

# PRE-ENGINEERED SYSTEMS OVERVIEW



DAIHEN INC.

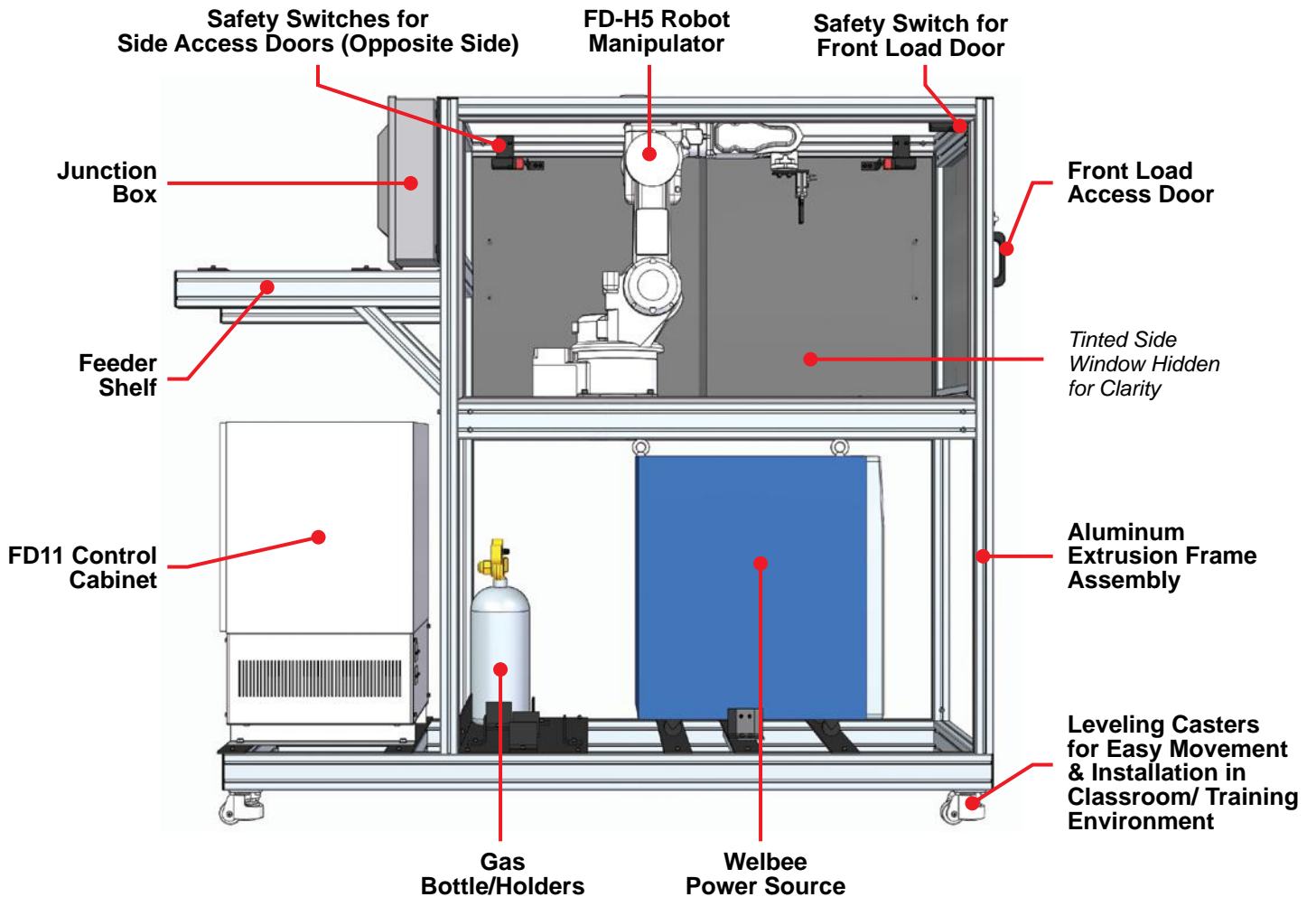
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# ED-ARC 100

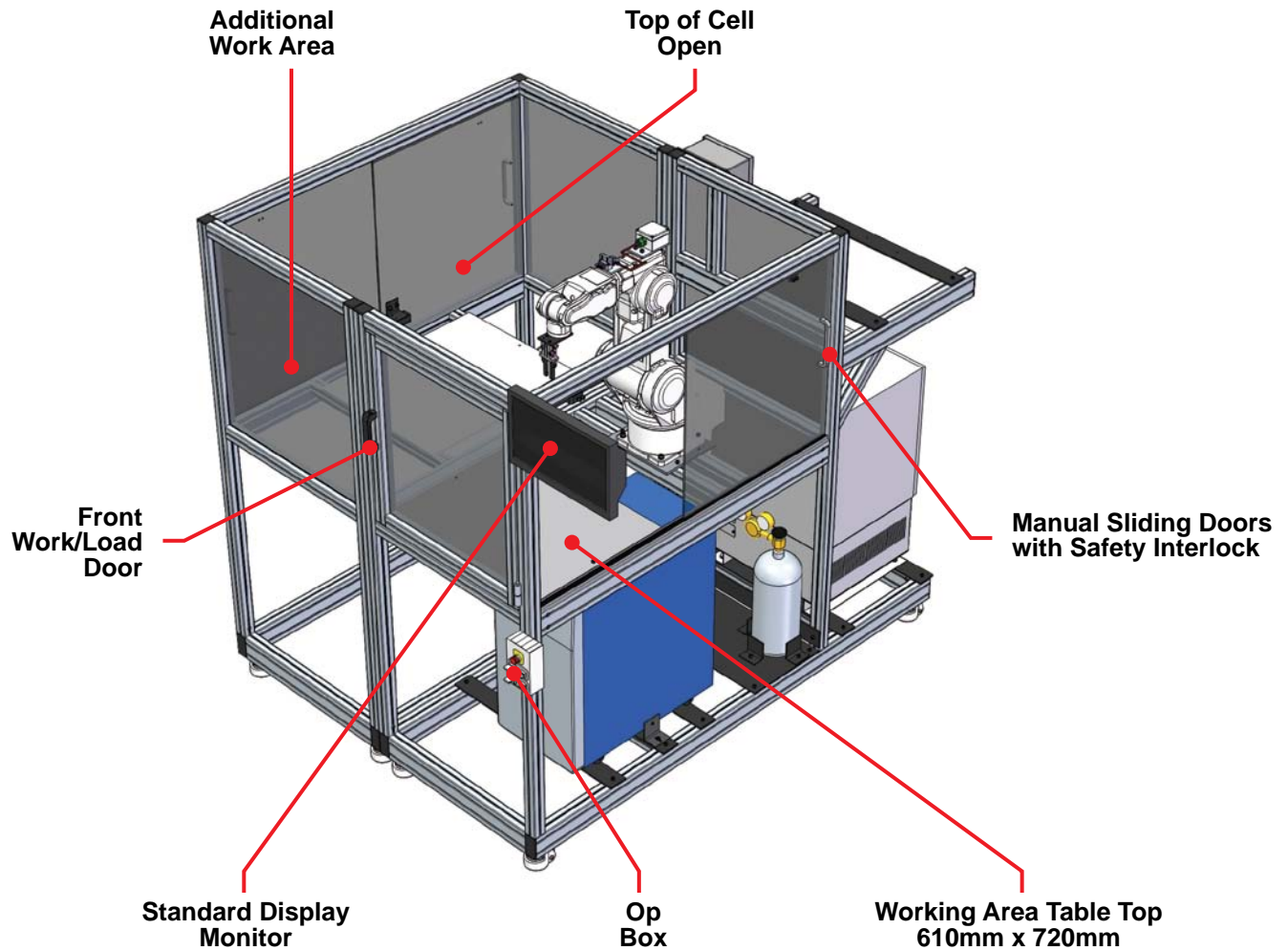


## Standard Option:

**ED-ARC 100** – Mobile, fully enclosed arc welding training station with compact robot manipulator (FD-H5)

### Details:

- Lightweight aluminum frame and polycarbonate arc flash enclosure
- Flat table top surface with 610mm x 720mm work area
- Height of work area 1177mm
- Maximum payload: 250kg
- Leveling casters for stable installation/easy movement when needed
- Weight – Approx. 550kg
- Front load access door with tinted window with safety interlock
- Side access door with tinted window for load/maintenance with safety interlock
- Tinted Panels provide better light in work area for training visibility and operator safety
- Shelf mounted welding power source
- Standard Display Monitor



## Specifications:

### Footprint Dimensions:

Width: 820mm (32.3")  
 Height: 2014mm (79.3")  
 Depth: 2230mm (87.8")

### Manipulator Type:

- FD-H5



FD-H5

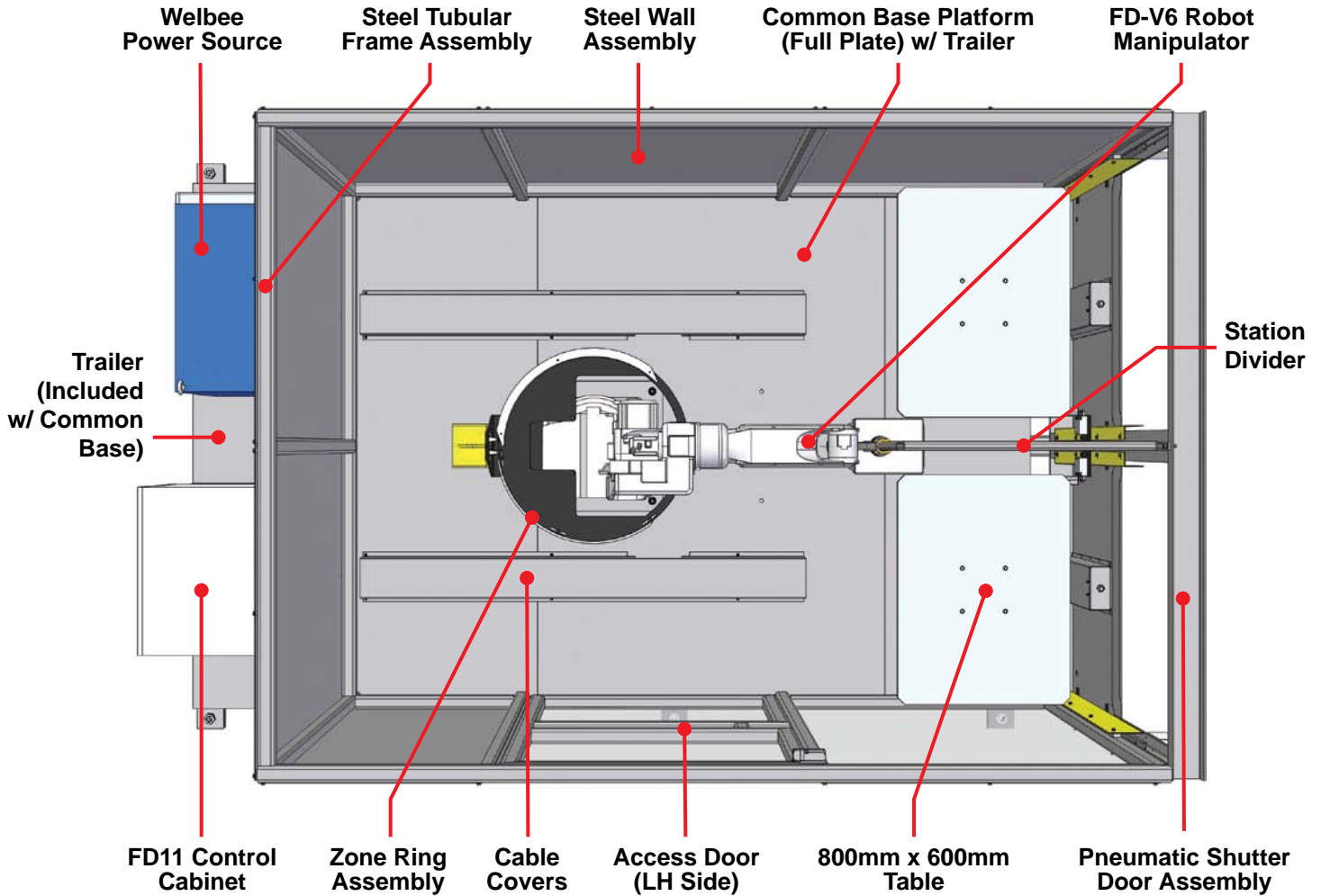
### Available I/O Slots:

