

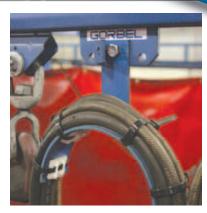
www.gorbel.com

Cranes, trolleys and accessories for suspending light tools.

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2450 W. Silver Spring Dr. Milwaukee, WI 53209 Phone: (414) 616-6680 Fax: (414) 616-6696



Cable Management





# SOLUTIONS

## **Tool Support Solutions by Gorbel**



For over 30 years, Gorbel has been an innovator and leader in ergonomic overhead lifting solutions. We have designed and manufactured a variety of rail technologies and lifting devices that have set the industry standard for quality, ease of use and return on investment.

With our innovative rail technology and years of experience with overhead solutions, we now offer complete solutions for the suspension of tools.

The cornerstone of Gorbel's tool solutions is our patented enclosed track design, which is engineered for easy movement. The cold rolled steel track keeps dirt and dust from settling on the rolling surface, allowing for smoother, more consistent easy movement of trolleys and tools than with an I-Beam without cleaning or maintenance of the track.

The track also features a running flange with a 2-degree taper to keep the trolley centered. That allows easy, non-binding movement by the trolley, which also features matching 2-degree tapers on the wheels. That effortless movement translates into accessible tools that won't interrupt work flow.



## **Create Your Custom Solution**

Putting together a complete solution for your suspended tooling application with Gorbel is as simple as selecting your method of suspension, finding a trolley that is most compatible with your tools, and customizing your solution with any of our tool accessories.

## Choose your support

Choose between Gorbel's monorail tool track for linear applications, or a tool solutions jib crane for individual work cell tool suspension. Both provide easy movement with our enclosed track design.



TSJ150 with vacuum lifter

## Choose your trolley

Gorbel offers a selection of trolleys to suspend tools, cables or lifting devices. Whether you need a trolley designed for side-loading, or one that gives the freedom of 360-degree rotation, we have a trolley that will match your application.



Light Tool Trolley

6" Trolley Saddle



#### **Choose your accessories**

For truly customized applications, explore Gorbel's additional options for tooling applications. From universal mount trolley saddles for improved cable management to rotation locks on jib cranes, these accessories help you get the most from your Gorbel<sup>®</sup> tool solution package.

*<b>ROLLEYS* 

## Step 1: Choose Your Support

## **Light Capacity Jibs**

Tool solution jib cranes use Gorbel's enclosed track to provide effortless movement and high productivity in work cells. Each jib is designed to be a durable, lightweight and cost effective solution for applications with suspended tools.

#### **TSJ50: 50 Pound Capacity**

The TSJ50 was designed for easy movement of light tools. Its lightweight tie rod style ensures easy movement and high performance without giving you more crane than you need for low capacity applications.

With a slim profile and simple installation, the TSJ50 excels in tight work spaces. The small bracket centers of 13 inches make it ideal for low headroom applications. For freestanding models, the crane's slim 4 inch square mast allows installation without a foundation where floor space may be limited. The four-bolt mounting brackets allow for easy adjustment of the boom height, and make conversion to wall or column mounting a simple task.

| TSJ50 Quick Facts                     |   |  |  |  |  |  |  |  |
|---------------------------------------|---|--|--|--|--|--|--|--|
| Standard spans to 10 feet             | Up to 180 degrees of rotation                               |  |  |  |  |  |  |  |
| Available as wall or floor mounted    | Uses 250 Series Track                                       |  |  |  |  |  |  |  |
| Freestanding Height Under Boom to     | Freestanding Height Under Boom to 10 feet                   |  |  |  |  |  |  |  |
| Available Options: Rotation lock, adj | Available Options: Rotation lock, adjustable friction brake |  |  |  |  |  |  |  |



Floor Mounted TSJ50 with nut runner in refurbishing bay

#### TSJ150: 150 Pound Capacity

For applications using heavier or higher impact tools, Gorbel offers the TSJ150. The lightweight design makes this higher capacity tool jib easy to operate as either a freestanding or a column/wall mounted style.

