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#### Genesis Systems Group

#### **CONTACT LIST**

8900 Harrison Street, Davenport, IA 52806 voice: 563.445.5600 • fax: 563.445.5699 www.genesis-systems.com

#### PLATFORMATION DEFINITIONS:

#### Positioner:

Positioner only

#### Platform:

Complete system less robot, weld gear and system controls. Includes safety fence and control/weld pallet.

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## **CRZ-FT Platform**



Robot/weld gear components and other options shown are not included in base platform.

**CRZ-FT Platform** 

#### **CRZ-FT PLATFORM FEATURES**

The CRZ-FT is ideal for small and medium parts that can be welded with no positioning or manual progressive processing. Unlike a turntable it eliminates downtime during fixture changeover and provides easier and safer robot programming. Connect air and power, and you're ready for operation.

#### **BENEFITS**

- · Handles multiple part numbers simultaneously
- No down time during fixture changeover able to run opposing station
- Proven cost effective solution excellent ROI
- · Maximized throughput and robot utilization
- · Material flow optimization
- · Customizable workcell configuration
- · Quick workcell relocation minimal installation requirements
- · Industry leading payload
- · Design reduces required floor space
- Unitized base easily transported

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#### **CRZ-FT Platform**

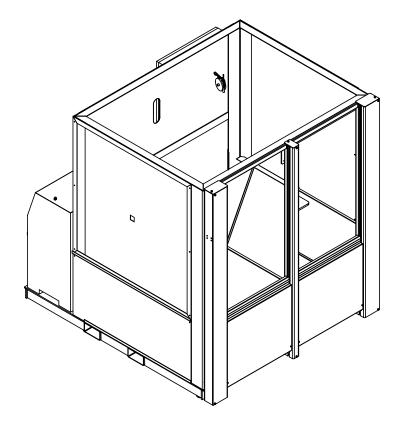
#### **PLATFORM SPECS**

#### Features:

Table Height
Table Dimensions
Weight Capacity1,000 lbs per side
Footprint

#### **PLATFORM INCLUDES**

- Positioner/system base, LifeGUARD Safety Door, safety fence and control pallet
- Workcell documentation searchable CD and hardcopy





**CRZ-FT Platform** 

#### STANDARD PLATFORM OPTIONS

• Torch Cleaner

Pneumatic nozzle cleaner with mister

• Genesis Alignment Station

Robot wrist and torch alignment station

Overhead Gantry

Wire drive mount and cable swing arm

• Genesis Robot or PLC Controls

See Controls section for description

- Integration Per Robot
- Versa Tool Control
- Genesis Training

4.5 days hands-on training at Genesis/per student

Genesis Installation

2 days on-site set-up and support

• Pneumatic 180-flip device

(2) 26" tool length, 40" tool swing diameter, 500 lbs.

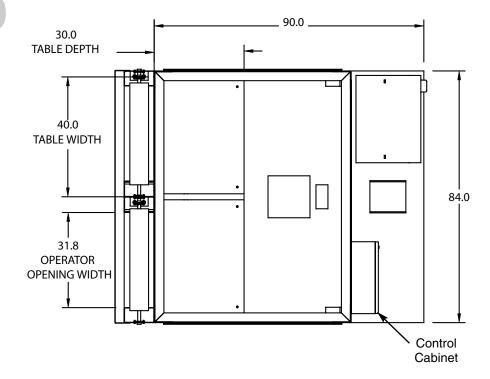
(1) 40" or 60" tool length, 40' tool swing diameter, 500 lbs.

· Servo Positioner

(2) 26" tool length, 40" tool swing diameter, 1,000 lbs.

(1) 40" or 60" tool length, 40" tool swing diameter, 1,000 lbs.

- Power Track Cable Carrier System
- Smoke Hood
- RoboVent Smoke Extraction System (Install separate)



## **CRZ-ST Platform**



other options shown are not included in base platform.



**CRZ-ST Platform** 

#### **CRZ-ST PLATFORM FEATURES**

CRZ-ST was designed as a low cost, high value robotic welding solution. This design also isolates the robot from the operator for a safe work environment.

#### **BENEFITS**

- Handles medium sized parts with medium to high part volumes
- · Positioner exchange time eliminated
- Compact design requires minimal floor space
- · Quick workcell relocation
- Proven cost effective solution excellent ROI
- · Maximized throughput and robot utilization
- Material flow optimization
- · Customizable workcell configuration

## Features

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**CRZ-ST Platform** 

#### **CRZ-ST PLATFORM SPECS**

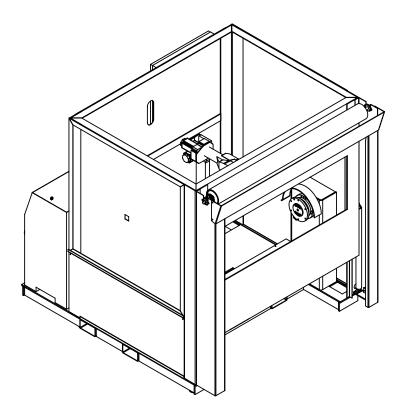
Features:

Weight Capacity550 kg per station
Tool length
Tool Swing Diameter1 meter

NOTE: Requires robot auxiliary axis package

#### **BASE PLATFORM INCLUDES**

- Positioner/system base control pallet, safety fence with LifeGUARD Safety
- Workcell documentation Searchable CD and hardcopy
- Positioner Axes gearbox, mounting plate, tail-stock, roto-grounds and pillow-block bearings (alignment included)



**CRZ-ST Platform** 

#### **STANDARD PLATFORM OPTIONS**

- Torch Cleaner
  - Pneumatic nozzle cleaner with mister
- Genesis Alignment Station

Robot wrist and torch alignment station

Overhead Gantry

Wire drive mount and cable swing arm

• Genesis Robot or PLC Controls

See Controls section for description

- Integration Per Robot
- Versa Tool Control
- · Genesis Training

4.5 days hands-on training at Genesis/per student

Genesis Installation

2 days on-site set-up and support

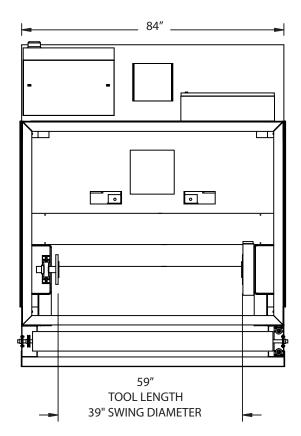
• Pneumatic 180-flip device

2 meter tool length, 1 meter tool swing diameter, 250 kg weight capacity

Servo Positioner

2 meter tool length, 1 meter tool swing diameter, 550 kg weight capacity

- Power Track Cable Carrier System
- Smoke Hood
- RoboVent Smoke Extraction System (Install separate)



## **CRZ-FW Platform**



**CRZ-FW Platform** 

Robot/weld gear components and other options shown are not included in base platform.

#### **CRZ-FW PLATFORM FEATURES**

The CRZ-FW is a flexible three-axis "ferris wheel" style robotic welding and cutting workcell. The workcell is designed to handle medium to large or multiple high-volume production parts. This design provides a space savings of up to 30% in floor space over traditional ferris wheel designs. An exclusive patent provides the fastest exchange time—increasing production efficiency, as well as comfortable load/unload and robot programming height. System controls for the CRZ-FW can accommodate the most sophisticated fixture designs and be equipped with push button or PanelView operator interfaces.

#### **BENEFITS**

- Handles high-volume production
- Patented design provides a large swing diameter which accommodate larger parts
- · Comfortable load/unload and robot programming height
- Easily maintained pneumatic exchange axis
- Proven cost effective solution excellent ROI
- · Maximized throughput and robot utilization
- Industry leading payload, tooling length, swing diameter and exchange time
- · Material flow optimization
- Minimal operator load/unload distance with Rollup Safety Curtain
- Customizable workcell configuration

Robot/weld gear components and other options shown are not included in base platform.

#### PLATFORM SPECS

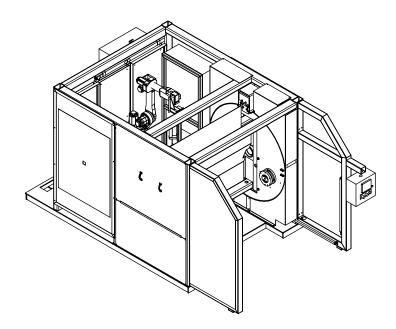
#### Features:

Tooling Length 1.5 meter, 2 meter
Swing Diameter1 meter
Weight Capacity550 kg per side
Index Time

NOTE: Requires robot auxiliary axis package

#### **PLATFORM INCLUDES**

- Positioner/system base Genesis patented pneumatic ferris wheel platform and safety fence with interlocking gate
- Controls Genesis Plug-n-Play Controls for positioner only
- Positioner Axes gearboxes, mounting plates, tail-stock shafts, roto-grounds and pillow-block bearings (alignment included)
- Workcell documentation searchable CD and hardcopy





**CRZ-FW Platform** 

Robot/weld gear components and other options shown are not included in base platform.

