


# LINTECH®

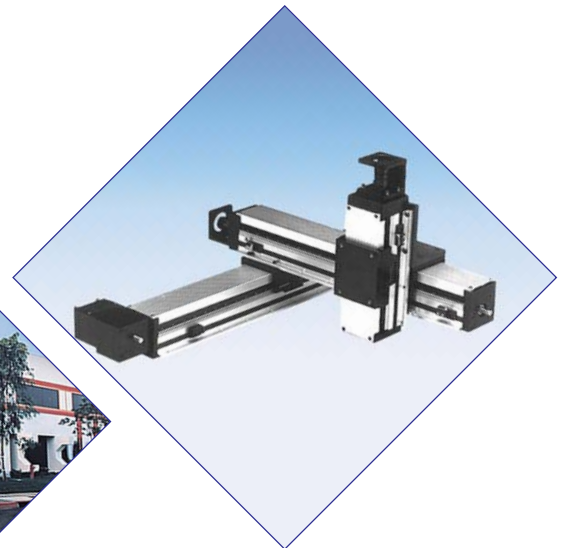
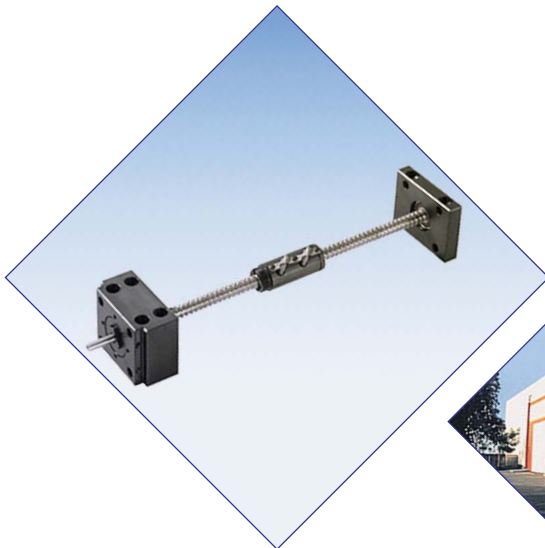
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**Manufacturer of Standard & Custom Positioning Components & Systems**



## Positioning Components

- Shaft Assemblies
- Single Rail
- *TWIN RAIL*®
- Carriage Assemblies
- Linear Bearings
- Ball Screw Assemblies
- Custom Assemblies

*For over 35 years LINTECH has designed, engineered, and manufactured positioning components and systems for use in a wide range of applications. With our commitment to service, technical support, in-house manufacturing, and quick deliveries, LINTECH can provide you with a high quality product for your present, or next automation task.*

## Positioning Systems

- Linear & Rotary
- Single Axis
- Multiple Axis
- Screw Driven
- Belt Driven
- Standard Tables
- Custom Tables

## Custom Systems

*LINTECH* has been manufacturing custom positioning systems for use in a wide variety of applications for over 30 years. See pages A-4 to A-7. Some of these custom systems have been simple modifications of carriage assemblies, special base mounting hole patterns, nonstandard travel lengths, specific motor mount brackets, or different accessories such as couplings, encoders, or waycovers.

Other more involved custom systems have been:

- \* 30 x 30 x 30 foot X-Y-Z inspection stations
- \* 60 foot part placement machines
- \* 5,000 pound load capacity assembly stations.
- \* vacuum or wash down rated
- \* 9 axis special assembly machines

All of these custom systems were successful by following a simple approach.

Review, fill out, and provide all the information on the application guide on page A-45. Providing us with all, or as much detail up front, can lead to the successful completion of a custom system. Then submit this information to *LINTECH* and we will review the data, to see if it is within our capabilities to manufacture.

Some of the more important information to provide us follows:

**Budget** will become extremely important in our evaluation process with you. With our many years of experience building custom systems we will be able to determine if the required performance you are seeking is possible within your budget.

**Accuracy** or **Repeatability** will make a big difference in the cost of a custom system. The accuracy of 0.0002 inches over 48 inches of travel will cost a whole lot more than a repeatability of 0.0002 inches over the same 48 inches of travel.