32 Inputs/32 Outputs  
 (Additional Power Supply needed for Outputs)

## Additional Options:

- Optional Additional Work Area
  - Adds additional space by adding to the extruded frame and removing the long side panel without sliding doors
  - May require adding a zone kit for station designation

# ECO-ARC 200



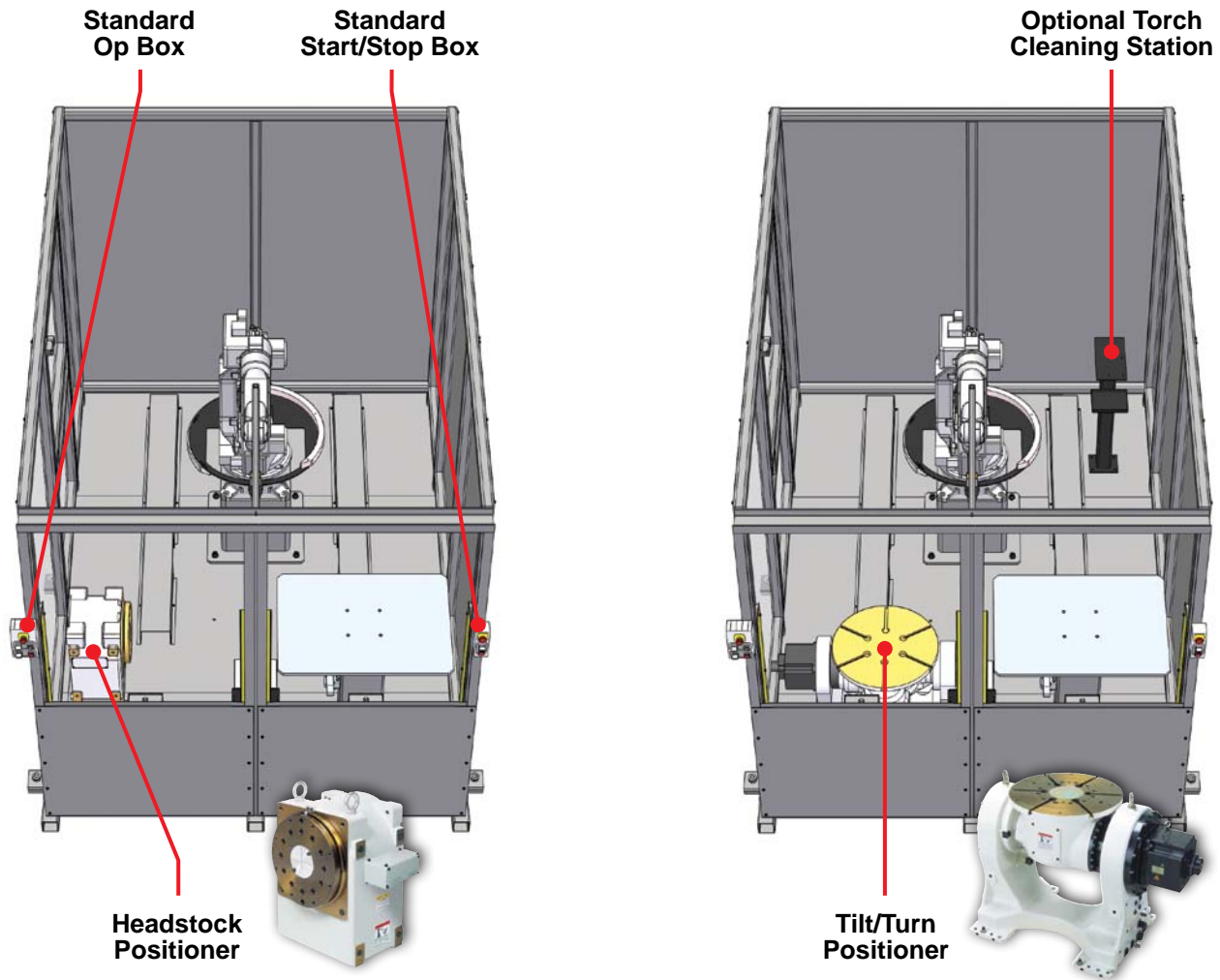
## Standard Option:

**ECO-ARC 200** – 2 stationary tables with standard robot manipulator (FD-V6)

- Tabletop Dimensions: 800mm x 600mm
- Weight – Approx. 2000kg

## Details:

- Pneumatic shutter doors
- Zone Ring for station designation
- Standard fork lift pockets in base for easy movement
- Steel wall station divider



## Specifications:

### Footprint Dimensions:

Width: 2194mm (86.4")  
 Height: 2158mm (85.0")  
 Depth: 3430mm (135.0")

### Manipulator Types:

• FD-V6 • FD-B4

### Cell Options:

• 2 Stationary Tables  
 • Positioner/Table  
 • 2 Positioners

### Headstock Options:

• A2PB-250 • A2PB-500 • A2PB-1000



### Tilt/Turn Options:

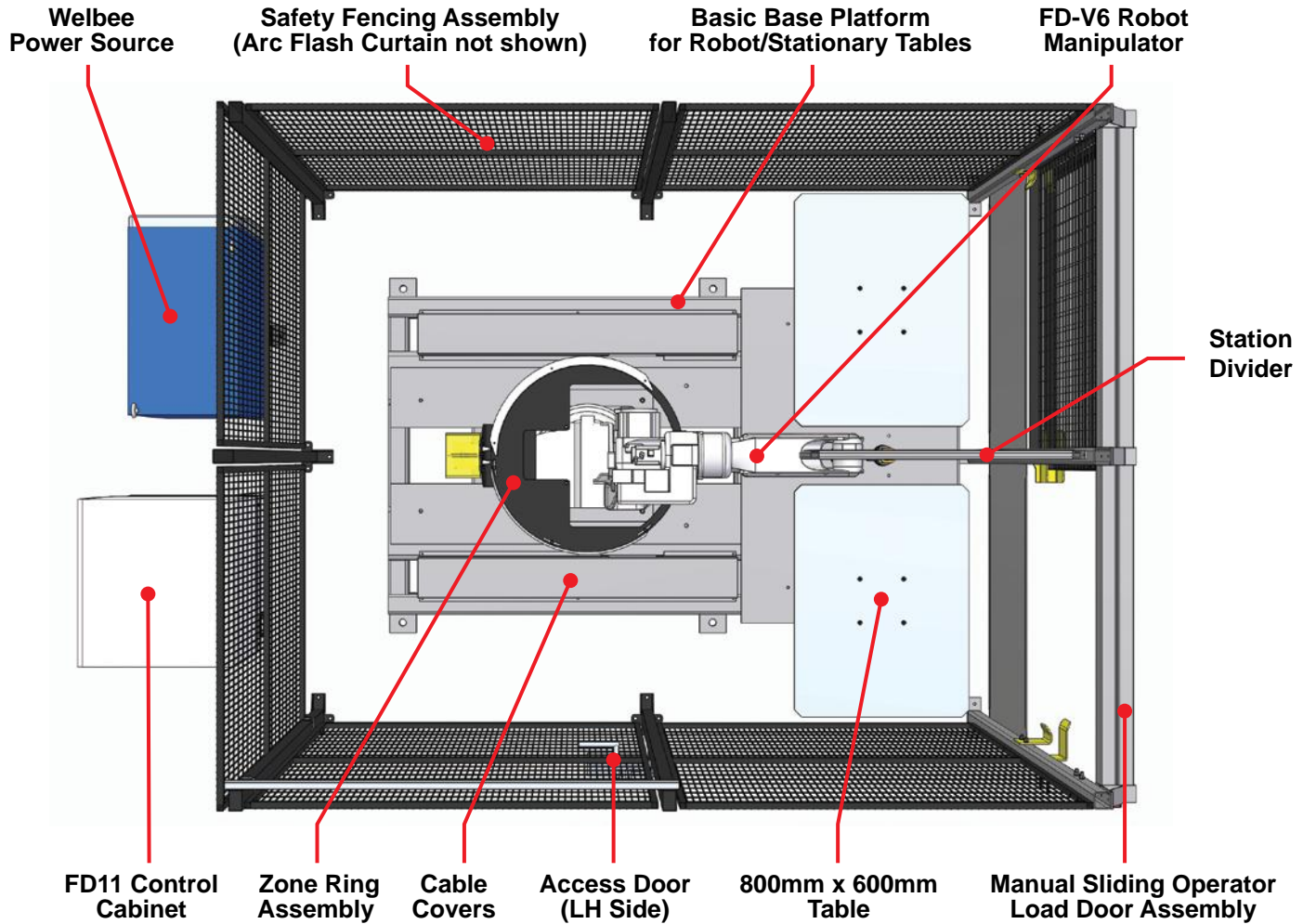
• A2PF-300 • A2PF-500 • A2PF-1000

**Available I/O Slots:** 28 Inputs/26 Outputs  
 (Additional Power Supply needed for Outputs)

### Other Options:

- Basic Base Design (ECO-ARC 200B)
- Safety Fencing on Floor
- Safety Fencing on Full Base
- Access Door on RH Side
- Manual Sliding Door Assembly
- Station Lighting
- Torch Cleaning Station
- Fixture Mounting Pattern in Table Top
- Extended I/O