#### STANDARD PLATFORM OPTIONS

Torch Cleaner

Pneumatic nozzle cleaner with mister

Genesis Alignment Station

Robot wrist and torch alignment station

Overhead Gantry

Wire drive mount and cable swing arm

• Genesis Robot or PLC Controls

See Controls section for description

- Rollup Safety Curtain
- Control Pallet

Steel control pallet for robot controller, system controls and welding power supply

- Robot Riser
- Power Track Cable Carrier System
- Multiple Robot Configuration
- Integration Per Robot
- Versa Tool Control
- Genesis Training

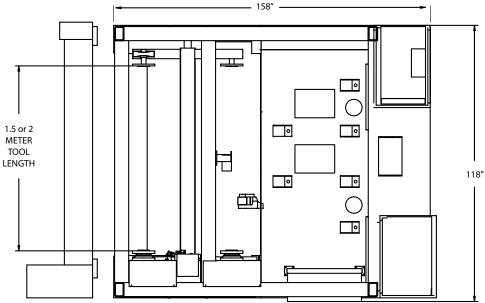
4.5 days hands-on training at Genesis/per student

Genesis Installation

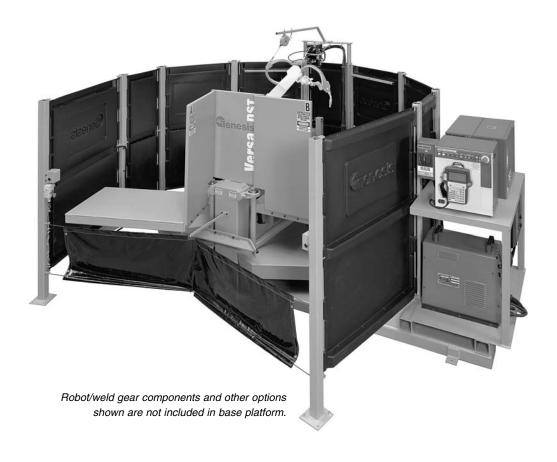
2 days on-site set-up and support

- Smoke Hood
- RoboVent Smoke Extraction System (Install separate)





## Versa DST Platform





#### **Versa DST Platform**

Robot/weld gear components and other options shown are not included in base platform.

#### **VERSA DST PLATFORM FEATURES**

The Versa DST was designed as a low cost, high value robotic welding solution. The patented design provides benefits not currently available with other dual table designs. The system's tables swing into position, placing the workspace directly in front of the robot, making it possible to better utilize the robot's work envelope. This design also isolates the robot from the operator for a safe work environment.

#### **BENEFITS**

- Handles medium sized parts with medium to high part volumes
- No downtime during fixture changeover able to run opposing station
- Positioner exchange time eliminated
- Compact design requires minimal floor space
- Easily maintained pneumatic exchange axis
- · Quick workcell relocation
- Proven cost effective solution excellent ROI
- · Maximized throughput and robot utilization
- · Material flow optimization
- Customizable workcell configuration

# Features &

#### **Versa DST Platform**

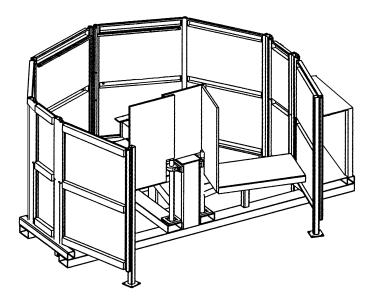
Robot/weld gear components and other options shown are not included in base platform.

#### **VERSA DST PLATFORM SPECS**

Features:

#### **BASE PLATFORM INCLUDES**

- Positioner/system base Genesis patent pneumatic swing table platform, control pallet, safety fence with gate interlock and life line for operator protection
- Workcell documentation Searchable CD and hardcopy



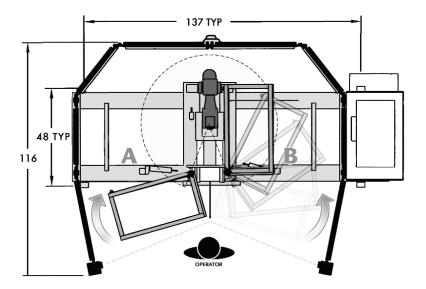


Robot/weld gear components and other options shown are not included in base platform.

#### **STANDARD PLATFORM OPTIONS**

- Torch Cleaner
- Pneumatic nozzle cleaner with mister
- · Genesis Alignment Station Robot wrist and torch alignment station
- Overhead Gantry Wire drive mount and cable swing arm
- Genesis Robot or PLC Controls See Controls section for description
- Integration Per Robot
- **Versa Tool Control**
- · Genesis Training 4.5 days hands-on training at Genesis/per student
- Genesis Installation 2 days on-site set-up and support
- Electric Rollup Safety Door
- LifeGUARD Safety Door
- Smoke Hood
- RoboVent Smoke Extraction System (Install separate)







Robot/weld gear components and other options shown are not included in base platform.

Benefits

#### **VERSA RCT PLATFORM FEATURES**

The Versa RCT is a flexible turntable robotic welding and cutting workcell designed to handle high-volume production parts that do not require repositioning during the weld cycle. The center mounted robot maximizes the utilization of the robot work envelope by matching the table geometry to that of the robot's envelope. This extremely fast and flexible turntable workcell meets the demands of today's manufacturing environments.

Programming the center-mounted robot is inherently safer and easier than the traditional turntable, due to the orientation of the programmer to the robot. The programmer faces the robot and workpiece, the natural programming orientation, and never stands in harms way between the robot and workpiece. This is unique to the center-mounted design.

#### **BENEFITS**

- Exclusive center-mounted robot design maximizes usable robot work envelope by placing the robot closer to the workpiece
- Provides easier and safer robot programming
- Center-mounted robot design reduces required floor space
- Easily maintained pneumatic exchange axis
- Cost effective solution excellent ROI
- · Industry leading payload and exchange time
- Unitized base easily transported
- · Customizable workcell configuration

# Features &

### **Platform**

Robot/weld gear components and other options shown are not included in base platform.

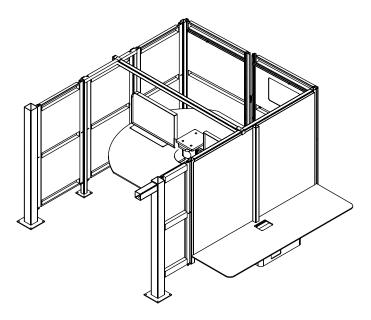
### **PLATFORM SPECS**

#### Features:

Weight Capacity	 750 lbs per side
Table Diameter	 
Table Height	 17"

#### **PLATFORM INCLUDES**

- Positioner/system base Genesis patented pneumatic turntable platform, control pallet, safety fence with gate interlock
- Workcell documentation searchable CD and hardcopy





Robot/weld gear components and other options shown are not included in base platform.

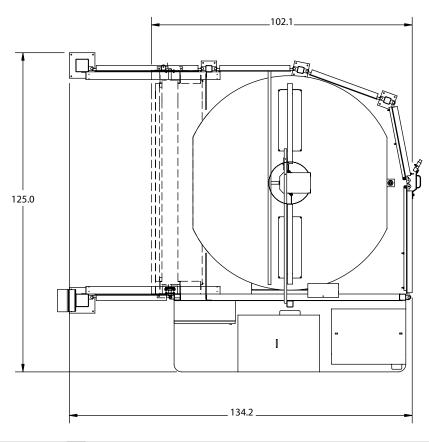
#### **STANDARD PLATFORM OPTIONS**

- Torch Cleaner
  - Pneumatic nozzle cleaner with mister
- Genesis Alignment Station
  Robot wrist and torch alignment station
- Overhead Gantry

Wire drive mount and cable swing arm

- Genesis Robot or PLC Controls See Controls section for description
- Electric Rollup Safety Door
- Table Riser
  - Raises entire table 13"
- Multiple Robot Configuration
- Integration Per Robot
- Genesis Plug-n-Play Controls for positioner only
- Versa Tool Control
- Genesis Training
   4.5 days hands-on training at Genesis/per student
- Genesis Installation 2 days on-site set-up and support
- Smoke Hood
- RoboVent Smoke Extraction System (Install separate)







Robot/weld gear components and other options shown are not included in base platform.

## Versa RCTL Platform

Robot/weld gear components and other options shown are not included in base platform.

#### **VERSA RCTL PLATFORM FEATURES**

The Versa RCTL is a flexible turntable robotic welding and cutting workcell designed to handle high-volume production parts that do not require repositioning during the weld cycle. The center mounted robot maximizes the utilization of the robot work envelope by matching the table geometry to that of the robot's envelope. This extremely fast and flexible turntable workcell meets the demands of today's manufacturing environments.