**Load Weight** will have an impact on the linear bearing, drive assembly, and structure that we would design for the custom system. Providing a realistic estimated of load weight (along with any other potential external forces), without too much of a safety factor will help select the proper custom positioning components. We will use the proper safety factors based on your application details.

**Required System Life** will also affect the selection of the proper components for the system.

**Systems Speeds** may affect the cost of a custom system if larger, more expensive components are required to meet the application needs. Providing us with a realistic target speed helps create a successful custom system.

**Application Sketch** (or diagram) can help minimize the time for us to respond to your request.

**Other Details** such as waycovers, motor mounts, or carriage size may not seem like key items to mention. However, providing us with as much information on the application requirements will lead to the successful completion of a custom system.

# Design Considerations

# Application Guide

A

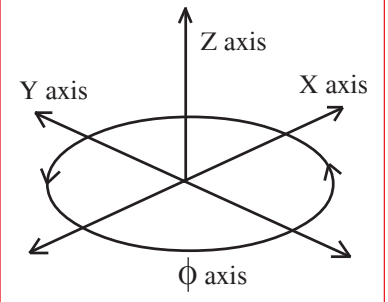
Name \_\_\_\_\_ Date \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone (\_\_\_\_) \_\_\_\_\_ Fax (\_\_\_\_) \_\_\_\_\_



**Positioning System Specifications** Budget (per system) \_\_\_\_\_

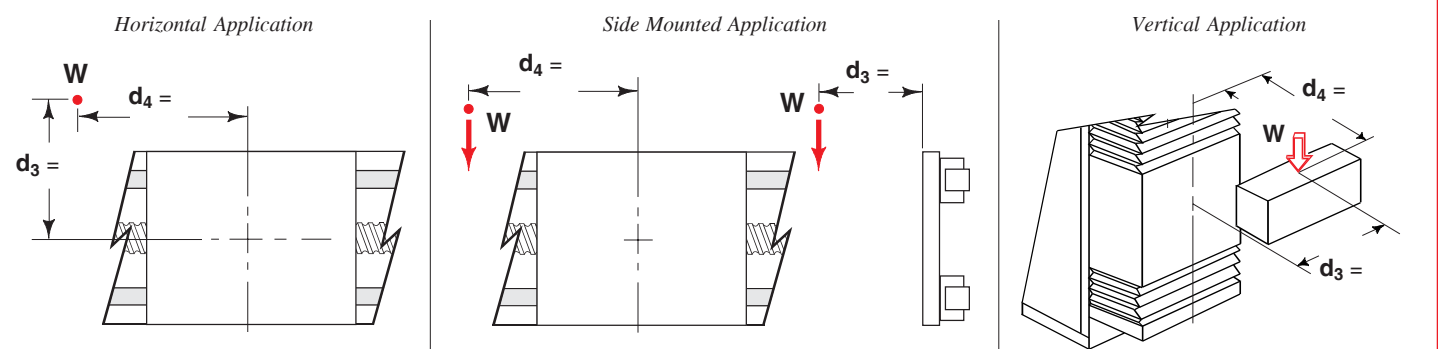
Axis	X	Y	Z	Φ	Axis	X	Y	Z	Φ
<b>Carriage Size</b> length x width (in or mm)					<b>Maximum Accel</b> (in/sec <sup>2</sup> or m/sec <sup>2</sup> )				
<b>Travel Length</b> (in or mm)					<b>Duty Cycle</b> (%)				
<b>Load Weight</b> (lbs or kg)					<b>Table Life</b> (millions of inches or Km)				
<b>Repeatability</b> (in or mm)					<b>Motor Frame Size</b> (NEMA 23, 34, 42, other)				
<b>Accuracy</b> (Overall - in or mm)					<b>Limit Switch Type</b> (mech, reed, hall, prox)				
<b>Maximum Speed</b> (in/sec or mm/sec)					<b>Waycovers</b> (Yes or No)				
<b>Most Difficult Move Profile</b>	<b>Distance</b> (in or mm)				<b>Encoder</b> (linear, rotary, & resolution)				
	<b>Time</b> (sec)					<b>Power-off Brake</b> (Yes or No)			