The slim profile of the TSJ150 features bracket centers of only 14 inches, making it ideal for applications with limited head room. Installing a freestanding model in a crowded work space is made easier with this jib, which does not require a special foundation.

| TSJ150 Quick Facts                        |                               |  |  |  |  |  |  |  |  |
|---|-------------------------------|--|--|--|--|--|--|--|--|
| Standard spans to 12 feet                 | Up to 200 degrees of rotation |  |  |  |  |  |  |  |  |
| Available as wall or floor mounted        | Uses 250 Series Track         |  |  |  |  |  |  |  |  |
| Freestanding Height Under Boom to 10 feet |                               |  |  |  |  |  |  |  |  |
| Available Options: Adjustable friction    | ı brake                       |  |  |  |  |  |  |  |  |

Freestanding jib cranes require a 6 inch reinforced concrete floor.



Floor Mounted TSJ150 in motor assembly area with light duty chain hoist

## **Monorail Tool Track**

Gorbel's monorail tool track is an ideal method for supporting assembly line applications or other work environments with a series of suspended tools.

Gorbel's monorail tool solution is designed for easy movement, low maintenance and long-term flexibility. The enclosed track design prevents dirt and other sediment from settling on the running surface, which allows smooth, effortless movement.

Monorail systems can be supported by ceiling suspensions or freestanding support steel, and are available in steel, aluminum and stainless steel.

Tool track is available with an optional maintenance gate, which allows for removal of tools in the middle of the track without taking each tool off at one end. For more information on maintenance gates, see page 8.

| Monorail Tool Track Quick Fa | cts |  |  |  |  |  |
|------------------------------|-----|--|--|--|--|--|
| Unlimited length potential   |     |  |  |  |  |  |
| Uses Track Series 250, 500   |     |  |  |  |  |  |

Available as ceiling or floor supported

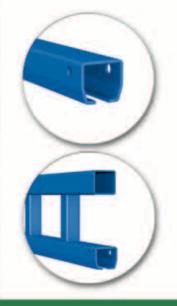
Capacities to 500 lbs.

Contact Gorbel for monorail tool track in higher capacities, as well as aluminum and stainless steel.



500 series tool track in welding area with suspended wire feed

#### Gorbel<sup>®</sup>monorail tool track is available in two track styles:



#### **Plain Steel Track**

Standard enclosed track features a very low profile, which is great for low-headroom applications. Maximum span for plain steel track is 6 feet.

#### **Trussed Steel Track**

The trussed design is engineered for longer spans between supports, allowing for maximum spans of up to 30 feet. Longer spans are also available by request.

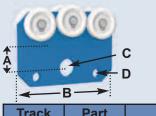
## Step 2: Choose Your Trolley

### **Tool Solution Trolleys**

Gorbel has a wide selection of trolleys for suspending tools, air and electrical cables, and lifting devices. Each trolley is designed for longevity and easy movement, featuring highly durable nylon wheels.

Dimensions listed are for 250 and 500 series enclosed track. For higher capacity trolleys, contact your Gorbel<sup>®</sup> representative. Weights and dimensions are approximate and may change without notice.

#### **Light Tool Trolley**



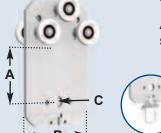
Designed specifically for suspending small tools, the light tool trolley features a six wheel design with the center wheel positioned slightly higher to prevent binding when force is applied at an angle.

The short wheel base allows for multiple trolleys to be used in a small area, making this trolley ideal for hanging tooling with spring balancers that require side loading capabilities.

| Track<br>Series | Part<br>Number | Α  | В             | С    | D    | Capacity | Ideal Applications:  |
|-----------------|----------------|----|---------------|------|------|----------|--|
| 250             | 55401          | 1" | <b>4</b> 1/4" | 3/4" | 3/8" | 75 lbs   | Spring Balancers up to 75 lbs, Spring Balancers<br>with side loading, Torque Tubes, Festooning<br>multiple conductors simultaneously |

#### Heavy Tool Trolley

The heavy tool trolley features six wheels with the center axis set higher to prevent binding. With a higher capacity and longer body profile, this trolley fits 500 track series, and can be used for suspending tools or festooning.