Programming the center-mounted robot is inherently safer and easier than the traditional turntable, due to the orientation of the programmer to the robot. The programmer faces the robot and workpiece, the natural programming orientation, and never stands in harms way between the robot and workpiece. This is unique to the center-mounted design.

#### **BENEFITS**

- Patented center mounted robot design maximizes usable robot work envelope by placing robot closer to work-piece and by aligning the table and robot envelope geometry
- · Handles high-volume, medium sized parts
- Provide operator with proper and safer robot programming position
- · Center-mounted robot design reduces required floor space
- Easily maintained pneumatic exchange axis
- Cost effective solution excellent ROI
- · Industry leading payload and exchange time
- · Unitized base easily transported
- Customizable workcell configuration

# Features &



Robot/weld gear components and other options shown are not included in base platform.

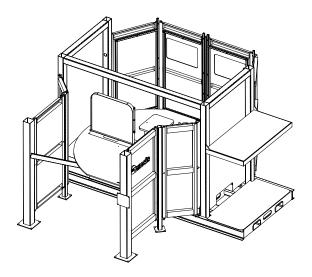
#### **PLATFORM SPECS**

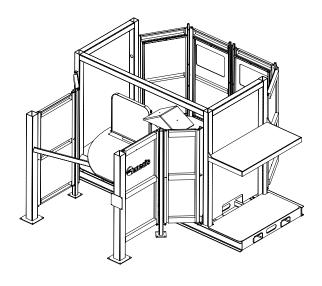
#### Features:

Weight Capacity	r side
Table Diameter	. 95"
Table Height	. 20"
Index Time	conds

#### **PLATFORM INCLUDES**

- Positioner/system base Genesis patented pneumatic turntable platform, control pallet, safety fence with gate interlock
- Workcell documentation searchable CD and hardcopy





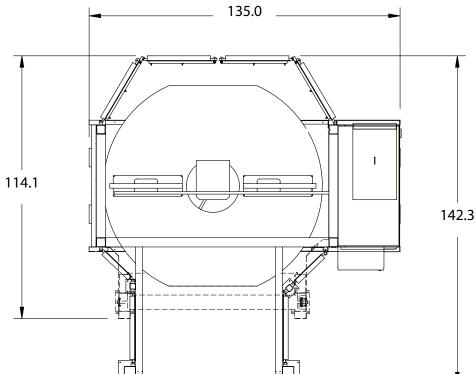


## Versa RCTL Platform

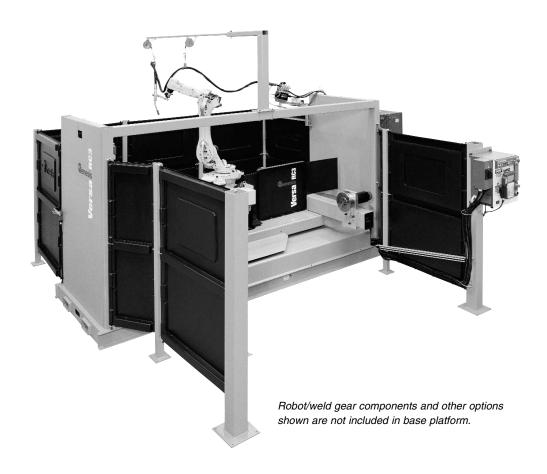
Robot/weld gear components and other options shown are not included in base platform.

#### STANDARD PLATFORM OPTIONS

- Torch Cleaner
   Pneumatic nozzle cleaner with mister
- Genesis Alignment Station
  Robot wrist and torch alignment station
- Overhead Gantry
   Wire drive mount and cable swing arm
- Genesis Robot or PLC Controls
   See Controls section for description
- Electric Rollup Safety Door
- Table Riser (requires robot riser)
   Raise entire table 13"
- Multiple Robot Configuration
- Integration Per Robot
- Jib Crane
- Plug-n-Play Controls for positioner only
- Versa Tool Control
- Genesis Training
   4.5 days hands-on training at Genesis/per student
- Genesis Installation
   2 days on-site set-up and support
- Smoke Hood
- · Heavy Base Option
- RoboVent Smoke Extraction System (Install separate)



# Standard 0



Robot/weld gear components and other options shown are not included in base platform.

## enefits

#### **VERSA RC3 PLATFORM FEATURES**

The patented, center-mounted robot design maximizes the utilization of the robot work envelope by placing the robot in the center of the turntable and closer to the workpiece. The result is a smaller, less expensive robot which accomplishes the same task as a larger robot on a traditional rear mounted turntable design.

The Versa RC3 is designed to handle high-volume production parts that require repositioning during the weld cycle. Programming the center-mounted robot is inherently safer and easier than the traditional turntable, due to the orientation of the programmer to the robot. The programmer faces the robot and workpiece, the natural programming orientation, and never stands in harms way between the robot and workpiece. This is unique to the center-mounted design.

#### **BENEFITS**

- Exclusive center-mounted robot design maximizes usable robot work envelope by placing robot closer to the workpiece
- Center-mounted robot design reduces required floor space
- · Provides easier and safer robot programming
- Easily maintained pneumatic exchange axis
- · Industry leading payload and exchange time
- Unitized base easily transported, improves repeatability
- Compact three axis robotic welding/cutting turntable requires minimal floor space
- Handles high-volume parts that require repositioning during weld cycle
- · Cost effective solution excellent ROI
- · Customizable workcell configuration

## Features &



Robot/weld gear components and other options shown are not included in base platform.

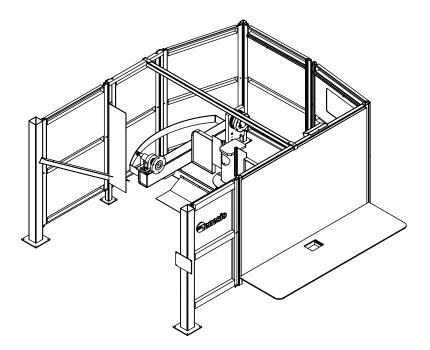
#### **PLATFORM SPECS**

#### Features:

Tooling Length
Tooling Swing Diameter
Weight Capacity
Index Time
NOTE: Requires robot auxiliary axis package

#### **PLATFORM INCLUDES**

- Positioner/system base Genesis patented pneumatic H-frame platform, control pallet, safety fence with gate interlock
- Positioner Axes gearboxes, mounting plates, tail-stock shafts, roto-grounds and pillow-block bearings (alignment included)
- Workcell documentation searchable CD and hardcopy

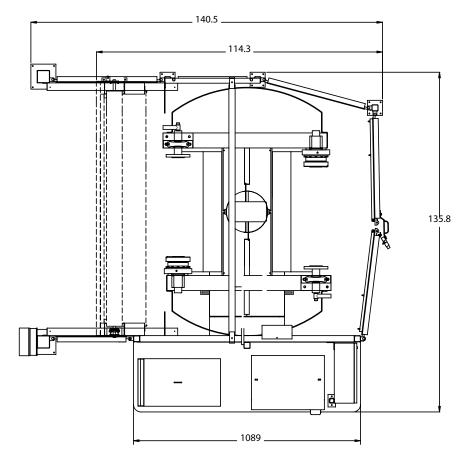




Robot/weld gear components and other options shown are not included in base platform.

#### **STANDARD PLATFORM OPTIONS**

- Torch Cleaner
   Pneumatic nozzle cleaner with mister
- Genesis Alignment Station
  Robot wrist and torch alignment station
- Overhead Gantry
   Wire drive mount and cable swing arm
- Genesis Robot or PLC Controls See Controls section for description
- Electric Rollup Safety Door
- Power Track Cable Carrier System
- Multiple Robot Configuration
- Integration Per Robot
- Plug-n-Play Controls for positioner only
- Versa Tool Control
- Genesis Training
  4.5 days hands-on training at Genesis/per student
- Genesis Installation
   2 days on-site set-up and support
- Smoke Hood
- RoboVent Smoke Extraction System (Install separate)



# Standard Op



Robot/weld gear components and other options shown are not included in base platform.

#### **VERSA RC3L PLATFORM FEATURES**

The patented, center-mounted robot design maximizes the utilization of the robot work envelope by placing the robot in the center of the turntable and closer to the workpiece. The result is a smaller, less expensive robot which accomplishes the same task as a larger robot on a traditional rear mounted turntable design.

The Versa RC3L is designed to handle high-volume production parts that require repositioning during the weld cycle. Programming the center-mounted robot is inherently safer and easier than the traditional turntable, due to the orientation of the programmer to the robot. The programmer faces the robot and workpiece, the natural programming orientation, and never stands in harms way between the robot and workpiece. This is unique to the center-mounted design.