**Special Requirements**

High Temperature     Clean Room     Maximum Smoothness     Motor Wrap  
 Vacuum Rated     High Moisture     Low Audible Noise     Other (explain below)

**Moment Loads**

Load Center of Gravity Distance from Carriage Center (in or mm)



Load Weight (W) \_\_\_\_\_ (lbs or kg)

**Application Details** (please describe and attach separate sketch if required)

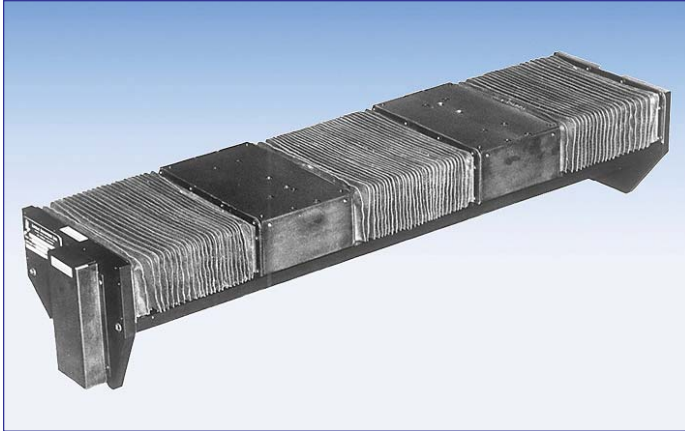
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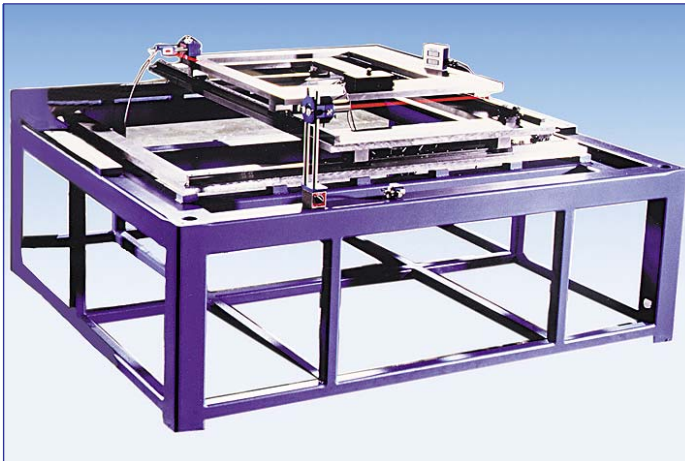
## Custom Positioning Systems

Sometimes a standard positioning system is not the right choice for a particular motion control application. Nor is it possible, or practical, to have the system built in house by your own design team. Let *LINTECH* take a look at your special requirements. *LINTECH* has been designing and building custom positioning systems for over 30 years. We can use our many years of experience to help you select the right approach to a unique motion control problem. Fill out our application guide on page A-45 and fax it to us. We stand ready to assist you.



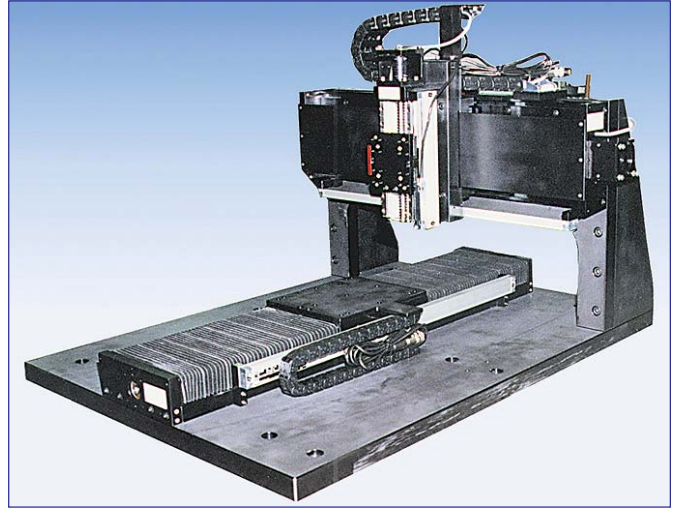
Two carriages (individually driven by two motors) on the same base for automated part assembly process

