	1800	10	6.6	10
LMT025	6	6:1	0 — 3000	1800	25	16.5	25
LMT050	9	6:1	0 — 3000	2700	50	33	50
LMT050	12	8:1	0 — 3000	2700	100	66	100
LMT050	12	8:1	0 — 3000	2700	200	132	200

*Load in compression

3D CAD models available for individual actuators or complete systems.

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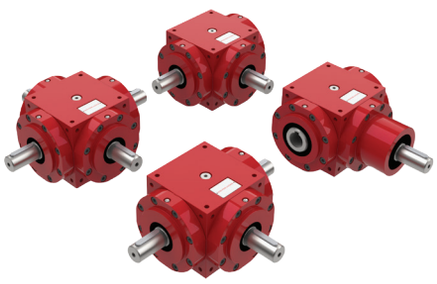
System Components



Bevel Gearboxes for mechanical power transmission and distribution in actuator systems.

- Standard Material or Stainless Steel Designs
- 6 Gearbox Sizes.
- Gear Ratios: 1:1, 1.5:1, 2:1, 3:1 and 4:1
- 2, 3 or 4-way Shaft Configurations
- Solid and Hollow Shaft Design

Geared motors for primary drive available in parallel shaft, in-line or right angled drive configurations

Flexible couplings for drive connections in standard material or stainless steel designs

Solid Drive Shafts or Self-Supporting Drive Shafts in standard material or stainless steel designs

Rotary Limit Switch for end of stroke control in rugged IP66 enclosure with 2 to 8 limit switches

Power Jacks specialises in the design and manufacture of precision linear actuation, positioning and lifting equipment.

Our products are supplied to over 80 countries worldwide across many sectors including Industrial Automation, Energy, Transport, Defence and Civil.

Support is provided globally with offices in UK, USA, India and China

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