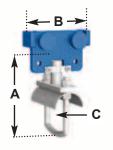
An optional swivel attachment (pictured below) can be added to the bottom edge to support festooning of electrical, air, or vacuum tube.

| Track<br>Series | Part<br>Number | Α                  | В                  | С                   | Capacity | Ideal Applications:  |
|-----------------|----------------|--------------------|--------------------|---------------------|----------|--|
| 500             | 74100          | 3 <sup>1</sup> /4" | 3 <sup>7</sup> /8" | 23/ <sub>32</sub> " | 150 lbs  | Spring balancers up to 150 lbs, Spring Balancers with side loading,<br>Torque Tubes, Festooning multiple conductors simultaneously |

For higher capacities, contact your Gorbel<sup>®</sup>representative.

#### **Festoon Trolley**

This trolley is intended for festooning of electrical cable and can be modified for use with vacuum and air hose.

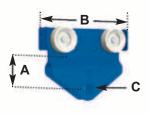


The swivel assembly at the bottom allows you to clamp flat cable below the trolley while allowing easy rotation. Accessory straps attach easily to adapt for festooning of vacuum hose below the trolley.

| Track<br>Series | Part<br>Number | Α                                | В                  | С                     | Capacity | Ideal Applications:                               |  |
|-----------------|----------------|----------------------------------|--------------------|-----------------------|----------|---|--|
| 250             | 0535           | 3 <sup>1</sup> / <sub>32</sub> " | 3 <sup>3</sup> /8" | <sup>7</sup> /8" x 1" | 15 lbs   | Festooning air or electric conductor 1/2" or less |  |
| 500             | 0535           | 3 <sup>1</sup> / <sub>32</sub> " | 3 <sup>3</sup> /8" | <sup>7</sup> /8" x 1" | 15 lbs   |   |  |

#### Additional trolleys by Gorbel

#### **Hoist Trolley**



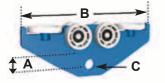
The versatile hoist trolley is available for all Gorbel<sup>®</sup> track series, and is designed for when a vertical load needs to be applied without side loading. The ears on both ends of the body allow for optional accessories, such as bumpers, track brushes, or tractor drives, to be mounted directly to the trolley.

| Track<br>Series | Part<br>Number | Α                  | В                  | С    | Capacity | Ideal Applications:                    |
|-----------------|----------------|--------------------|--------------------|------|----------|--|
| 250             | 0251           | 1 <sup>3</sup> /4" | 5"                 | 1/2" | 250 lbs  | Dual Trolley Load Bars, Air Balancers, |
| 500             | 0501           | 3"                 | 8 <sup>3</sup> /8" | 3/4" | 500 lbs  | Torque Tubes, Air or Electric Hoists,  |

For higher capacities, contact your Gorbel<sup>®</sup> representative.

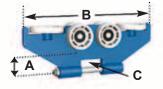
#### **Torque Trolley**

The horizontal wheel design of the torque trolley gives it great side loading capabilities and rigidity. There are three trolley options for connecting your tools; the solid plate trolley with one hole, the open hinge trolley, and the optional full clevis assembly. Each option offers flexibility for your application.



| Track<br>Series | Part<br>Number | Α                  | В                   | С  | Capacity | Ideal Applications: |  |
|-----------------|----------------|--------------------|---------------------|----|----------|---------------------|--|
| 250             | 0270.11        | <b>1</b> 1/2"      | 9 <sup>3</sup> /8"  | 1" | 250 lbs  | Torque Tubes        |  |
| 500             | 0570.11        | 1 <sup>5</sup> /8" | 11 <sup>3</sup> /4" | 1" | 500 lbs  |                     |  |