#### **BENEFITS**

- Exclusive center-mounted robot design maximizes usable robot work envelope by placing robot closer to the workpiece
- Center-mounted robot design reduces required floor space
- Easily maintained pneumatic exchange axis
- · Provides easier and safer robot programming
- · Industry leading payload and exchange time
- Unitized base easily transported, improves repeatability
- Compact three axis robotic welding/cutting turntable requires minimal floor space
- Handles high-volume parts that require repositioning during weld cycle
- Cost effective solution excellent ROI
- Customizable workcell configuration

# Features &

Robot/weld gear components and other options

shown are not included in base platform.

#### **PLATFORM SPECS**

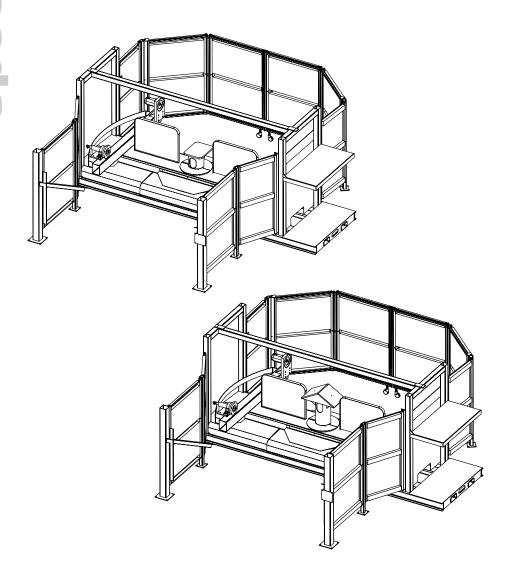
Features:

Tooling Length
Swing Diameter
Weight Capacity
Index Time4 seconds

NOTE: Requires robot auxiliary axis package

#### **PLATFORM INCLUDES**

- Positioner/system base Genesis patented pneumatic H-frame platform, 60", 72", 84", 96" tool length "H" frame, 1,000 lbs. capacity per side, control pallet, safety fence with gate interlock
- Positioner Axes gearboxes, mounting plates, tail-stock shafts, roto-grounds and pillow-block bearings (alignment included)
- Workcell documentation searchable CD and hardcopy

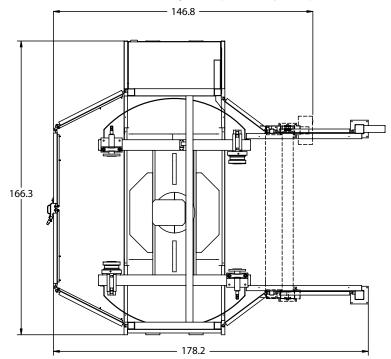




Robot/weld gear components and other options shown are not included in base platform.

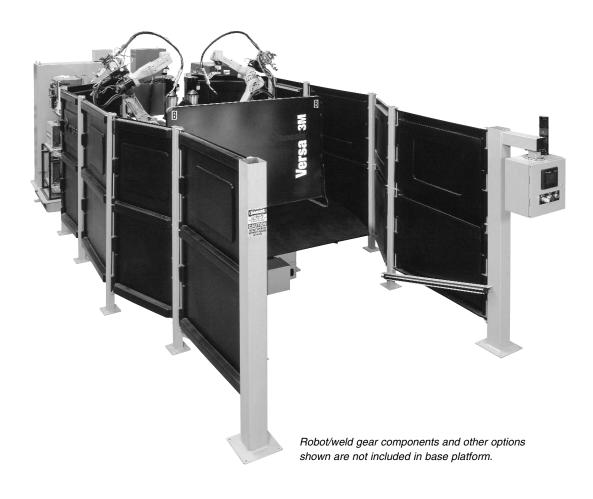
#### **STANDARD PLATFORM OPTIONS**

- Torch Cleaner
   Pneumatic nozzle cleaner with mister
- Genesis Alignment Station
  Robot wrist and torch alignment station
- Overhead Gantry
   Wire drive mount and cable swing arm
- Genesis Robot or PLC Controls See Controls section for description
- Electric Rollup Safety Door
- Power Track Cable Carrier System
- 72" "H" Frame Tool Length 1,200 lbs. capacity per side
- 84" "H" Frame Tool Length 1,000 lbs. capacity per side
- 96" "H" Frame Tool Length 1,000 lbs. capacity per side Requires optional plug and play controls, index, time is 5 seconds.
- Multiple Robot Configuration
- Integration Per Robot
- Jib Crane
- Plug-n-Play Controls for positioner only
- Versa Tool Control
- Genesis Training
  4.5 days hands-on training at Genesis/per student
- Genesis Installation
   2 days on-site set-up and support
- Smoke Hood
- Heavy Base Option
- RoboVent Smoke Extraction System (Install separate)



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## Versa 3M Positioner



#### **Versa 3M Positioner**

Robot/weld gear components and other options shown are not included in base platform.

#### **VERSA 3M POSITIONER FEATURES**

The Versa 3M Positioner is designed to handle high-volume production parts that do not require repositioning during the weld cycle. This extremely fast and flexible turntable workcell meets the demands of today's manufacturing environments.

#### **BENEFITS**

- Handles high-volume, medium-size parts
- Patented table design provides an extremely fast exchange time
- Easily maintained pneumatic exchange axis
- Proven cost effective solution excellent ROI
- · Maximized throughput and robot utilization
- · Material flow optimization
- Industry leading payload, table diameter and exchange time
- Customizable workcell configuration
- · Flexible load height

## Features

#### **Versa 3M Positioner**

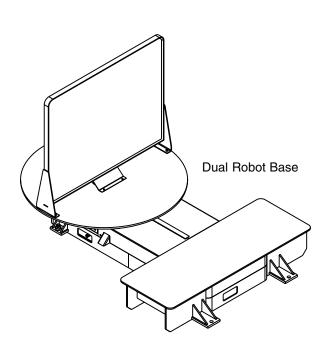
Robot/weld gear components and other options shown are not included in base platform.

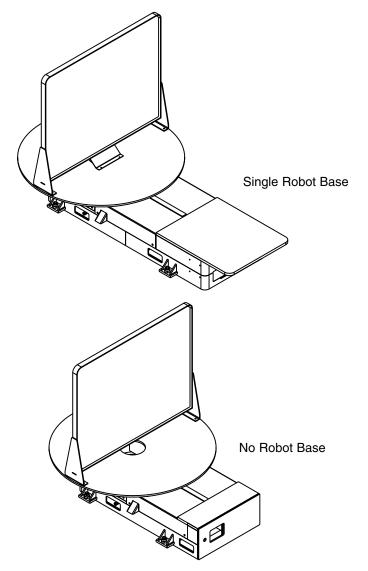
#### **POSITIONER SPECS**

Features: Weight Capacity	
	(71" table)
1,000 lbs per side	(58" table)
Table Diameter	58'
Table Height	17"
Index Time	.3 seconds

#### **POSITIONER INCLUDES**

- Positioner/system base Genesis patented pneumatic turntable positioner
- Workcell documentation searchable CD and hardcopy





#### **Versa 3M Positioner**

Robot/weld gear components and other options shown are not included in base platform.

#### **STANDARD POSITIONER OPTIONS**

Torch Cleaner

Pneumatic nozzle cleaner with mister

Genesis Alignment Station

Robot wrist and torch alignment station

Overhead Gantry

Wire drive mount and cable swing arm

• Genesis Robot or PLC Controls

See Controls section for description

- Electric Rollup Safety Door
- Control Pallet

4' x 8' steel control pallet for robot controller, system controls and welding power supply

· Safety Fencing for

58" table positioner "U" shaped fencing for operator safety – includes two gates with safety switches

71" table positioner "U" shaped fencing for operator safety – includes two gates with safety switches

Table Riser (may require robot riser)

Raise entire table level 13"

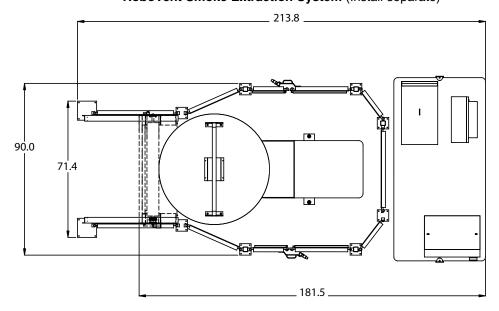
- 71" Diameter Table 750 lbs. capacity per side
- Multiple Robot Configuration
- Integration Per Robot
- Plug-n-Play Controls for positioner only
- Versa Tool Control
- · Genesis Training

4.5 days hands-on training at Genesis/per student

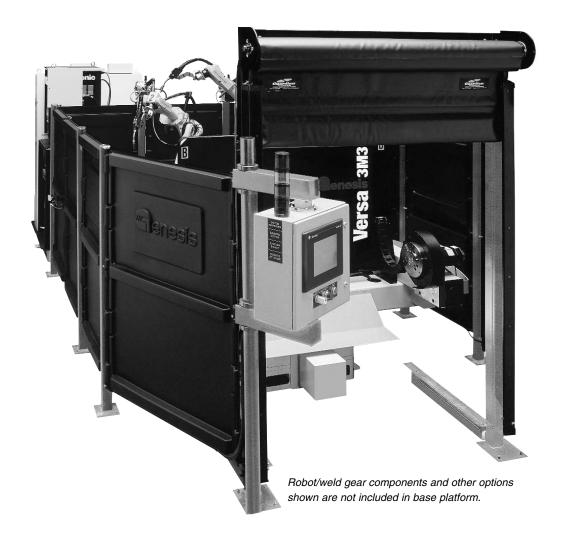
· Genesis Installation

2 days on-site set-up and support

- Smoke Hood
- · Heavy Base Option
- RoboVent Smoke Extraction System (Install separate)



## Versa 3M3 Positioner



#### **Versa 3M3 Positioner**

Robot/weld gear components and other options shown are not included in base platform.