# ECO-ARC 200B



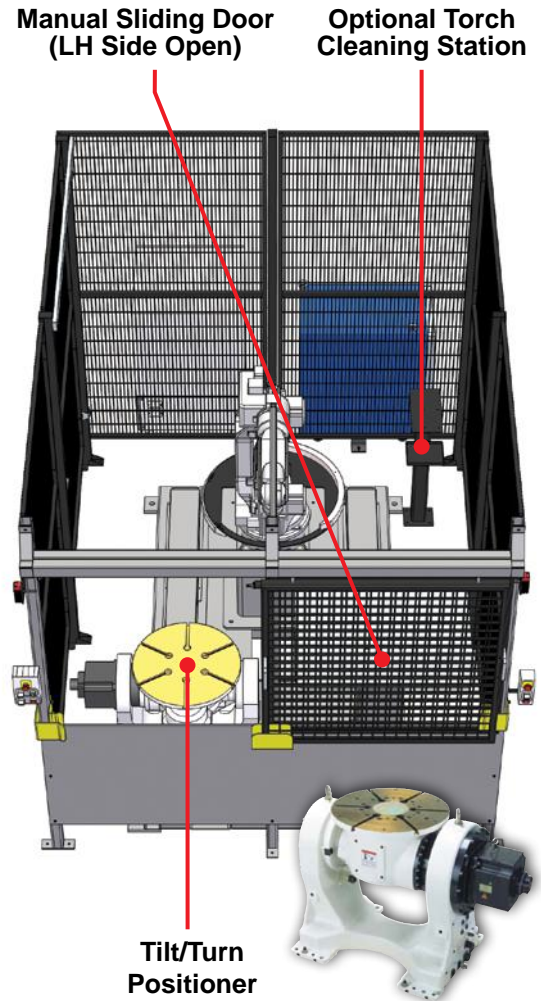
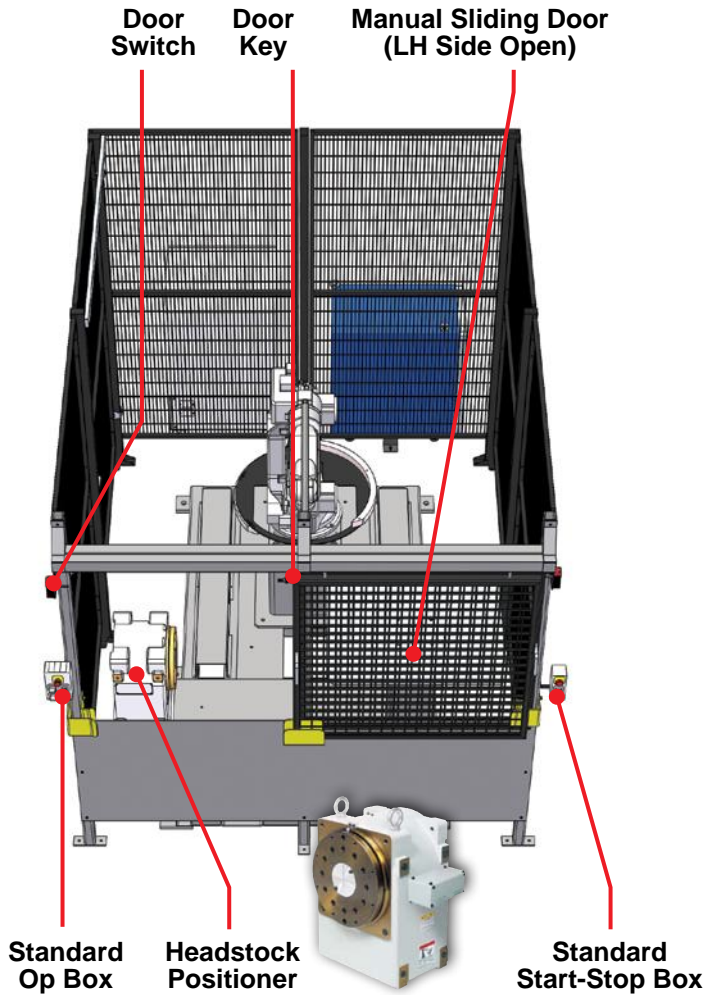
## Standard Option:

**ECO-ARC 200B** – 2 stationary tables with standard robot manipulator (FD-V6)

### Details:

- Manual sliding operator load doors
- Zone Ring for station designation
- Standard fork lift pockets in base for easy movement
- Steel wall station divider
- Tabletop Dimensions: 800mm x 600mm
- Weight – Approx. 1500kg
- Floor mounted safety fencing w/ arc flash curtains





## Specifications:

### Footprint Dimensions:

- Width: 2140mm (84.2")
- Height: 2200mm (86.6")
- Depth: 3420mm (134.6")

### Manipulator Types:

- FD-V6
- FD-B4

### Cell Options:

- 2 Stationary Tables
- Positioner/Table
- 2 Positioners

### Headstock Options:

- A2PB-250
- A2PB-500
- A2PB-1000



### Tilt/Turn Options:

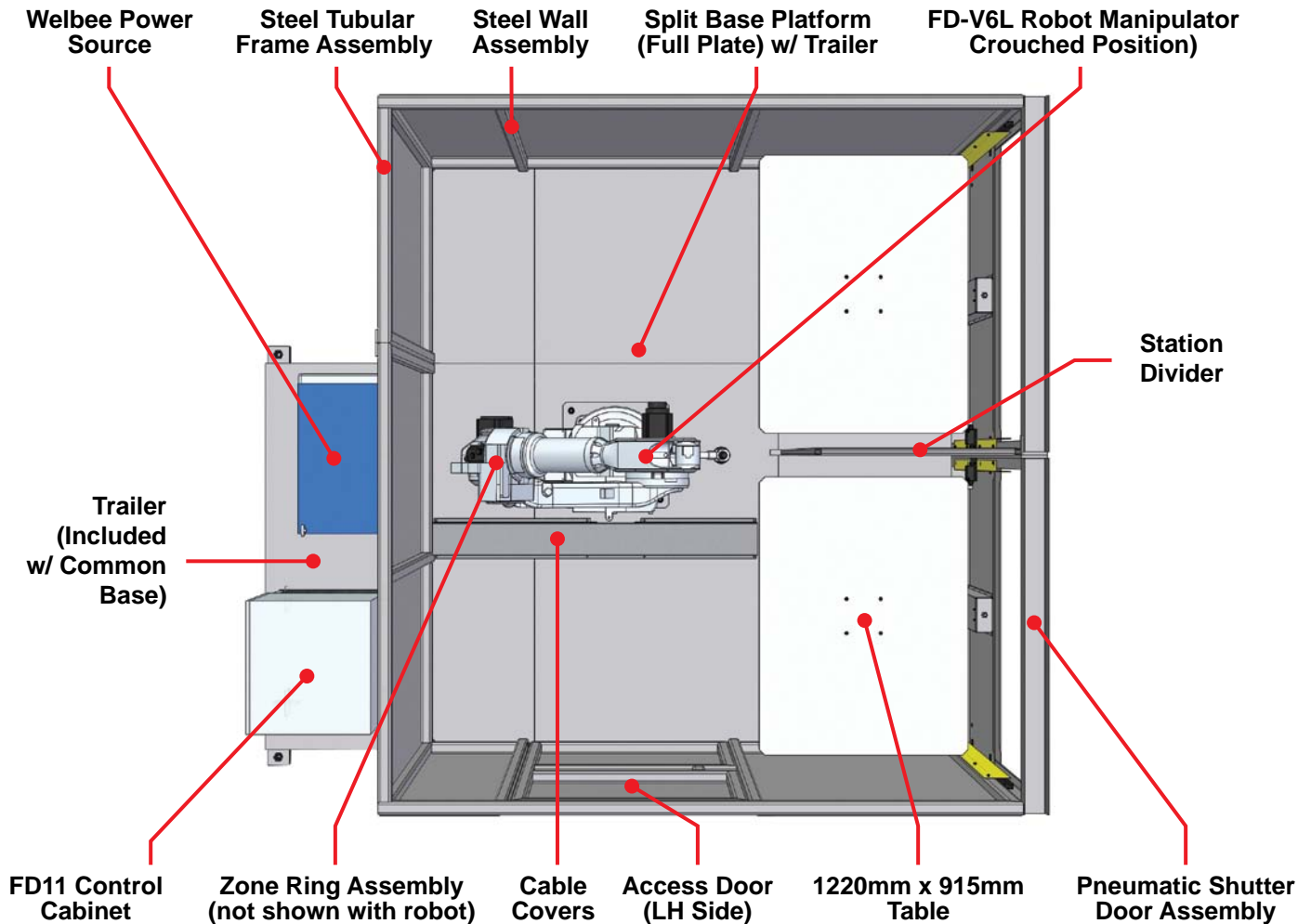
- A2PF-300
- A2PF-500
- A2PF-1000

**Available I/O Slots:** 28 Inputs/26 Outputs  
(Additional Power Supply needed for Outputs)

### Other Options:

- Full Base Design (ECO-ARC 200)
- Mesh Fencing on Full Base
- Access Door on RH Side
- Pneumatic Shutter Door Assembly
- Station Lighting
- Torch Cleaning Station
- Fixture Mounting Pattern in Table Top
- Extended I/O
- Trailer (Base)

# ECO-ARC 200L



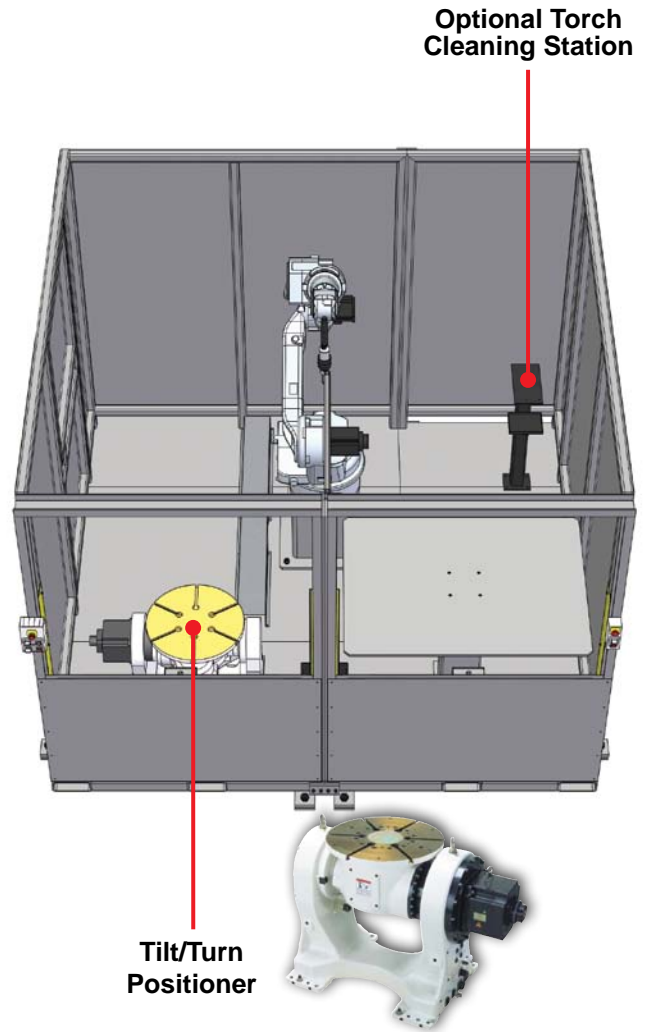
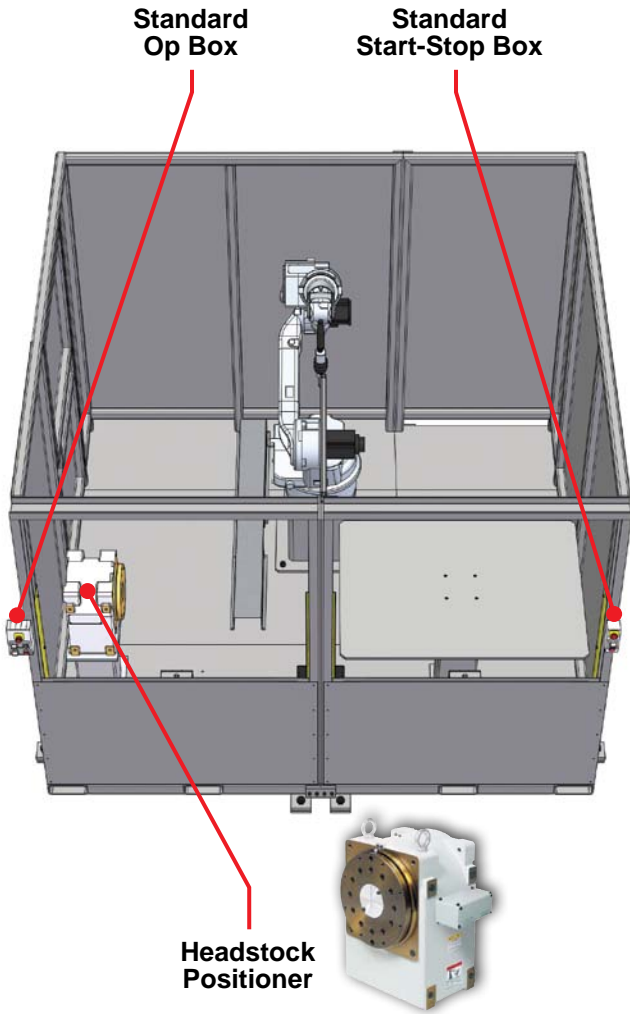
## Standard Option:

**ECO-ARC 200L** – 2 stationary tables with long reach robot manipulator (FD-V6L)

### Details:

- Pneumatic shutter doors
- Zone Ring for station designation
- Standard fork lift pockets in split base for easy movement

- Steel wall station divider
- Table Top Dimensions: 1220mm x 915mm
- Weight – Approx. 3500kg



## Specifications:

### Footprint Dimensions:

Width: 3394mm (133.6")

Height: 2148mm (84.6")

Depth: 4065mm (160.0")

### Manipulator Types:

- FD-V6L
- FD-B4L

### Cell Options:

- 2 Stationary Tables
- Positioner/Table
- 2 Positioners

### Headstock Options:

- A2PB-250
- A2PB-500
- A2PB-1000



### Tilt/Turn Options:

- A2PF-300
- A2PF-500
- A2PF-1000

### Available I/O Slots:

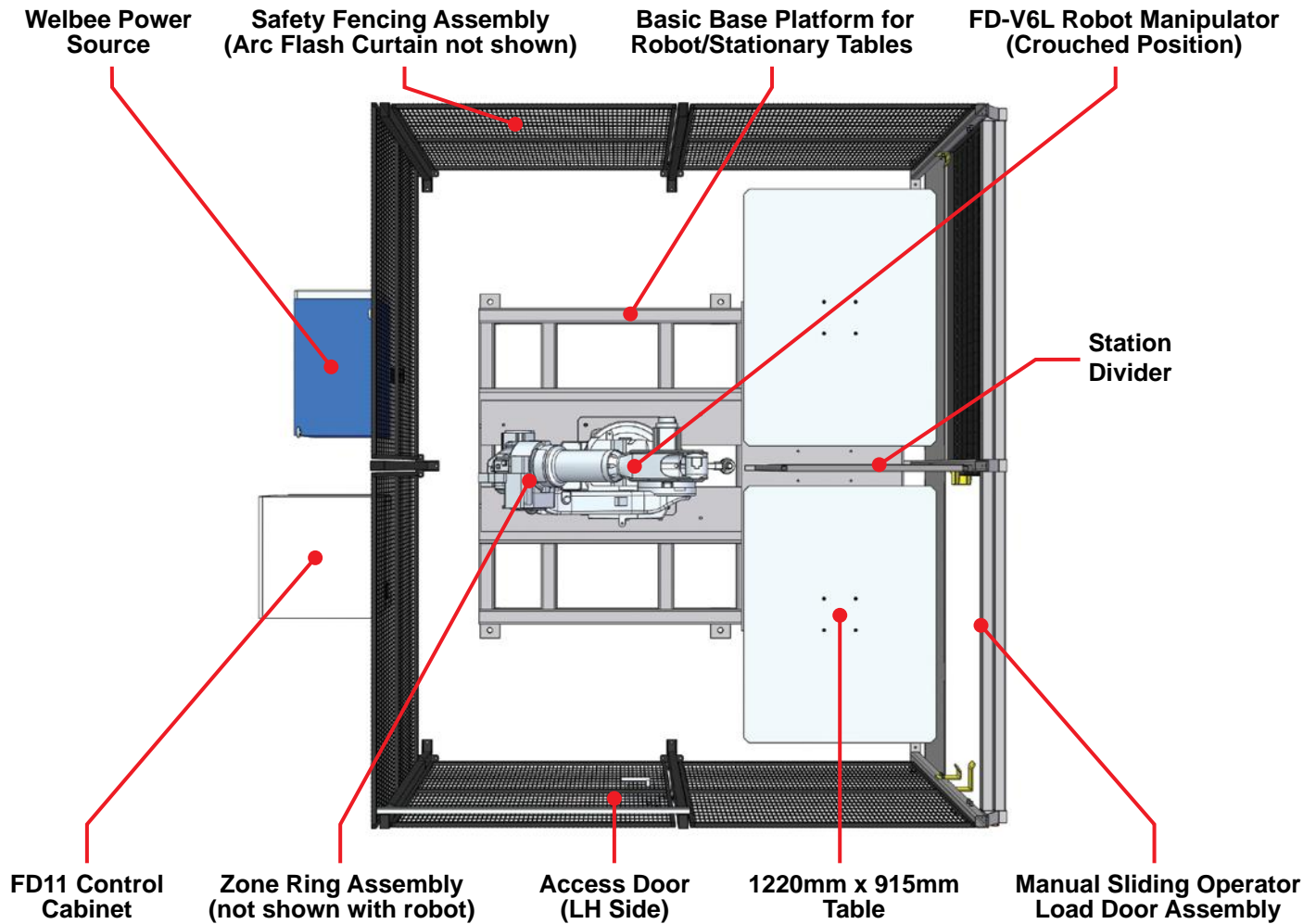
28 Inputs/26 Outputs

(Additional Power Supply needed for Outputs)

### Other Options:

- Basic Base Design (ECO-ARC 200LB)
- Safety Fencing on Floor
- Safety Fencing on Full Base
- Access Door on RH Side
- Manual Sliding Door Assembly
- Station Lighting
- Torch Cleaning Station
- Fixture Mounting Pattern in Table Top
- Extended I/O

# ECO-ARC 200LB

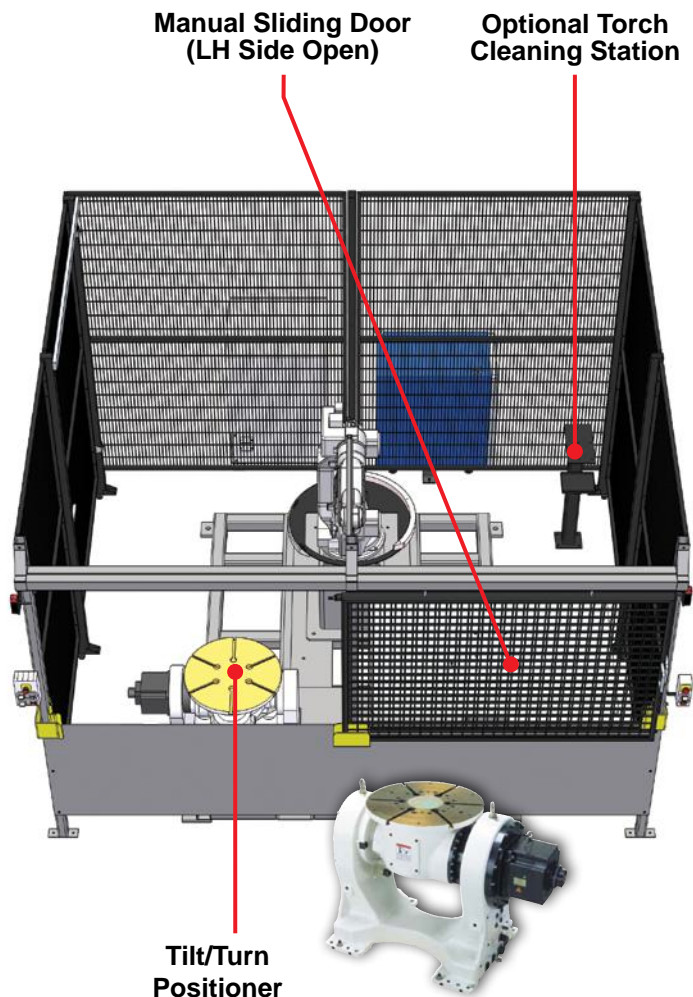
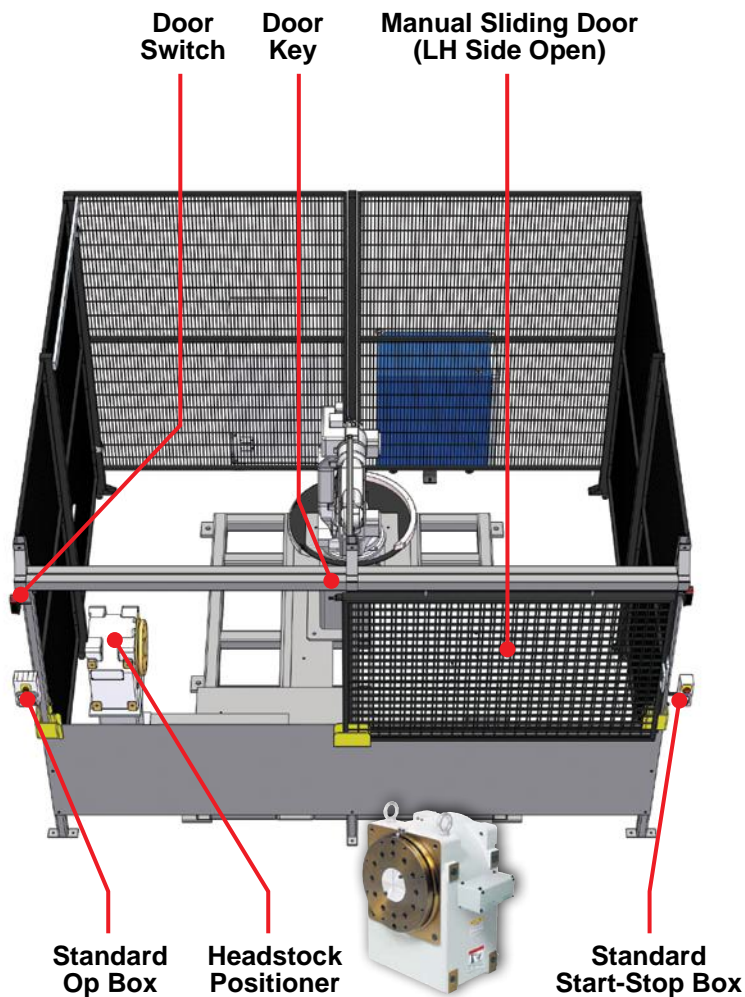


## Standard Option:

**ECO-ARC 200LB** – 2 stationary tables with long reach robot manipulator (FD-V6L)

### Details:

- Manual sliding operator load doors
- Zone Ring for station designation
- Standard fork lift pockets in base for easy movement
- Steel wall station divider
- Tabletop Dimensions: 1220mm x 915mm
- Weight – Approx. 2000kg
- Floor mounted safety fencing w/ arc flash curtains



## Specifications:

### Footprint Dimensions:

Width: 3294mm (129.7")  
 Height: 2200mm (86.6")  
 Depth: 3726mm (146.7")