X-Y-Z automated assembly system with aluminum support structure



X-Y open frame inspection station with steel support structure

X-Z vision inspection station mounted on steel sub plate

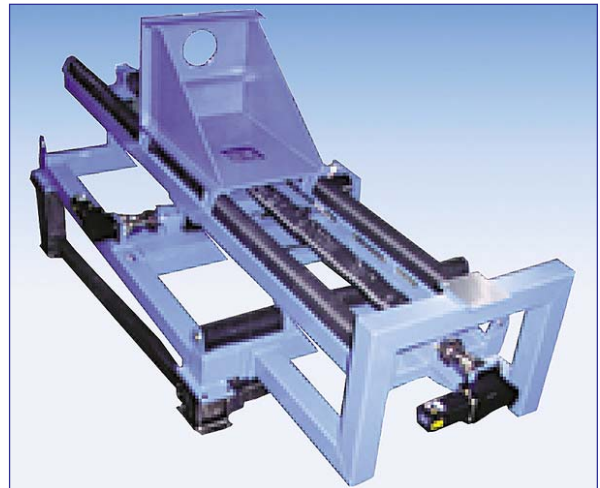


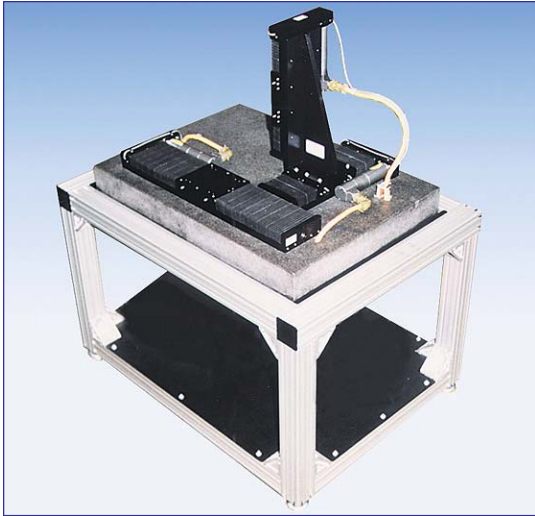
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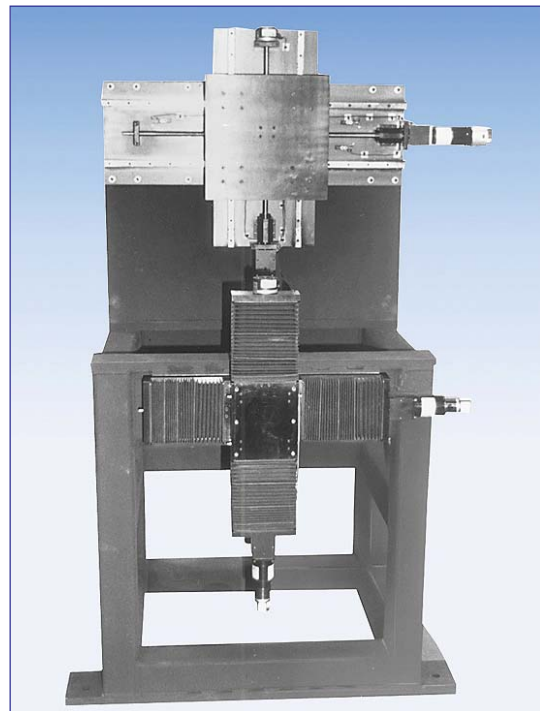
Belt driven long travel X-Y-Z inspection station with aluminum support structure