For higher capacities, contact your Gorbel<sup>®</sup> representative.



| Track<br>Series | Part<br>Number | Α      | В                   | С                                    | Capacity | Ideal Applications:                  |
|-----------------|----------------|--------|---------------------|--------------------------------------|----------|--------------------------------------|
| 500             | 0580.10        | 2 1/4" | 11 <sup>3</sup> /4" | 1" x 2 <sup>1</sup> / <sub>2</sub> " | 500 lbs  | Dual Trolley Load Bars, Torque Tubes |

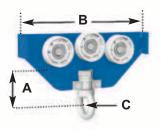
For higher capacities, contact your Gorbel<sup>®</sup> representative.



| Tracl<br>Serie |          | Α                          | С    | Capacity | Ideal Applications:                  |
|----------------|----------|----------------------------|------|----------|--------------------------------------|
| 500            | S1090-10 | <b>4</b> <sup>7</sup> /16" | 5/8" | 500 lbs  | Dual Trolley Load Bars, Torque Tubes |

\*Clevis assembly shown with trolley 0580.10

#### **Swivel Trolley**



The swivel trolley features a high strength eyebolt with 360-degree rotation for full maneuverability in high capacity applications. The six wheel design prevents binding when side loads are applied. Ears on the ends of the trolley body allow for bumpers and other accessories to be added to the trolley. This is a great trolley to use when a higher capacity is needed for hanging special tools such as drills, drivers, and welders.

| Track<br>Series | Part<br>Number | Α                                 | В   | С                         | Capacity | Ideal For:  |
|-----------------|----------------|-----------------------------------|-----|---------------------------|----------|---|
| 500             | 0590           | 3 <sup>13</sup> / <sub>16</sub> " | 11" | <b>1</b> <sup>1</sup> /2" | 500 lbs  | Spring Balancers, Tools Without Air or<br>Electric Cables |

For higher capacities, contact your Gorbel<sup>®</sup> representative.

## **Step 3: Choose Your Accessories**

#### Adaptable Cable Management

Whether you have a welder suspended in your work cell or an assembly line with several tools, cable management is a matter of safety and efficiency. Keeping the cables and wires necessary for a work process out of the operator's way without jeopardizing productivity can be a challenge.

Gorbel's tool solution saddles were designed for applications that require festooning of cables and hoses. The arched saddle with the option for angled mounting creates

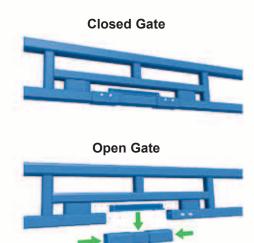
a very clean, efficient way to manage your cables and wires.

Saddles are available in 3 and 6 inch diameters for various sized festooning with a 75 pound capacity per saddle. The universal mounting plate allows for the saddle to hang in line with the track, or at a 30-degree angle to assist the cable in self-coiling, taking up less track space and allowing more room for end approach.

#### For Tool Track Monorails

#### **Maintenance Gates**

For long monorail systems with multiple tools suspended, keeping proper maintenance of tools is simple with Gorbel's maintenance gates. Installed within the length of the monorail, tools and trolleys may be taken down without taking every suspended tool down from the track to get to the broken device.



A section of track is lowered with the removal of a few bolts, allowing access to an individual tool or trolley.

#### For Tool Solution Jib Cranes

#### Rotation Lock

The rotation lock for the TSJ50 tool jib crane allows you to securely lock the boom of the crane in position for storage. The lock features a spring loaded bit that fits into any of 9 positions within the 180-degree rotation when engaged.

#### **Friction Brake**

Available as an option for both the TSJ50 and TSJ150 is an adjustable friction brake that allows you to



increase drag on the boom's rotation to eliminate over swing in high cycle applications.

#### **Portable Base**

Rather than bolting free standing jib cranes to the floor, our optional portable base provides a stable base that can be moved easily within your facility.