#### **3M3 POSITIONER FEATURES**

The Versa 3M3 Positioner is a flexible three-axis turntable robotic welding and cutting workcell. The workcell is designed to handle high-volume parts that require repositioning during the weld cycle. This extremely fast three axis turntable workcell meets the demands of today's flexible manufacturing environments.

#### **BENEFITS**

- Handles high-volume parts that require repositioning during the welding cycle
- · Patented table design provides an extremely fast exchange time
- Easily maintained pneumatic exchange axis
- Proven cost effective solution excellent ROI
- · Maximized throughput and robot utilization
- Material flow optimization
- Industry leading payload, tooling length, swing diameter and exchange time
- · Customizable workcell configuration

# reatures &

#### **Versa 3M3 Positioner**

Robot/weld gear components and other options shown are not included in base platform.

#### **POSITIONER SPECS**

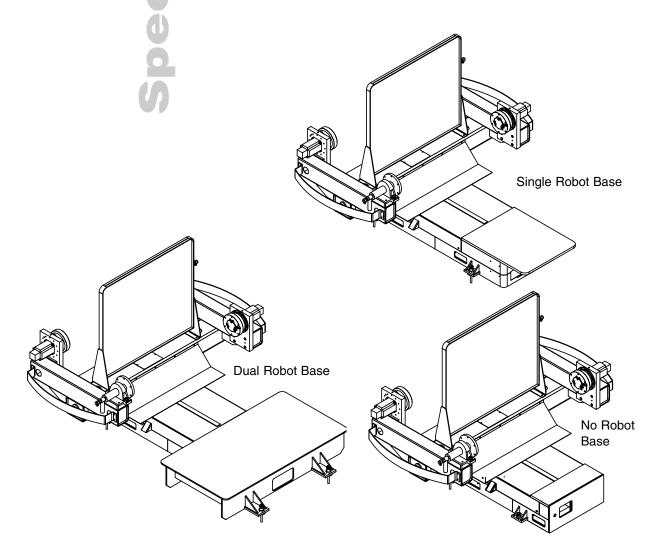
Features:

Tooling Length	60", 67"
Swing Diameter	40"
Weight Capacity750 lb	s per side
Index Time	3 seconds

NOTE: Requires robot auxiliary axis package

#### **POSITIONER INCLUDES**

- Positioner/system base Genesis patented pneumatic H-frame positioner with 60" tool length
- Positioner Axes gearboxes, mounting plates, tail-stock shafts, roto-grounds and pillow-block bearings (alignment included)
- Workcell documentation searchable CD and hardcopy





**Versa 3M3 Positioner** 

#### **STANDARD POSITIONER OPTIONS**

- Torch Cleaner
  - Pneumatic nozzle cleaner with mister
- Genesis Alignment Station

Robot wrist and torch alignment station

Overhead Gantry

Wire drive mount and cable swing arm

• Genesis Robot or PLC Controls

See Controls section for description

- Electric Rollup Safety Door
- Control Pallet

 $4' \times 8'$  steel control pallet for robot controller, system controls and welding power supply

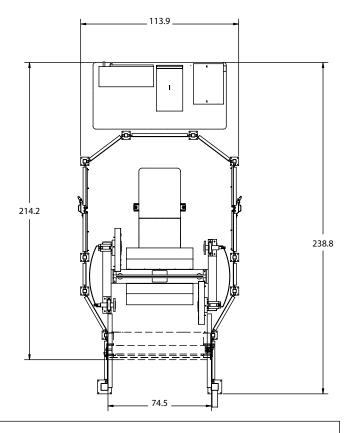
- Safety Fencing for "H" frame positioner "U" shaped fencing for operator safety includes two gates with safety switches
- Power Track Cable Carrier System
- 67" "H" Frame Tool Length
- Multiple Robot Configuration
- Plug-n-Play Controls for positioner only
- Versa Tool Control
- Genesis Training

4.5 days hands-on training at Genesis/per student

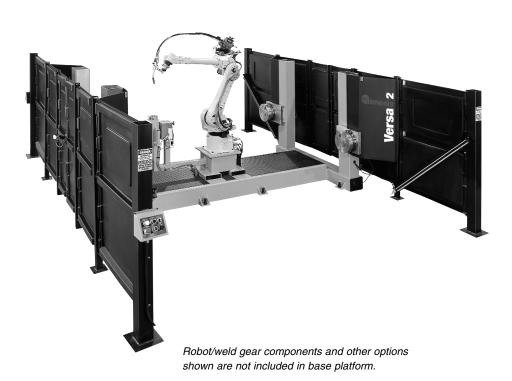
· Genesis Installation

2 days on-site set-up and support

- Smoke Hood
- Heavy Base Option
- RoboVent Smoke Extraction System (Install separate)



## Versa 2 Platform



**Versa 2 Platform** 

#### **VERSA 2 PLATFORM FEATURES**

The Versa 2 Platform is a flexible robotic welding and cutting workcell. The workcell is designed for the job shop manufacturing environment – low to medium part volumes and high changeover applications. The Versa 2 Platform can be configured to fit your application from a wide array of options. With fork slots on all four sides, the workcell is easily moved – meeting the demands of today's flexible manufacturing environments.

#### **BENEFITS**

- · Handles multiple part numbers simultaneously
- No downtime during changeover able to run opposing station
- Proven cost effective solution excellent ROI
- · Maximized throughput and robot utilization
- · Material flow optimization
- Customizable workcell configuration
- Quick workcell relocation minimal installation requirements
- · Industry leading payload, tooling length & swing diameter

## Features

shown are not included in base platform.

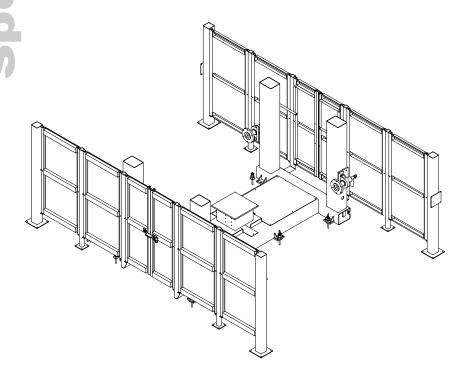
#### **PLATFORM SPECS**

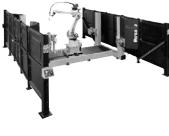
#### Features:

Tooling Length
Swing Diameter
Weight Capacity
NOTE: Requires robot auxiliary axis package

#### **PLATFORM INCLUDES**

- Positioner/system base base positioner platform, safety fence with two interlocking gates, robot riser and control pallet
- Positioner Axes gearboxes, mounting plates, tail-stock shafts, roto-grounds and pillow-block bearings (alignment included)
- Workcell documentation searchable CD and hardcopy

