



G-FORCE

G-FORCE® Q2 AND iQ2 BRIDGE CRANE MOUNTED INTELLIGENT LIFTING DEVICE

When precision, lifting power and speed are necessities, turn to Gorbels patented G-Force® Intelligent Lifting Device. More precise than hoists, more responsive than air balancers, our bridge crane mounted G-Force® units improve safety, productivity and quality, resulting in a direct increase to your bottom line.

CHOOSE A BRIDGE MOUNTED CRANE CONFIGURATION FOR:

- Higher capacities: available in 165, 330, 660, and 1320 lb capacities
- Faster speeds: maximum speeds up to 200 fpm
- More responsive performance: faster acceleration and deceleration
- Covering multiple work cells with one G-Force®

APPLICATIONS:

- Automotive assembly (engines, transmissions, chassis components)
- Heavy equipment manufacturing
- Tool & die changeouts
- Natural gas & oil industry (valves, drilling components, etc)
- Repetitive lifting jobs
- Parts assembly
- Machining
- Process equipment maintenance
- Covering larger single work areas

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ANTI-RECOIL TECHNOLOGY

This prevents the G-Force® and Easy Arm® units from moving or recoiling when there is a sudden change in load, reducing the risk of potentially serious injury.

FLOAT MODE

The G-Force® and Easy Arm® units offer our versatile Float Mode. With as little as 1/2lb (227 g) of force on the load itself, operators can precisely orient loads throughout the full stroke range by manipulating the load with their hands.

POWER LOSS PROTECTION

A fail safe load braking system locks the unit in place in the event of a power loss.

BLAZING SPEEDS

With G-Force® speeds reaching 200 fpm (61 mpm) and Easy Arm® speeds reaching 180 fpm (55 mpm), these devices travel up to 4 times faster than traditional high-end lifting devices currently on the market, making them the fastest, most precise lifting devices on the planet.

OPERATOR PRESENT DETECTION

Each of our seven handle configurations has Operator Present Detection that doesn't allow the unit to move unless the operator initiates the movement.

CAPACITY OVERLOAD

The units have a factory setting that prevents them from lifting a load if it exceeds their capacity. There's also a setting that users can electronically set within the menu if a smaller capacity overload limit is desired.

THE SAFE ALTERNATIVE

Operators want to use our G-Force® technology because it's easy to learn and easy to use. Our Intelligent Lifting Devices are safer than manual lifting and dramatically reduce worker injury cost.

INFINITE SPEED CONTROL

Gorbel's Intelligent Lifting Devices move with the operator. They move as fast or as slow as the operator chooses to move. They are ideal for applications that require high speed at some points in the cycle and slow, precise movements at other points.

PINPOINT PRECISION

Our Intelligent Lifting Devices deliver unparalleled precision with speeds of less than 1 fpm (0.3 mpm). This gives the operator the control necessary to finesse expensive or fragile parts.



INNOVATIVE HANDLE DESIGN

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1

G 360™ Swivel Assembly

Our G-Force® Intelligent Lifting Devices have a combined collector/air swivel that allows the handle to continuously rotate without damaging electrical conductors in the coil cord or optional air coil. This is ideal in applications where the operator is continuously rotating the handle.

2

Multi-Language Handle Display

High resolution OLED, multi-language handle display allows for menu style set up of features like Virtual Limits and Speed Reduction Points. It also communicates valuable information like operation modes, weight readout, diagnostic information, and fault codes.

3

Operator Present Function

All G-Force® and Easy Arm® control handles have operator present sensing functionality, making them safe and intuitive. This method senses the presence of the operator's hand without a physical lever to depress. The result is safe, smooth operation because the operator is not tempted to use the Operator Present Sensor safety feature as a start/stop control.

4

Ergonomic Handle Design

Our long lasting handle grips are designed with your operator's comfort in mind. Their shape, size, and material were carefully planned to fit comfortably in your hand, and textured to give you a positive grip.

GORBEL'S G-FORCE® TECHNOLOGY: PROVEN PERFORMANCE

ERGONOMIC STUDY

The following summary is based on a study performed by the Rochester Institute of Technology. The study compared the performance of Gorbels G-Force® Intelligent Lifting Device to other lifting devices. It focused on High Cycle Applications and Precision Placement Applications. To read the whole study, go to: <http://www.gorbel.com/pdfs/study/gforceergostudy.pdf>.

High Cycle Test

Operators were:

- **124%** more productive with the G-Force® than with air balancers
- **74%** more productive with the G-Force® than with variable frequency drive hoists

* Manual: 75% of the subjects could not complete 10 minutes of lifting & still maintain safe heart rates.

Precision Placement Test

Operators were:

- **76%** more productive with the G-Force® than with air balancers
- **59%** more productive with the G-Force® than with variable frequency drive hoists

* Manual: None of the subjects could complete 10 minutes of lifting w/o exceeding safe heart rates.

Force of Placement

The G-Force® was:

- **2.5x** less likely to damage the load than the air balancer with pendant control
- **3.3x** less likely to damage the load than the variable frequency drive hoists
- **2.2x** less likely to damage the load than manual

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Figure 1: Number of Palletizing Lifts
(Normalized for Energy Expenditure)

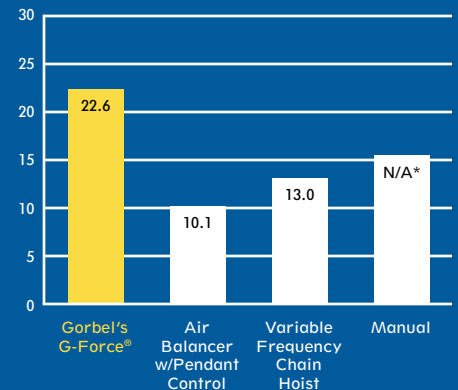


Figure 2: Number of Precision Placement Lifts

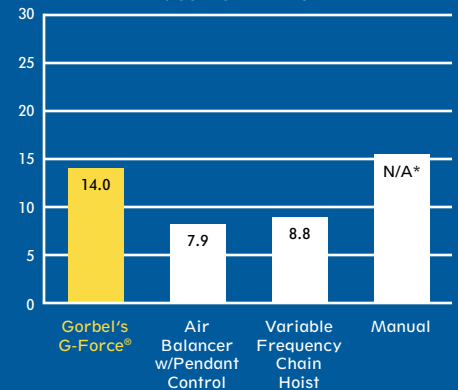


Figure 3: Percentage of Lifts Exceeding Force Threshold