### Manipulator Types:

- FD-V6L
- FD-B4L

### Cell Options:

- 2 Stationary Tables
- Positioner/Table
- 2 Positioners

### Headstock Options:

- A2PB-250
- A2PB-500
- A2PB-1000



### Tilt/Turn Options:

- A2PF-300
- A2PF-500
- A2PF-1000

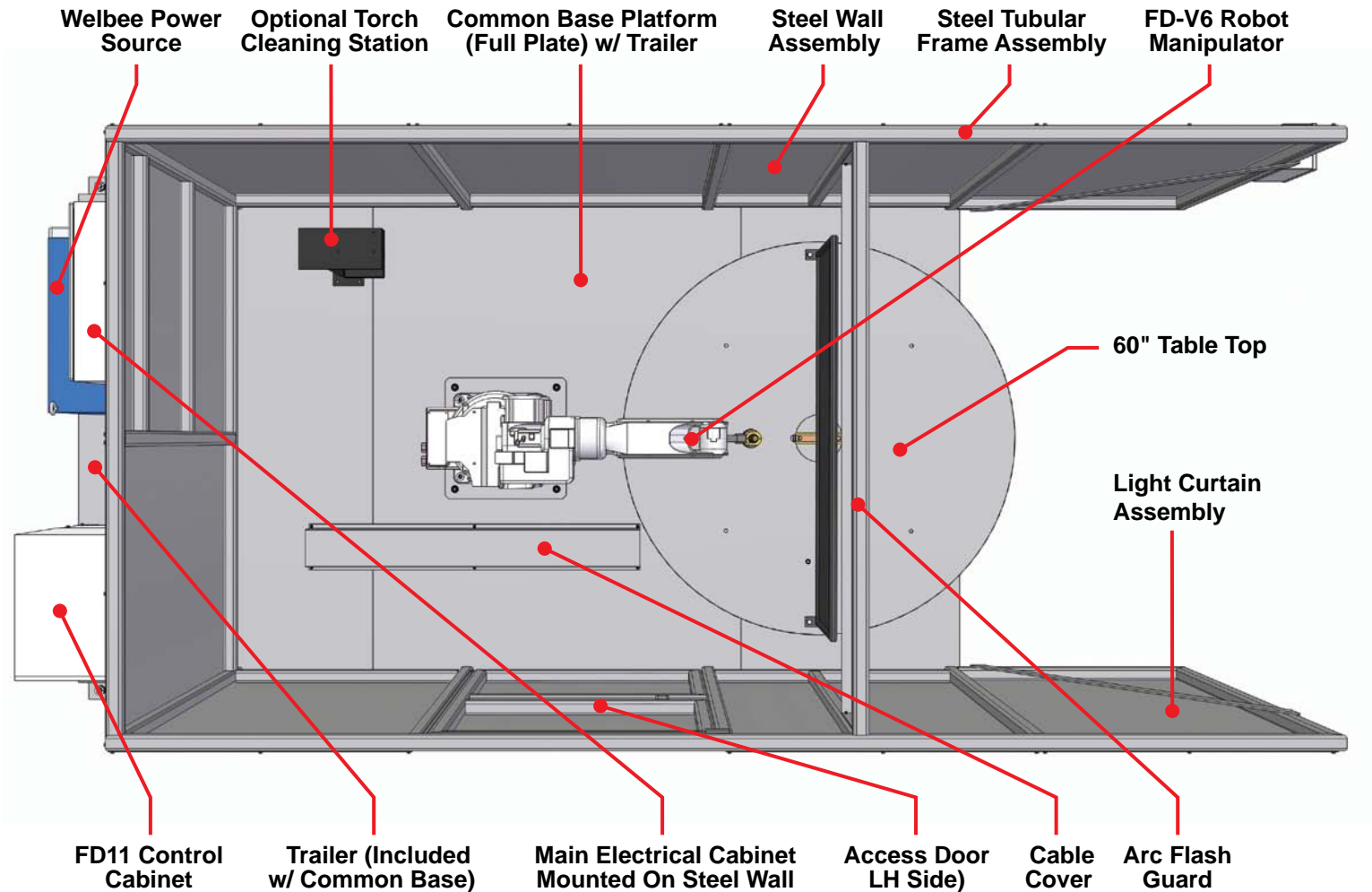
### Available I/O Slots:

28 Inputs/26 Outputs  
 (Additional Power Supply needed for Outputs)

### Other Options:

- Full Base & Wall Design (ECO-ARC 200L)
- Mesh Fencing on Full Base
- Access Door on RH Side
- Pneumatic Shutter Door Assembly
- Station Lighting
- Torch Cleaning Station
- Fixture Mounting Pattern in Table Top
- Extended I/O
- Trailer (Base)

# PT-ARC 600



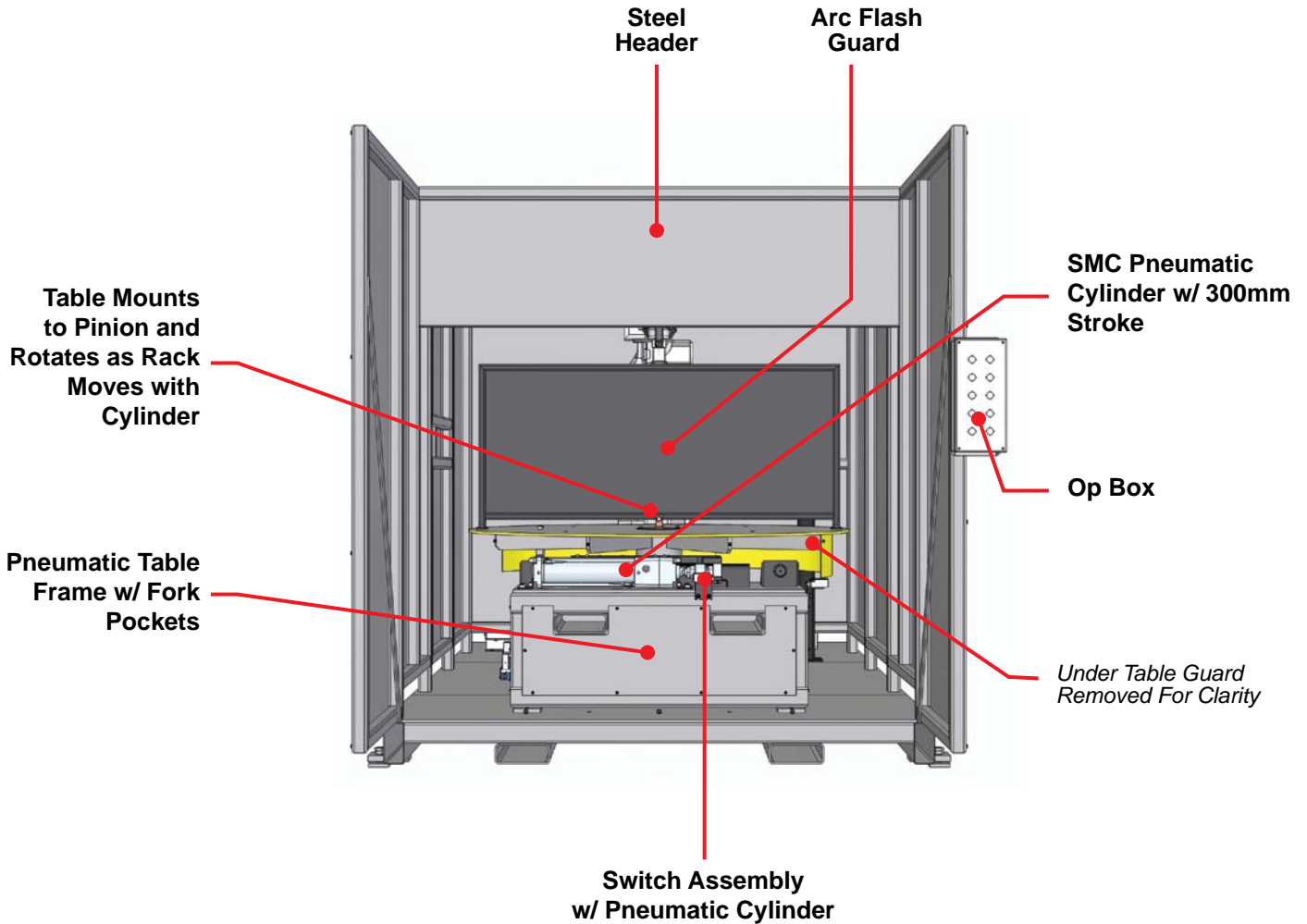
## Standard Option:

**PT-ARC 600** – 60" pneumatic indexing table

### Details:

- SMC 300mm Stroke Pneumatic Cylinder
- Omron 1495mm Light Curtains
- Omron Limit Switches for station designation
- Index Speed (180°) - 4.2 seconds
- Work Capacity – 250kg/side

- Weight – Approx. 3500kg
- Standard fork lift pockets
- Rack and Pinion Design



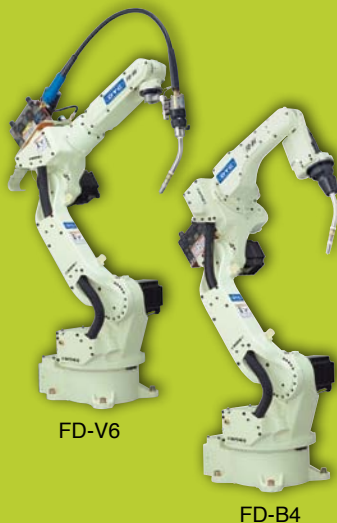
## Specifications:

### Footprint Dimensions:

Width: 2200mm (86.6")  
 Height: 2235mm (88.0")  
 Depth: 4584mm (180.5")