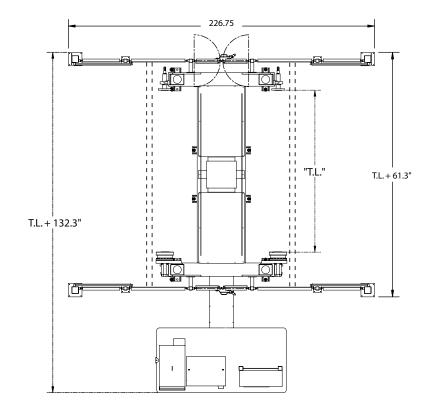




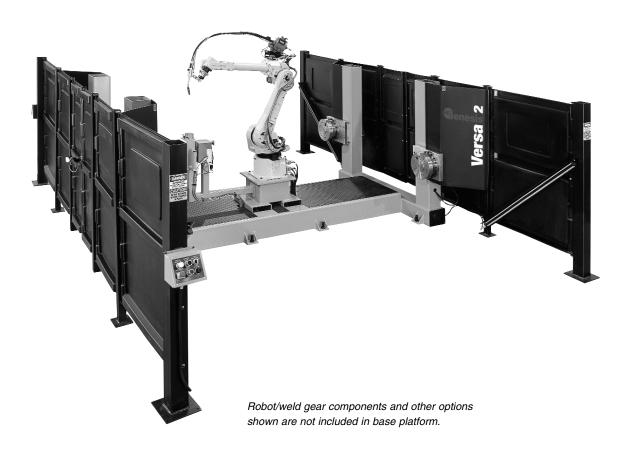
Versa 2 Platform

#### **STANDARD PLATFORM OPTIONS**

- Torch Cleaner
  Pneumatic nozzle cleaner with mister
- Genesis Alignment Station
  Robot wrist and torch alignment station
- Overhead Gantry
   Wire drive mount and cable swing arm,
- Genesis Robot or PLC Controls See Controls section for description
- Electric Rollup Safety Door per station
- Power Track Cable Carrier System
- 2,000, 3,000, 5,000 lbs. capacity
- Multiple Robot Configuration
- Integration Per Robot
- Versa Tool Control
- Genesis Training
   4.5 days hands-on training at Genesis/per student
- Genesis Installation
   2 days on-site set-up and support
- Smoke Hood
- RoboVent Smoke Extraction System (Install separate)



## Versa 2L Platform



#### **VERSA 2L PLATFORM FEATURES**

The Versa 2L Platform is a flexible robotic welding and cutting workcell. The workcell is designed for the job shop manufacturing environment – low to medium part volumes and high changeover applications. The Versa 2L Platform can be configured to fit your application from a wide array of options. With fork slots on all four sides, the workcell is easily moved – meeting the demands of today's flexible manufacturing environments.

#### **BENEFITS**

- · Handles multiple part numbers simultaneously
- No downtime during changeover able to run opposing station
- Proven cost effective solution excellent ROI
- · Maximized throughput and robot utilization
- · Material flow optimization
- · Customizable workcell configuration
- · Quick workcell relocation minimal installation requirements
- · Industry leading payload, tooling length & swing diameter

## Features

#### **PLATFORM SPECS**

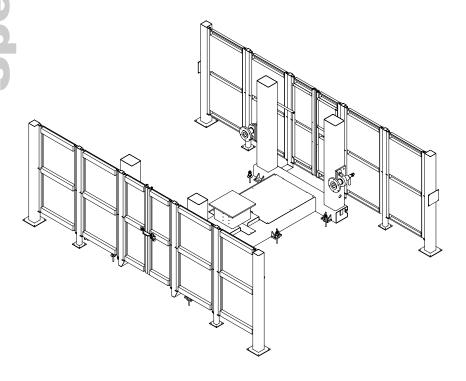
#### Features:

Tooling Length .		20", 132", 144'
Weight Capacity	2,000, 3,000, 5,0	00 lbs per side
Swing Diameter		54", 60"

NOTE: Requires robot auxiliary axis package

#### **PLATFORM INCLUDES**

- Positioner/system base base positioner platform, 2,000 lbs capacity per side, safety fence with two interlocking gates, robot riser and control pallet
- Positioner Axes gearboxes, mounting plates, tail-stock shafts, roto-grounds and pillow-block bearings (alignment included)
- Workcell documentation searchable CD and hardcopy



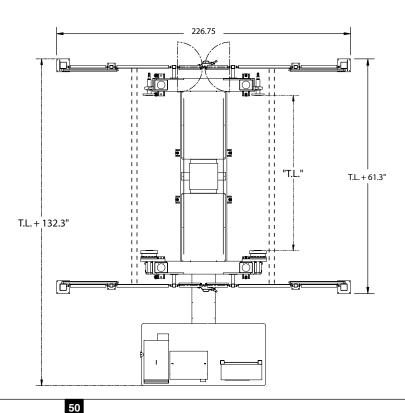


**Versa 2L Platform** 

#### **STANDARD PLATFORM OPTIONS**

- Torch Cleaner
   Pneumatic nozzle cleaner with mister
- Genesis Alignment Station
  Robot wrist and torch alignment station
- Overhead Gantry
  Wire drive mount and cable swing arm,
- Genesis Robot or PLC Controls See Controls section for description
- Electric Rollup Safety Door
- Power Track Cable Carrier System
- 2,000, 3,000, 5,000 lbs. capacity
- 132"-144" Tool Length
- Multiple Robot Configuration
- Integration Per Robot
- Versa Tool Control
- Genesis Training
  4.5 days hands-on training at Genesis/per student
- Genesis Installation
   2 days on-site set-up and support
- Smoke Hood
- RoboVent Smoke Extraction System (Install separate)





## Versa 4M Positioner



#### **Versa 4M Positioner**

Robot/weld gear components and other options shown are not included in base platform.

#### **VERSA 4M POSITIONER FEATURES**

The Versa 4M is a flexible three-axis "ferris wheel" style robotic welding and cutting workcell. The workcell is designed to handle large or multiple high-volume production parts. An exclusive patent provides a large swing diameter and comfortable load/unload and robot programming height. The system controls can accommodate the most sophisticated fixture designs and can be equipped with push button or PanelView operator interfaces.

#### **BENEFITS**

- Patented design provides a large swing diameter which accommodates larger parts
- Handles high-volume production
- · Comfortable load/unload and robot programming height
- Easily maintained pneumatic exchange axis
- Proven cost effective solution excellent ROI
- Maximized throughput and robot utilization (overhead design)
- Industry leading payload, tooling length, swing diameter and exchange time
- · Material flow optimization
- · Minimal operator load/unload distance
- · Customizable workcell configuration

# Features &

#### COMPONENT

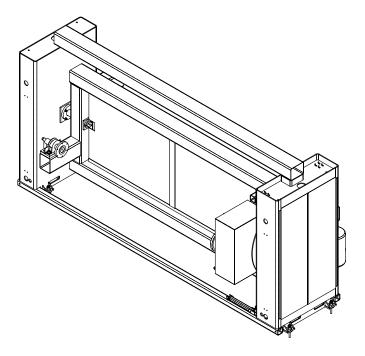
#### Features:

Tooling Length	96", 120", 132", 144"
Swing Diameter	
Weight Capacity	2,000, 3,000, 5,000 lbs per side
Index Time	4-6 seconds

NOTE: Requires robot auxiliary axis package

#### **COMPONENTS AND PLATFORM INCLUDES**

- Positioner/system base Genesis patented pneumatic ferris wheel positioner, 96" tool length, 42" swing diameter, 2,000 lbs. capacity per side
- Controls Genesis Plug-n-Play Controls for positioner only
- Positioners Axes gearboxes, mounting plates, tail-stock shafts, roto-grounds and pillow-block bearings (alignment included)
- Workcell documentation searchable CD and hardcopy

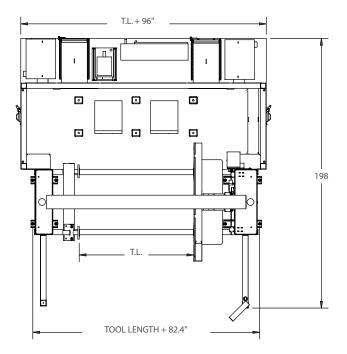


#### **Versa 4M Positioner**

Robot/weld gear components and other options shown are not included in base platform.

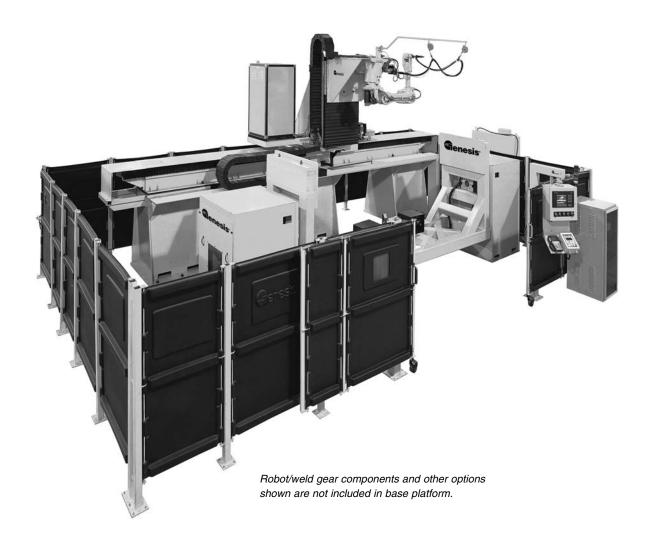
#### STANDARD POSITIONER OPTIONS

- Torch Cleaner: Pneumatic nozzle cleaner with mister
- Genesis Alignment station: Robot wrist and torch alignment station
- Overhead Gantry: Wire drive mount and cable swing arm
- Genesis Robot or PLC Controls
- Electric Rollup Safety Door
- Control Pallet: Steel control pallet for robot controller, system controls and welding power supply
- **Safety Fence**: Safety fence enclosed robot work area from operator two gate interlocks included
- Safety Wings: Front safety barriers
- Robot Riser
- Power Track Cable Carrier System
- 3,000, 5,000 lbs weight capacity
- 132" 144" Tool Length
- Increased Swing: Diameters 54" or 60"
- Multiple Robot Configuration
- Integration Per Robot
- Versa Tool Control
- Genesis Training
   4.5 days hands-on training at Genesis/per student
- Genesis Installation
   2 days on-site set-up and support
- Smoke Hood
- RoboVent Smoke Extraction System (Install separate)