The square steel plate allows you to secure and level your jib with mast mounting hardware and leveling feet. It also features fork pockets for easy relocation by fork truck or pallet jack.



ACCESSORIES

SUPPORT



## **Solution Stories**

#### Assembly Line

This assembly line application features a slow moving floor conveyor. At each station, workers must quickly attach parts to the assembly using nut runners and torque wrenches. About 25 tools hang in an area about 75 feet long.



A monorail tool track with trussed steel for longer spans was a perfect fit for this long, linear application. A custom paint color was also applied to match existing handling equipment.

Wheel plate trolleys, with a single mounting hole for spring balancers, were chosen to support a higher load capacity.

With a high number of tools on the assembly line, removing them for repair is much easier with this maintenance gate.

#### **Order Fulfillment**

In this order fulfillment station an operator selects boxes from various pallets to create a custom order pallet. Boxes vary slightly in weight, though all are below 50 pounds.



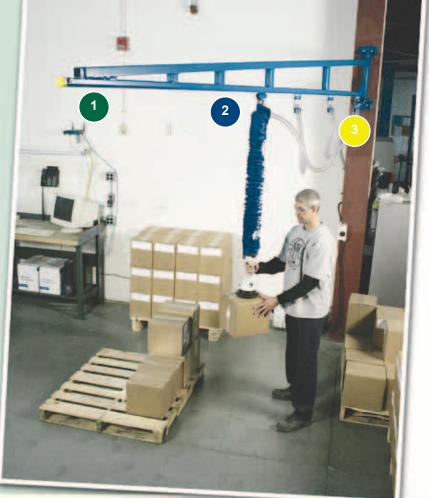
A 150 pound, column-mounted Tool Solution Jib crane was selected to support a light duty vacuum lifter in the the semi-circular work space.



The handle of the vacuum lifter is supported by a standard hoist trolley, while tool trolleys are used for festooning.

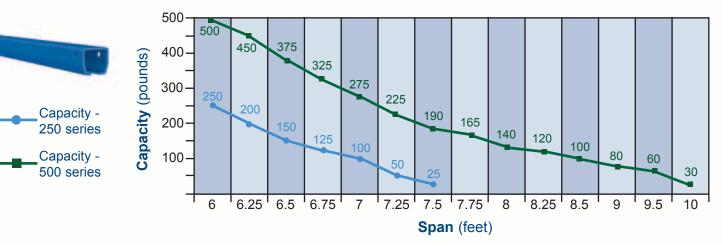
To help the vacuum hose stack neatly, this application featured 3" trolley saddles mounted at a 30-degree angle.

"Using this wall mounted jib with the vacuum lifter has been great. I pick from pallets all day, and the jib is so light it feels like there's nothing there."



## Sizing & Dimensional Information

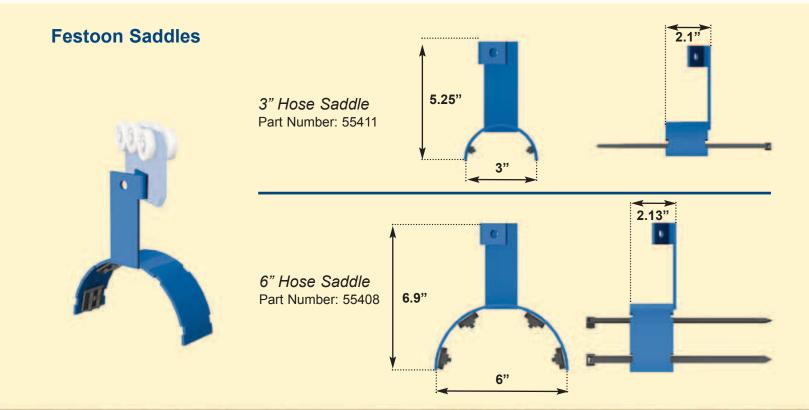
#### Monorail Sample Sizing - Plain Track