### Manipulator Types:

- FD-V6
- FD-B4



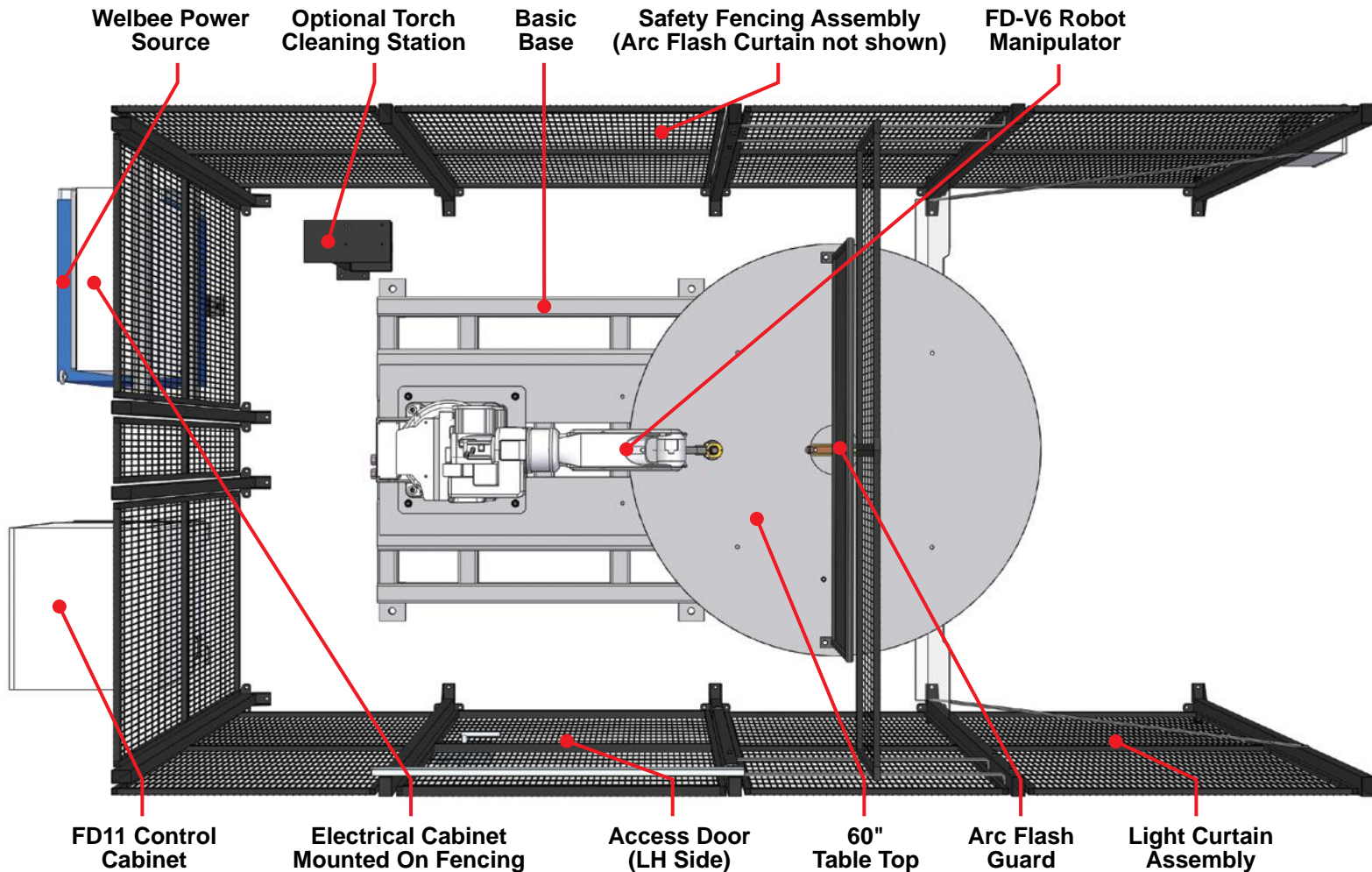
### Available I/O Slots:

22 Inputs/21 Outputs  
 (Additional Power Supply needed for Outputs)

## Additional Options:

- Fixture mounting pattern in table top
- Torch cleaning station
- Station Lighting
- Access door on RH side
- Safety Fence on Full Base
- Basic Layout (PT-ARC 600B)
- Extended I/O

# PT-ARC 600B



## Standard Option:

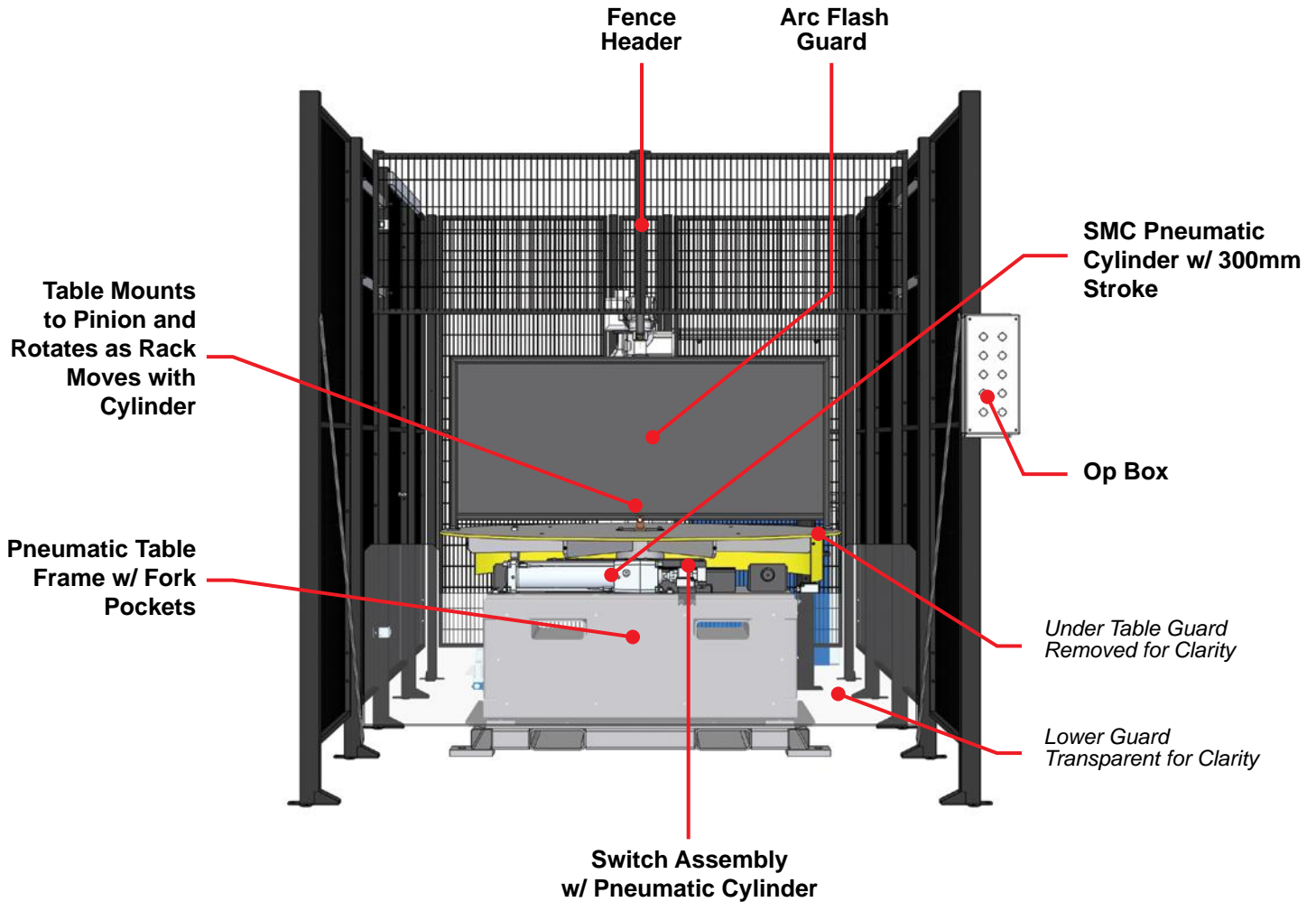
**PT-ARC 600B** – 60" pneumatic indexing table

### Details:

- SMC 300mm Stroke Pneumatic Cylinder
- Omron 1495mm Light Curtains
- Omron Limit Switches for station designation
- Index Speed (180°) - 4.2 seconds
- Work Capacity – 250kg/side
- Weight – Approx. 2000kg

- Standard fork lift pockets
- Rack and Pinion Design
- Floor mounted safety fencing w/ arc flash curtains





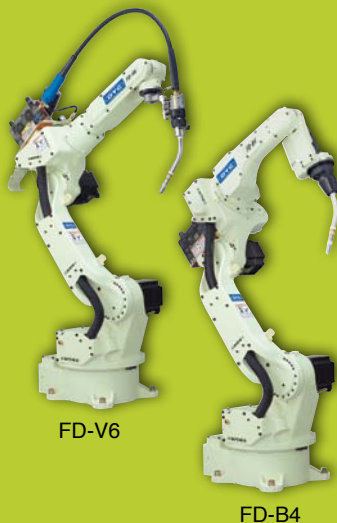
## Specifications:

### Footprint Dimensions:

Width: 2187mm (86.1")  
 Height: 2200mm (86.6")  
 Depth: 4564mm (179.7")

### Manipulator Types:

- FD-V6
- FD-B4



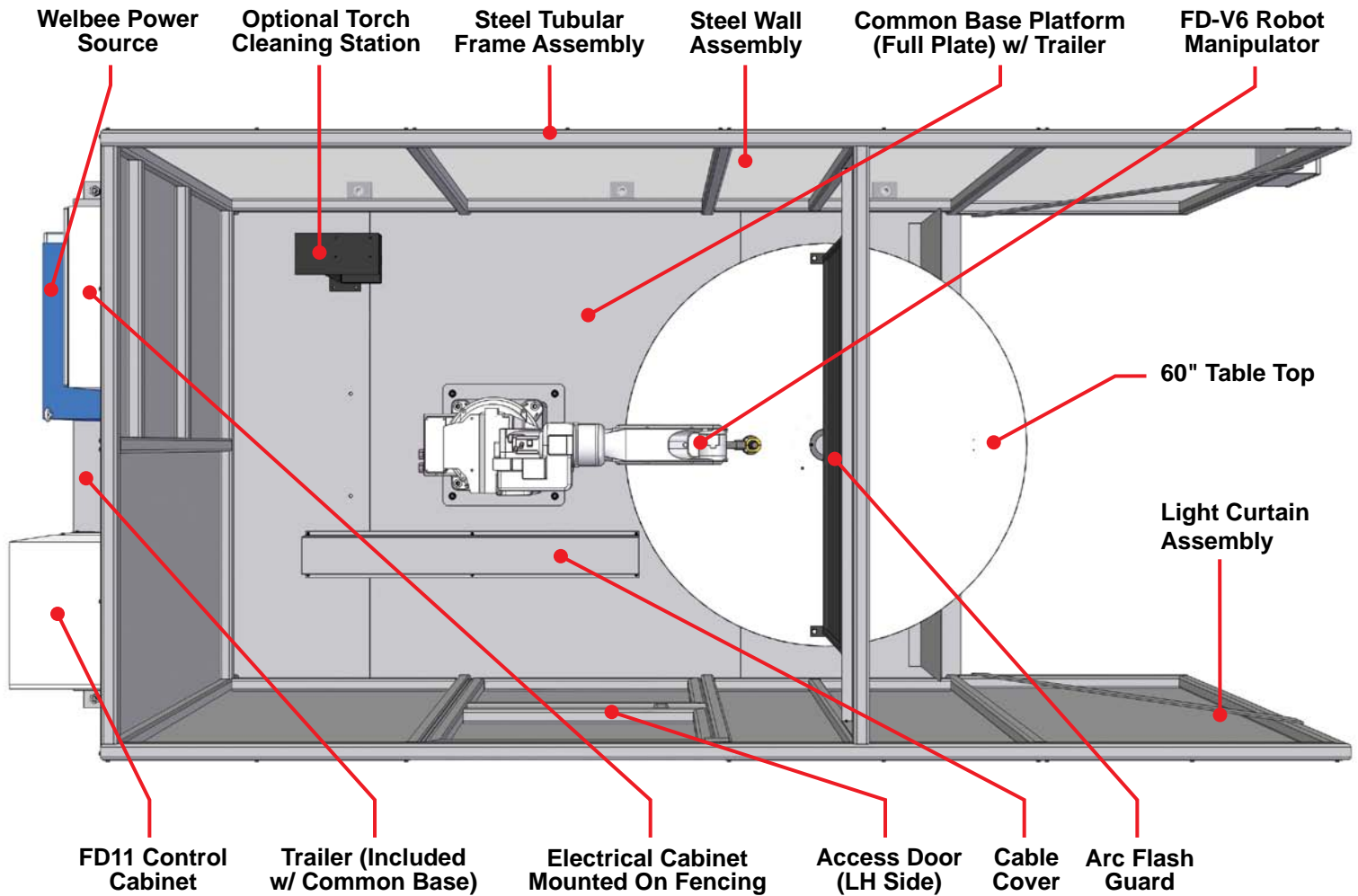
## Additional Options:

- Fixture mounting pattern in table top
- Torch cleaning station
- Station Lighting
- Access door on RH side
- Standard Layout (PT-ARC 600)
- Extended I/O