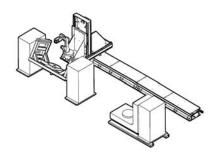
### Modular

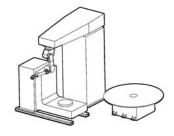


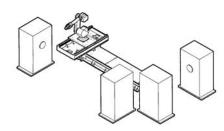
Platformation Positioner and Track Systems are designed to weld larger, heavier workpieces often found in the construction, industrial and related industries. These systems are ideal for the manufacturer with low-to-medium part volumes and/or a medium-to-high mix of parts. The modular design allows the Positioner and Track Systems to be configured to meet a project's specific production needs. The individual components are placed together in a "building block" fashion, interacting with one another to comprise a cohesive and complete robotic welding system.

Positioner and Track Systems will often include a robot transporter to increase the robot's work envelope and enable the system to weld large parts and hard to reach welds. Other common enhancements include advanced robot and weld monitoring features such as coordinated motion, touch sensing, seam tracking, and arc data monitoring.

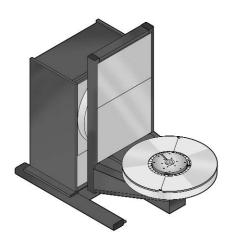
Features







#### **WORKPIECE POSITIONERS**



The Drop Axis is used in conjunction with the Head stock positioner. The Drop Axis provides two positioner axes and utilizes coordinated motion to manipulate the workpiece during the weld cycle. The Drop Axis offers substantial robot access to complex parts.

Does not include Servo motors.

#### **DROP AXIS**

**Specifications:** DA-3 DA-5 >>>>>>>>> 3,000 lbs 5,000 lbs

Weight Capacity (includes fixture)

Max. Swing Radius of 32" Minor Axis

Note: For larger swing radii consult GSG.

32"

Gear Ratio

Major Axis 673:1 780:1 Minor Axis 141:1 184:1 **Housing Dimensions** 

(Width x Depth)

60" x 31" 60" x 31"

Centerline Height of 30" to 42" 30" to 42"

Rotation Note: For taller centerline height consult GSG.

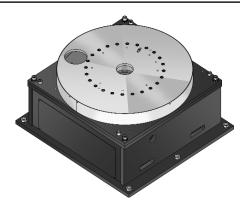
Weights

Headstock Housing 5,200 lbs 5,000 lbs

Drop Axis Frame Note: Depends on tooling dimensions.

NOTE: Specifications will vary. All specifications are application specific.

#### **HIGH CAPACITY TURNTABLE**



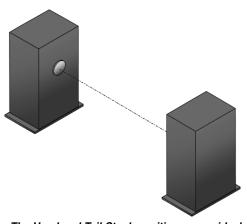
The High Capacity Modular Turntable can handle the heaviest of jobs. The servo driven table can be used as a two-position table or as a multi-position turntable for those parts that require a multi-step manufacturing process.

Does not include Servo motors.

Specifications:	RA-10	RA-15	RA-20
•>>>>>>>> Weight Capacity (includes fixture)	10,000 lbs	15,000 lbs	20,000 lbs
Gear Ratio	673:1	780:1	780:1
Table Base Dimensions (Width x Depth)	40" x 40"	52" x 52"	52" x 52"
Table Height Note		30" to 42" nterline height c	30" to 42" consult GSG.

Weights

Table Base 3.200 lbs 4.000 lbs 4.200 lbs Table Top Structure Note: Depends on table top size.



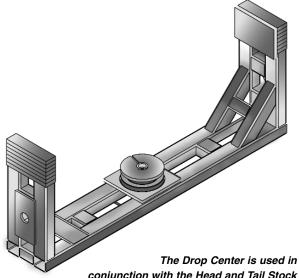
The Head and Tail Stock positioners are ideal for those parts that require repositioning during the weld cycle. Part rotation is servo driven, allowing robot and workpiece coordinated motion. Common configurations when using two stations include; stations located on opposing sides of robot or stations end to end with robot on transporter.

Does not include Servo motor(s).

#### **HEAD STOCK / TAIL STOCK**

Specifications:	HT-10	HT-15	HT-20
•>>>>>>>> Weight City (includes fixture)	>>>> 10,000 lbs		>>>>>>>>> 20,000 lbs
Max. Swing Radius	32" NOTE: For I	35" arger swing radi	38" i, consult GSG.
Tool Length	Call Genesis	3	
Housing Dimensions (Width x Depth)	50" x 31"	60" x 31"	60" x 31"
Max. Housing Height	72"	80"	80"
Centerline Height of Rotation	30" to 42" NOTE: For to	00 10 .=	30" to 42" neight, consult GSG.
Weight of Housing Headstock Tailstock	4,500 lbs 3,400 lbs	500 lbs 3,900 lbs	5,200 lbs 3,900 lbs
Gear Ratio NOTE: Specifications will	673:1 Vary. All spec	780:1 ifications are ap	780:1 olication specific.

#### **DROP CENTER**

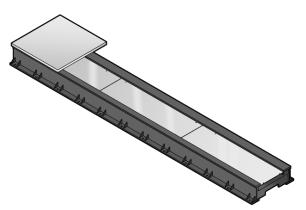


conjunction with the Head and Tail Stock positioner. This positioner adds an additional axis to weld parts that require complex manipulation during the weld cycle. With two axes it can manipulate a part into almost any position to achieve "in position" welds.

Does not include Servo motor(s).

Specifications:	DC-2	DC-5	DC-10
Weight Capacity (includes fixture)	2,000 lbs	5,000 lbs	10,000 lbs
Max. Swing Radius of Minor Axis	21" NOTE: For la	32" arger swing radii	32" , consult GSG.
Centerline Height of Rotation	30" to 42"	30" to 42"	30" to 42"

#### **TRACKS**



The Modular Track is a heavy duty, high capacity track system. The track comes in two standard lengths which can be linked together to reach infinite lengths. The servo driven track transports both the robot and weld wire. The Modular Track can be used for the following applications; floor mount, wall mount or invert mount.

Does not include Servo motors or carriage.

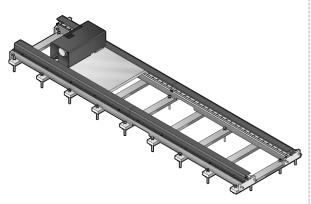
#### **MODULAR TRANSPORTER**

Specifications:	MT-35	MT-50
Weight Capacity	3,500 lbs	10,000 lbs
Method of Movement	Rack & Pinion	Rack & Pinion
Max. Linear Speed	30 inches/second	20 inches/second
Repeatability	+/- 0.004	+/- 0.004
Carriage Dimensions (Width x Depth)	38" x 44.5"	38" x 44.5"
Overall Height	20"	20"
Std Lengths	12' & 18' NOTE: For longer lengths transporters can be mounted together. I.e. (2) 18' to get 36'.	
Weights (lbs) 12' Long Section	2.000	2.000
18' Long Section	3,000 4,500	3,000 4,500
Carriage	1,200	1,200
	-,	- ,

NOTE: Specifications will vary. All specifications are application specific.

#### **ROBOT TRANSPORTER**

Method of Movement



The Robot Transporter is a light duty, high capacity track system. The track comes in two standard lengths which can be linked together to reach infinite lengths. The servo track transports both the robot and weld wire. The Robot Transporter Track is designed only for floor mounted applications.

Does not include Servo motors or carriage.

**Specifications: RT-20** 

•>>>>>>>>> ·>>•>> 2,000 lbs

Weight Capacity Rack & Pinion

Max. Linear Speed 30 inches/second

Repeatability +/- 0.004

Carriage Dimensions 27.25" x 25" (Width x Depth)

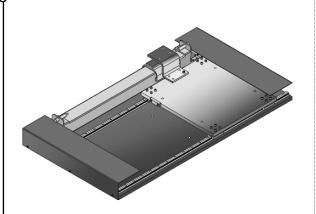
Overall Height 8.25" 12' & 18' Std Lengths

NOTE: For longer lengths transporters can be mounted together

Weights (lbs)

12' Long Section 2.500 18' Long Section 3,500 Carriage 1,200

#### **MORE TRACKS**



The Shuttle Track is a low cost solution to increase the work envelope of a robotic system. It is a two position pnematic track available in 2, 3 and 4 foot lengths.