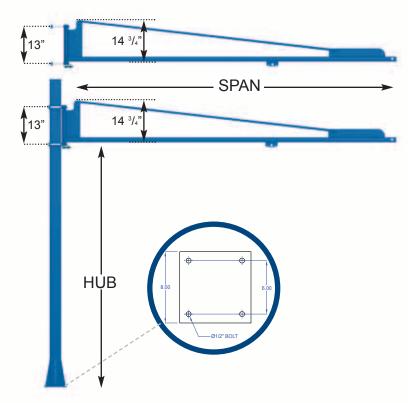
#### Monorail Maximum Spans - Trussed Track



| Track Style      | GLMS | GLMSL | GLMSLX |
|------------------|------|-------|--------|
| 250 lb. Capacity | 20'  | 25'   |        |
| 500 lb. Capacity | 20'  | 25'   | 30'    |



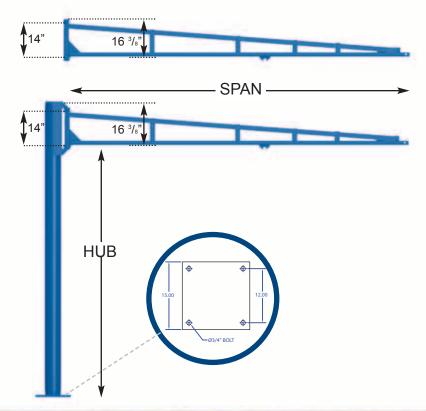
#### **TSJ50 Tool Solution Jib Crane**



| Span | Model Number   |
|------|----------------|
| 4'   | TSJ50-WM-50-4  |
| 6'   | TSJ50-WM-50-6  |
| 8'   | TSJ50-WM-50-8  |
| 10'  | TSJ50-WM-50-10 |

| HUB | Span                  | Model Number  |
|-----|-----------------------|---|
| 8'  | 4'<br>6'<br>8'<br>10' | TSJ50-FS-50-8-4<br>TSJ50-FS-50-8-6<br>TSJ50-FS-50-8-8<br>TSJ50-FS-50-8-10     |
| 10' | 4'<br>6'<br>8'<br>10' | TSJ50-FS-50-10-4<br>TSJ50-FS-50-10-6<br>TSJ50-FS-50-10-8<br>TSJ50-FS-50-10-10 |

#### **TSJ150 Tool Solution Jib Crane**



| Span | Model Number     |
|------|------------------|
| 4'   | TSJ150-WM-150-4  |
| 6'   | TSJ510-WM-150-6  |
| 8'   | TSJ150-WM-150-8  |
| 10'  | TSJ150-WM-150-10 |
| 12'  | TSJ150-WM-150-12 |

| HUB | Span                         | Model Number   |
|-----|------------------------------|--|
| 8'  | 4'<br>6'<br>8'<br>10'<br>12' | TSJ150-FS-150-8-4<br>TSJ150-FS-150-8-6<br>TSJ150-FS-150-8-8<br>TSJ150-FS-150-8-10<br>TSJ150-FS-150-8-12      |
| 10' | 4'<br>6'<br>8'<br>10'<br>12' | TSJ150-FS-150-10-4<br>TSJ150-FS-150-10-6<br>TSJ150-FS-150-10-8<br>TSJ150-FS-150-10-10<br>TSJ150-FS-150-10-12 |

#### **OVERVIEW BROCHURE**



#### FOR MORE INFORMATION

Your authorized Gorbel® dealer can give you more information on what makes Gorbel's Ergonomic Work Station Cranes and other material handling products "A Class Above."

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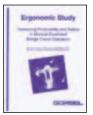
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#### **BRIDGE CRANES**







ERGONOMIC STUDY

#### **ERGONOMIC LIFTING**



## Ergonomic Liting Study:

JIB CRANES

#### -----



SPECIALTY PRODUCTS

FALL ARREST

## 

SEISMIC ZONE IV



TELESCOPING



TRACTOR DRIVES



GANTRY CRANES

Andreak / Transfer

INTERLOCK/TRANSFER





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