X-Y machine assembly process with steel support structure

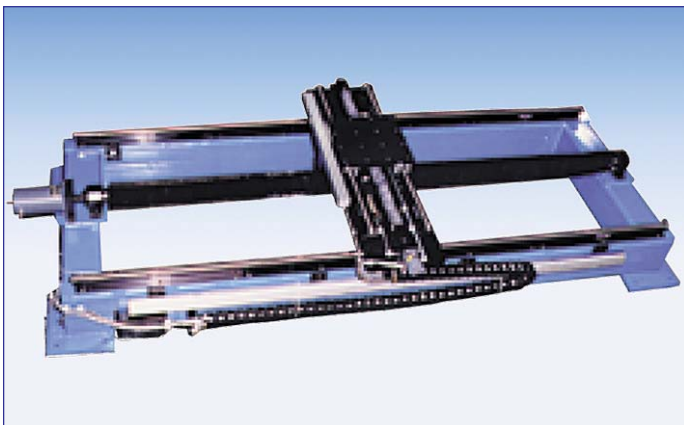




X-Y-Z high accuracy  
chemical coating process  
mounted on granite & aluminum support structure

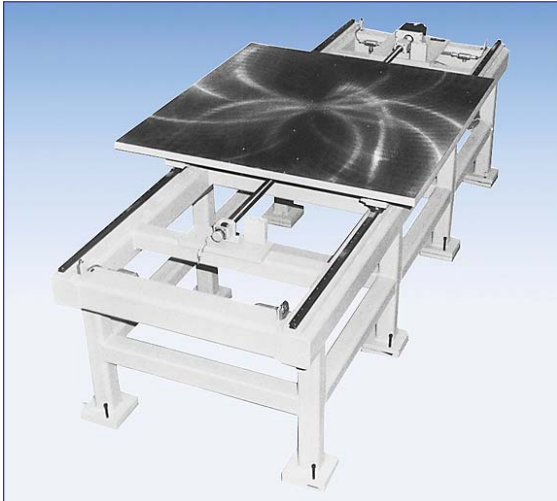
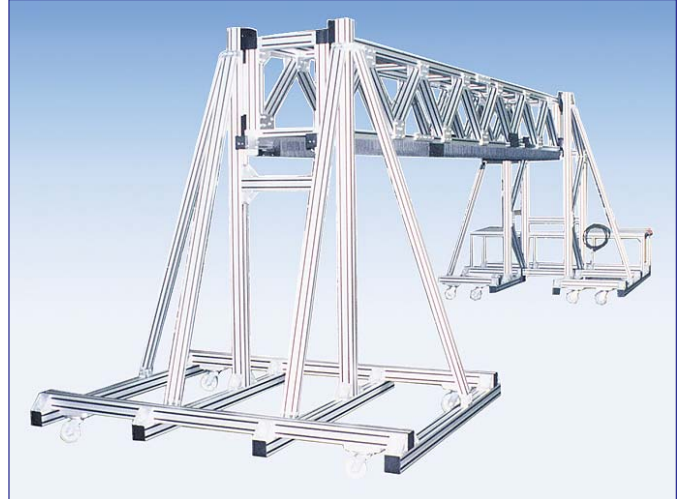


Two individual  
X-Y axes for laser cutting  
process supported by steel structure

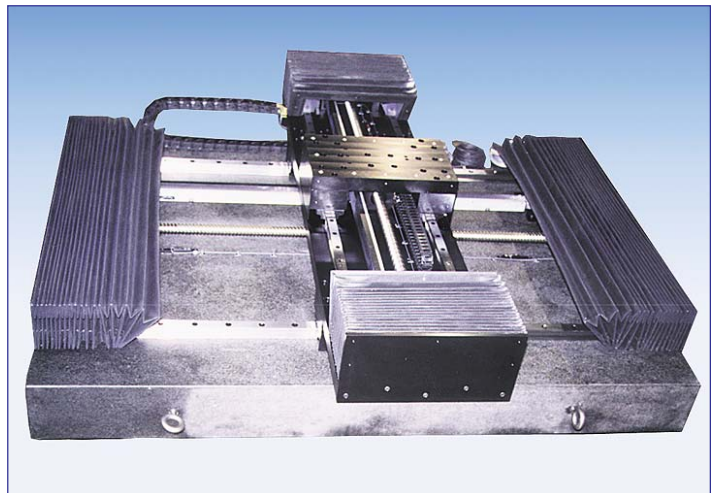


X-Y axis  
water jet cutting process  
with open frame steel support structure

X-Y belt driven  
infrared inspection station  
supported by movable aluminum structure



X axis machining station  
with steel support structure



X-Y laser marking assembly  
with granite surface support structure