#### **SHUTTLE TRACK**

Specifications: ST-10

Weight Capacity 1,000 lbs

Method of Movement Air Cylinder

Max. Linear Speed 10 inches/second

Repeatability Positive Stops

Carriage Dimensions

(Width x Depth)

24" x 24"

Base Dimensions

36" Travel 36" x 72" 48" Travel 36" x 84"

Overall Height (Min.) 4"

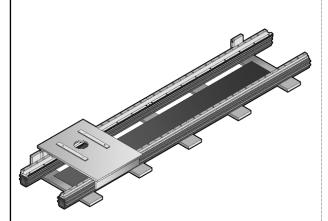
Note: Dimension is for carriage to mounting plate.

Weights (lbs)

72 Long Section 1,300 84 Long Section 1,700 Carriage 200

NOTE: Specifications will vary. All specifications are application specific.

#### **FIXED LINEAR TRACK**



The Linear Track is a highly accurate servo driven track with infinite position capabilities. It comes in three distinct lengths; 2, 3 and 4 meters.

Does not include Servo motors or carriage.

Specifications: FT-15

Weight Capacity 1,500 lbs

Method of Movement Rack & Pinion

Max. Linear Speed 40 inches/second

Repeatability +/- 0.004

Carriage Dimensions

(Width x Depth)

22" x 27"

Overall Height (Min.) 19"

Std Lengths (Meters) 2, 3, & 4

Weights (lbs)

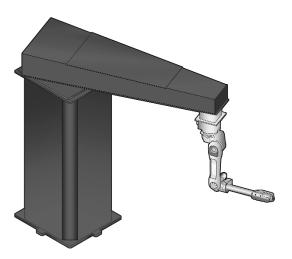
 2m Long Section
 550

 3m Long Section
 800

 4m Long Section
 1100

 Carriage (19" min.)
 400

NOTE: Carriage weight will vary with riser height.



The Overhead Boom increases robot usable work envelope and provides a better reach to welds located on the interior of large parts. The Boom is driven by a servo motor allowing the robot to be positioned over multiple stations.

Does not include Servo motor.

#### **OVERHEAD BOOM**

Weight Capacity 6-16kg Robots

(Based on Robot Sizes)

Max. Swing Radius of 60

Boom Note: For larger swing radius consult GSG.

Repeatability +/- 0.001

per ft of swing radius)

Base Dimensions 60" x 31"

(Width x Depth)

Max. Height of Boom 120"

Arm

Weights Consult GSG for weights.

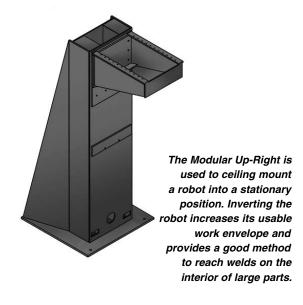
Base (lbs)

Note: Depends on boom height dimension.

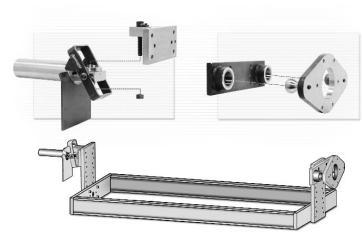
Note: Depends on arm dimension.

NOTE: Specifications will vary. All specifications are application specific.

#### **UP-RIGHT**



Overall Height 120" 22"
Weights 4,325 lbs. 685 lbs.



#### **QUICK CHANGE TOOL**

- Rapid tool changeover
- Reduces robot downtime during tooling changeover
- Simple one-step process
- Self-alignment system (requires dual pillow block bearings)

AP's unique Quick Change Tooling design, patent pending, is ideal for any industry that has a medium-to-high mix of parts and/or high changeover applications. It optimizes machine utilization and throughput by reducing the associated down time when changing out tools.



LIFEGuard Safety Door is available in a variety of sizes: 24", 36", 48", 60", 72", 84" and 96"

#### **LIFEGUARD SAFETY DOOR**

- Shrinks workcell space
- Free access for hoist-weight parts
- Faster movement– providing quick access to workcell
- Highly visible operation
   — motion is in operator's normal site-line
- Available in a broad range of sizes
- Low load height
- Wide range of applications

## **Control Options**

## GENESIS ROBOT BASED MASTER CONTROL SYSTEM

Integrates complete system control with robot logic. This control system includes all system safety devices, power distribution and control enclosure wired and integrated into system. Also included are system programs and documentation.



- SICK Light Curtains and Light Curtain Controller
- SICK Safety Rated Gate Switches
- SICK Safety Relays



- 480/120VAC 1.5KVA Transformer
- 24VDC 3.6A Power Supply
- Rittal Enclosure with 60 Disconnect (single robot)
- Power Distribution equipment for welders and robot equipment (fuses, terminal blocks, etc.)
- Requires a single power drop of 60 amps to the system (single robot)



- System Electrical Drawing Package in AutoCAD.dwg format
- Complete electrical Bill of Materials
- System Operations Manual in PDF format
- System Maintenance Manual in PDF format

#### **OPERATOR CONSOLE FEATURES:**

- Sloped Front Pushbutton Station
- Control Power On Illuminated Pushbutton
- Station Ready Illuminated Pushbutton
- Sweep Table Pushbutton
- Robot at Home Pilot Light
- Fault Indicator Illuminated Pushbutton
- Emergency Stop Mushroom Pushbutton

#### **OPTIONS:**

- 6.0" or 10.5" Touchscreen operator interface
- Tooling I/O options making the weld systems "Tool Ready"







Integrates complete system control with PLC processor. This control system includes all system safety devices, power distribution and control enclosure wired and integrated into system. Also included are system programs and documentation.

#### **SAFETY DEVICE FEATURES:**

- SICK Light Curtains and Light Curtain Controller
- SICK Safety Rated Gate Switches
- SICK Safety Relays

#### **CONTROL ENCLOSURE FEATURES:**

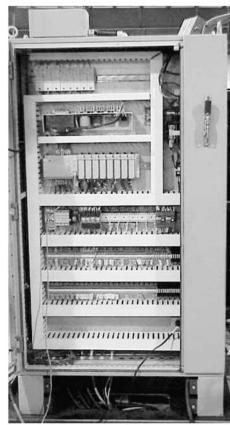
- Allen-Bradley Micrologix 1500 PLC 12In/12Out (all base I/O used)
- (2) 16pt 24VDC Input Modules Used
- (1) 16pt 24VDC Output Modules Used
- Available (5) modules of expansion (to be supplied by customer)
- 480/120VAC 2.0KVA Transformer
- 24VDC 12A Power Supply
- Rittal Enclosure with 60A Flange Disconnect (single robot)
- Power Distribution equipment for welders and robot equipment (fuses, terminal blocks, etc.)
- Requires a single power drop of 60Amps to the system (single robot)

#### **SYSTEM DOCUMENTATION FEATURES:**

- System Electrical Drawing Package in AutoCAD.dwg format
- Hardcopy of RSLogix Program
- RSLogix Program in .RSS format
- Complete electrical Bill of Materials
- System Operations Manual in PDF format
- System Maintenance Manual in PDF format

#### **OPERATOR CONSOLE FEATURES:**

- Sloped Front Pushbutton Station
- Control Power On Illuminated Pushbutton
- Station Ready Illuminated Pushbutton
- Sweep Table Pushbutton
- Robot at Home Pilot Light
- Fault Indicator Illuminated Pushbutton
- Emergency Stop Mushroom Pushbutton







- Upgrade PLC to Allen-Bradley SLC family of processors (PV600, PV1000)
- Communication modules installed
- Allen-Bradley RIO Module (SLC 500 version)
- Allen-Bradley DeviceNet Module (MicroLogix 1500 version)
- Allen-Bradley DeviceNet Module (SLC 500 version)
- PV550 or PV1000 Touchscreen operator interface
- Tooling I/O options making the weld systems "Tool Ready"



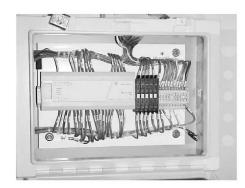
Modularized software/hardware for positioner operations. This pre-programmed PLC processor allows easy interface to start, stop, and adjust system sweep parameters. 24VDC digital signals are required for start signals to initiate sweeping the table to A station or B station. This control is required for all dual cylinder sweep systems.



- Allen-Bradley Micrologix 1000
- 16" x 12" Junction Box
- Pre-Wired I/O to 24 pin Epic plug

#### **SYSTEM DOCUMENTATION FEATURES:**

- Ladder Logic File in RS-Logix 500 format (.RSS)
- AutoCAD drawings with complete Bill of Material (.dwg files)
- Plug-N-Play users manual in PDF format





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