### Available I/O Slots:

28 Inputs/26 Outputs  
 (Additional Power Supply needed for Outputs)

# SERVO-ARC 600



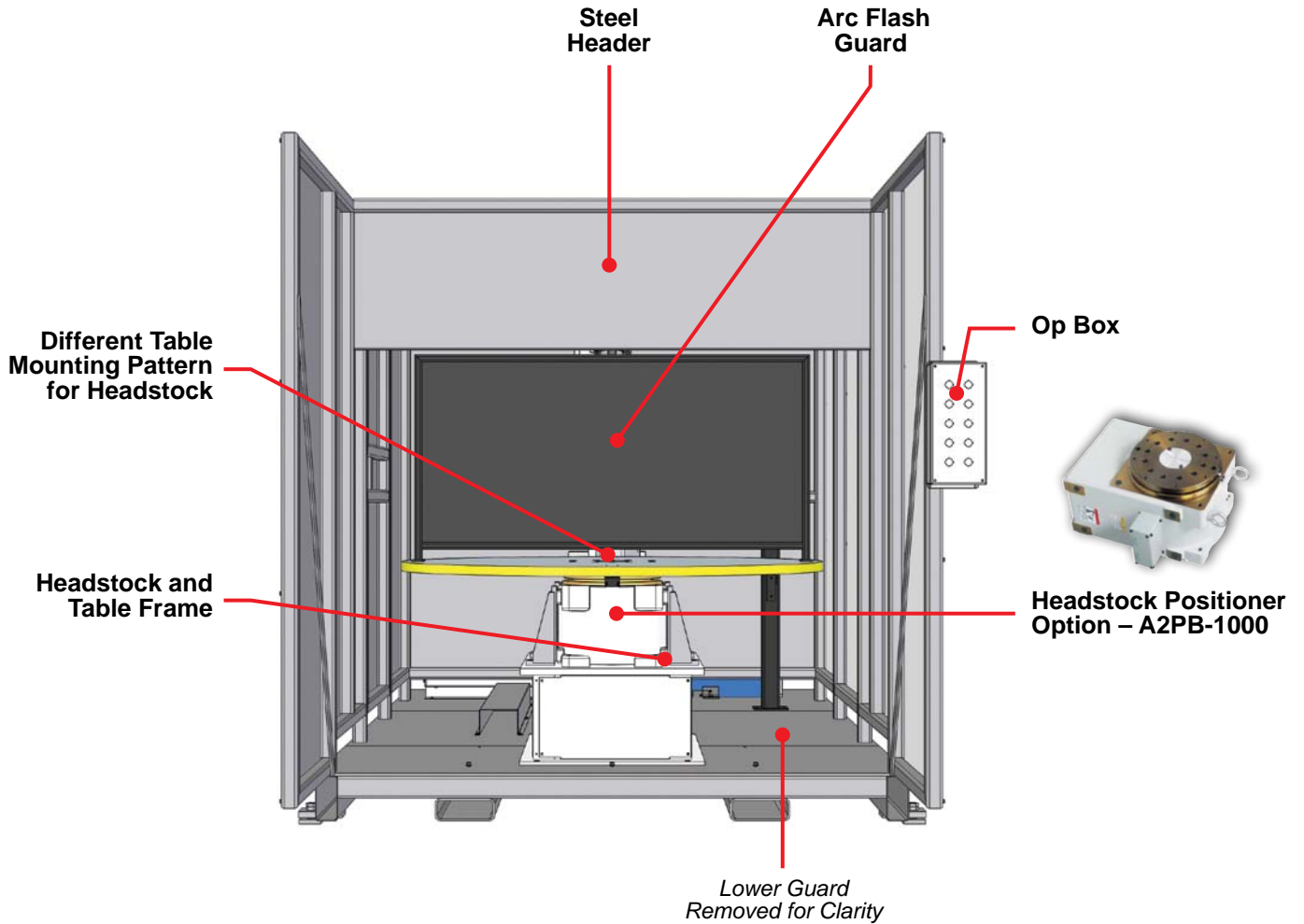
## Standard Option:

**SERVO-ARC 600** – 60" servo-driven indexing table

### Details:

- 1.2kW Servo-motor, RV-40E Gearbox
- Omron 1495mm Light Curtains
- Omron Switch/Two Actuators for station designation
- 3" through hole diameter in table top
- Index Speed (180°) - 4.2 seconds

- Work Capacity – 250kg/side
- Weight – Approx. 3000kg
- Standard fork lift pockets



## Specifications:

### Footprint Dimensions:

Width: 2200mm (86.6")  
 Height: 2235mm (88.0")  
 Depth: 4584mm (180.5")

### Manipulator Types:

- FD-V6
- FD-B4



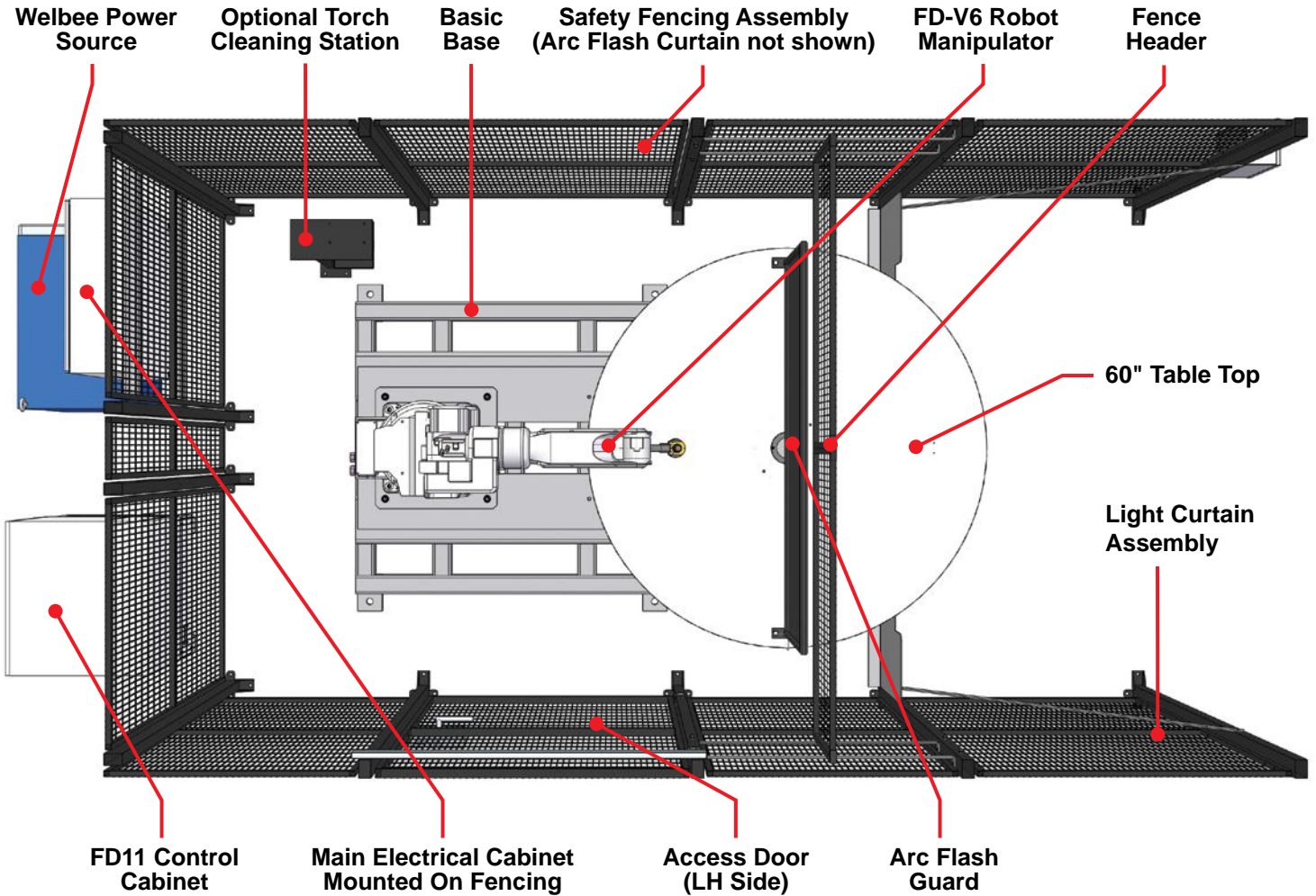
### Available I/O Slots:

23 Inputs/24 Outputs  
 (Additional Power Supply needed for Outputs)

## Additional Options:

- A2PB-1000 Headstock instead of servo-table
- Fixture mounting pattern in table top
- Torch cleaning station
- Station Lighting
- Access door on RH side
- Safety Fence on Full Base
- 48" Table Top
- Basic Layout (SERVO-ARC 600B)
- Extended I/O

# SERVO-ARC 600B



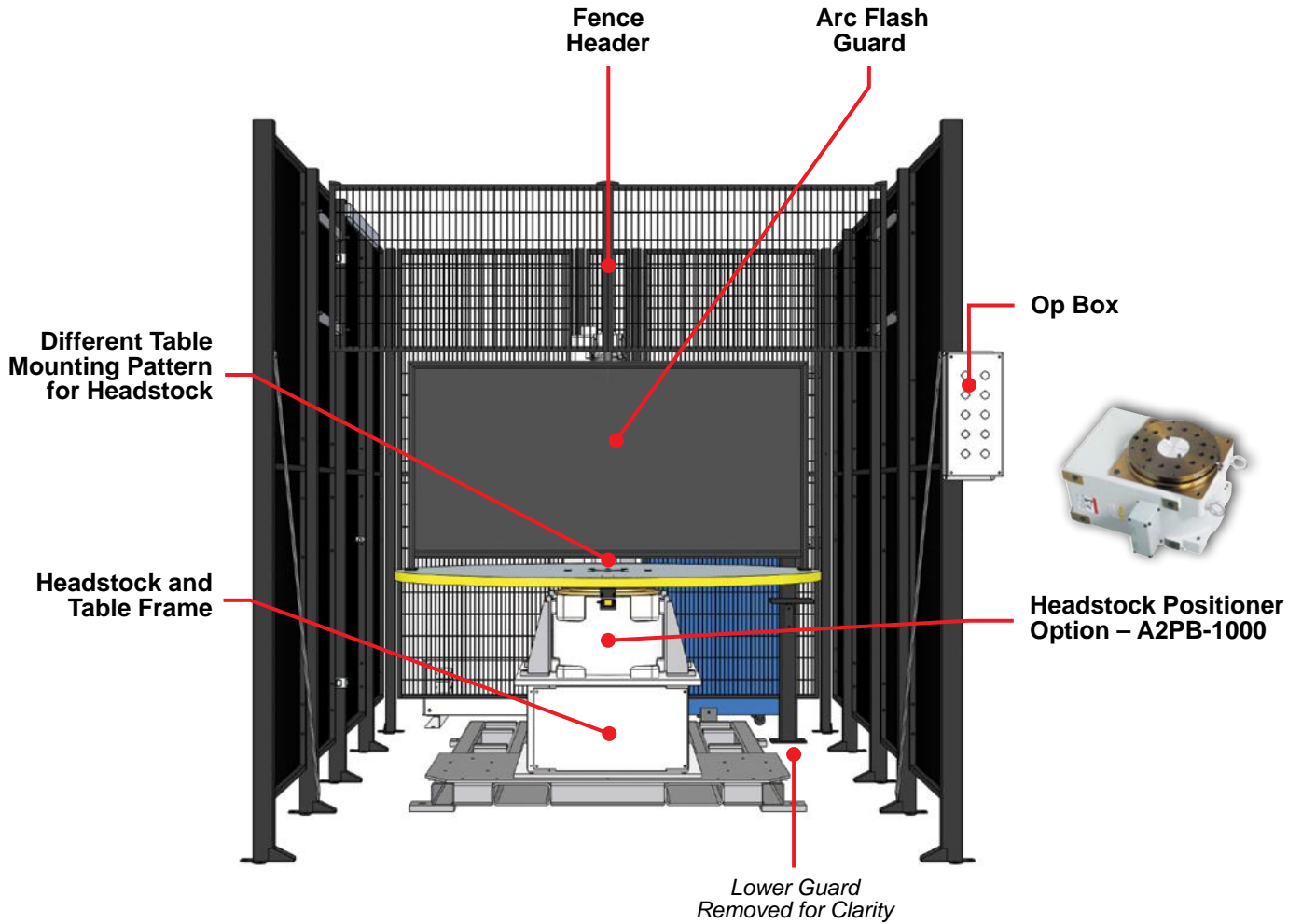
## Standard Option:

**SERVO-ARC 600B** – 60" servo-driven indexing table

### Details:

- 1.2kW Servo-motor, RV-40E Gearbox
- Omron 1495mm Light Curtains
- Omron Switch/Two Actuators for station designation
- 3" through hole diameter in table top
- Index Speed (180°) - 4.2 seconds

- Work Capacity – 250kg/side
- Weight – Approx. 2000kg
- Standard fork lift pockets
- Floor mounted safety fencing w/ arc flash curtains



## Specifications:

### Footprint Dimensions:

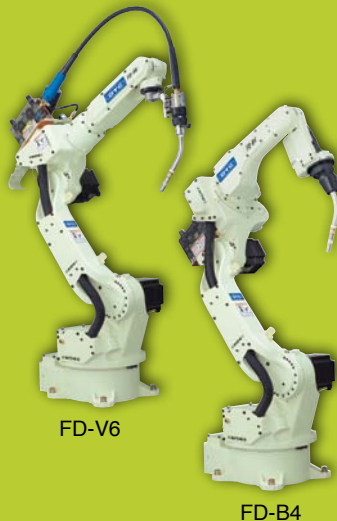
Width: 2187mm (86.1")  
 Height: 2200mm (86.6")  
 Depth: 4564mm (179.7")

### Manipulator Types:

- FD-V6
- FD-B4

### Available I/O Slots:

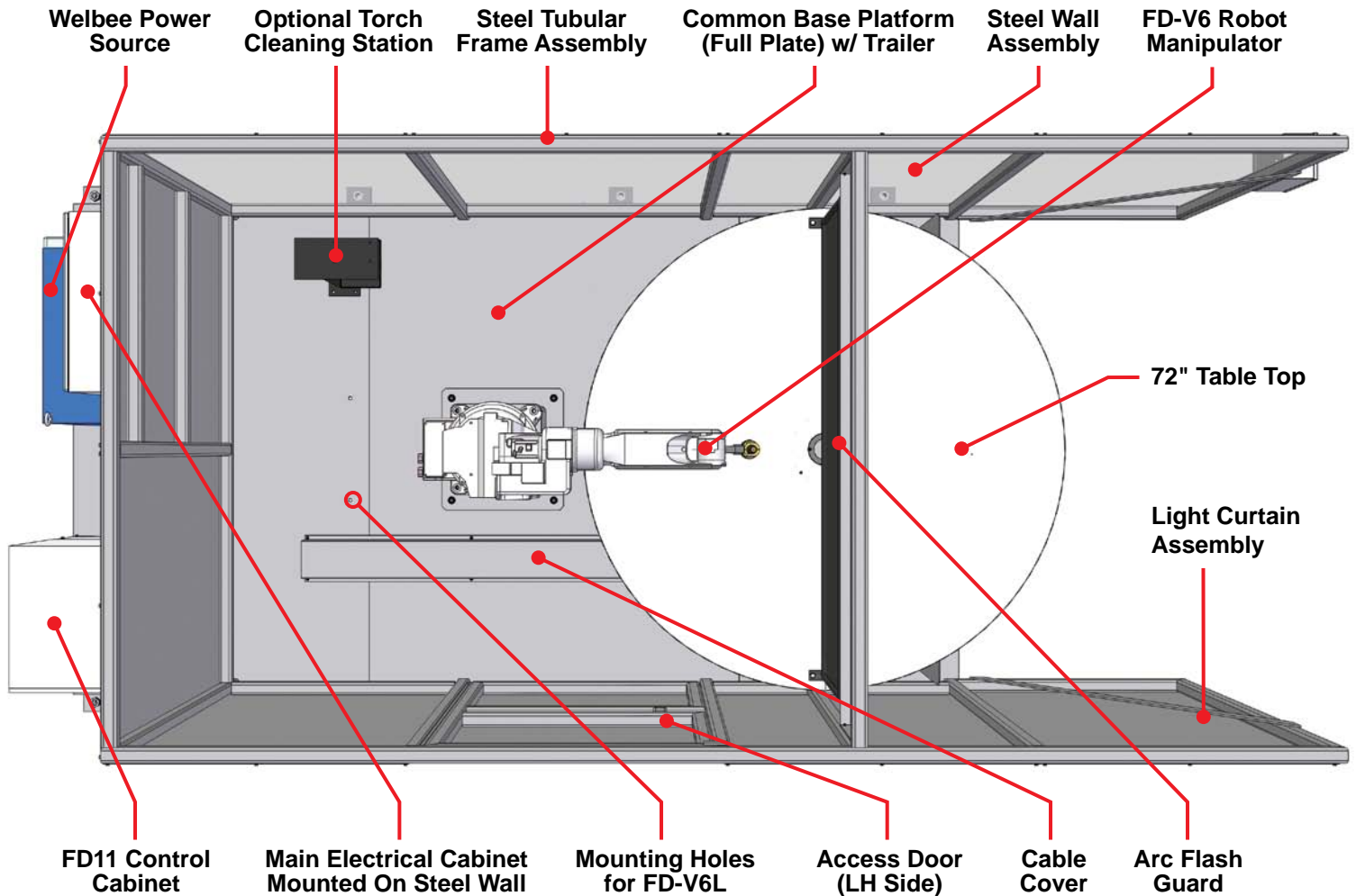
23 Inputs/24 Outputs  
 (Additional Power Supply needed for Outputs)



## Additional Options:

- A2PB-1000 Headstock instead of servo-table
- Fixture mounting pattern in table top
- Torch cleaning station
- Station Lighting
- Access door on RH side
- Safety Fence on Full Base
- 48" Table Top
- Standard Layout (SERVO-ARC 600)
- Extended I/O
- Trailer (Base)

# SERVO-ARC 720



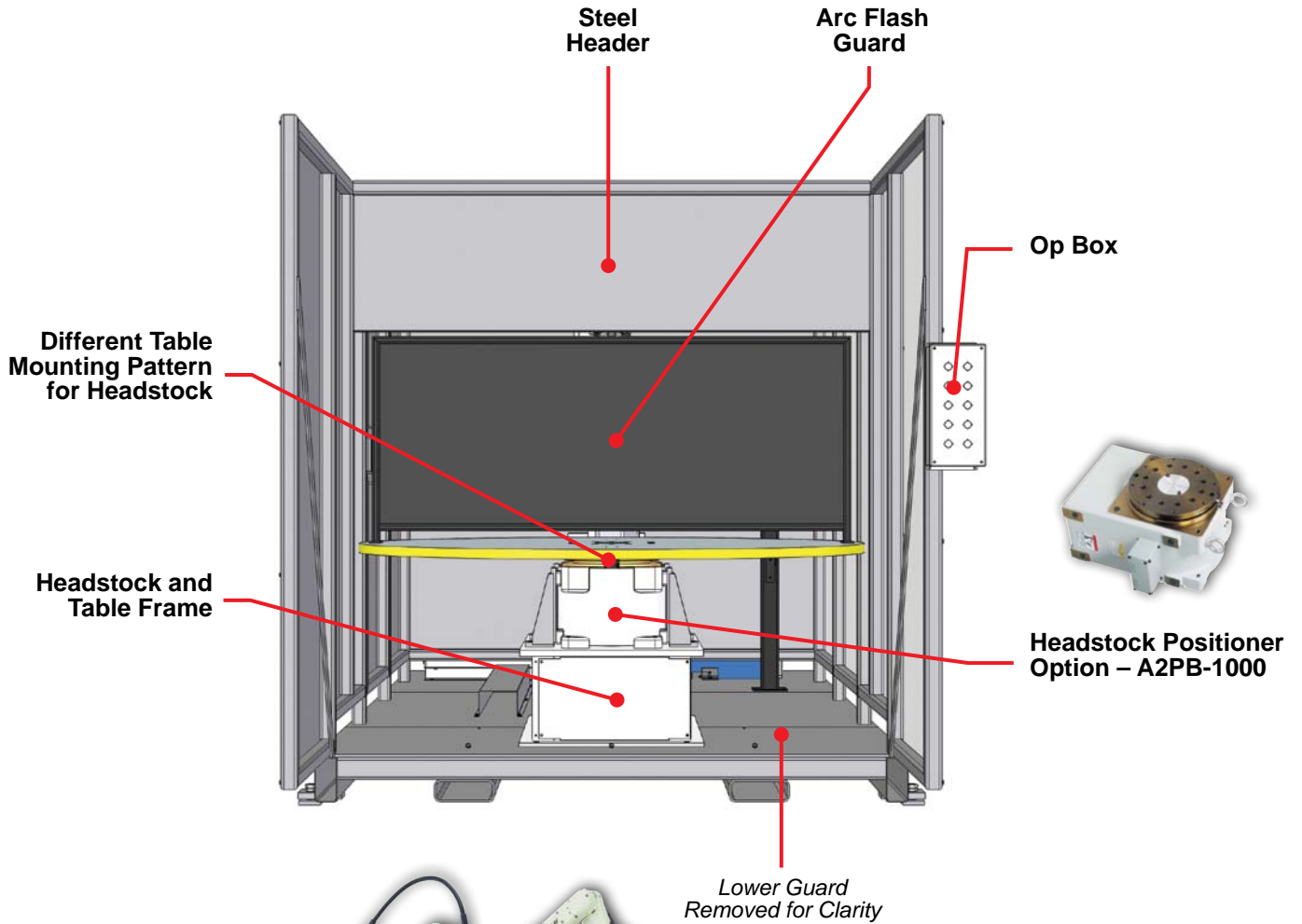
## Standard Option:

**SERVO-ARC 720** – 72" servo-driven indexing table

### Details:

- 1.2kW Servo-motor, RV-40E Gearbox
- Omron 1495mm Light Curtains
- Omron Switch/Two Actuators for station designation
- 3" through hole diameter in table top
- Index Speed (180°) - 4.2 seconds

- Work Capacity – 250kg/side
- Weight – Approx. 3200kg
- Standard fork lift pockets



**Specifications:**

**Footprint Dimensions:**

- Width: 2200mm (86.6")
- Height: 2235mm (88.0")
- Depth: 4584mm (180.5")

**Manipulator Types:**

- FD-V6, FD-V6L
- FD-B4, FD-B4L

**Available I/O Slots:**

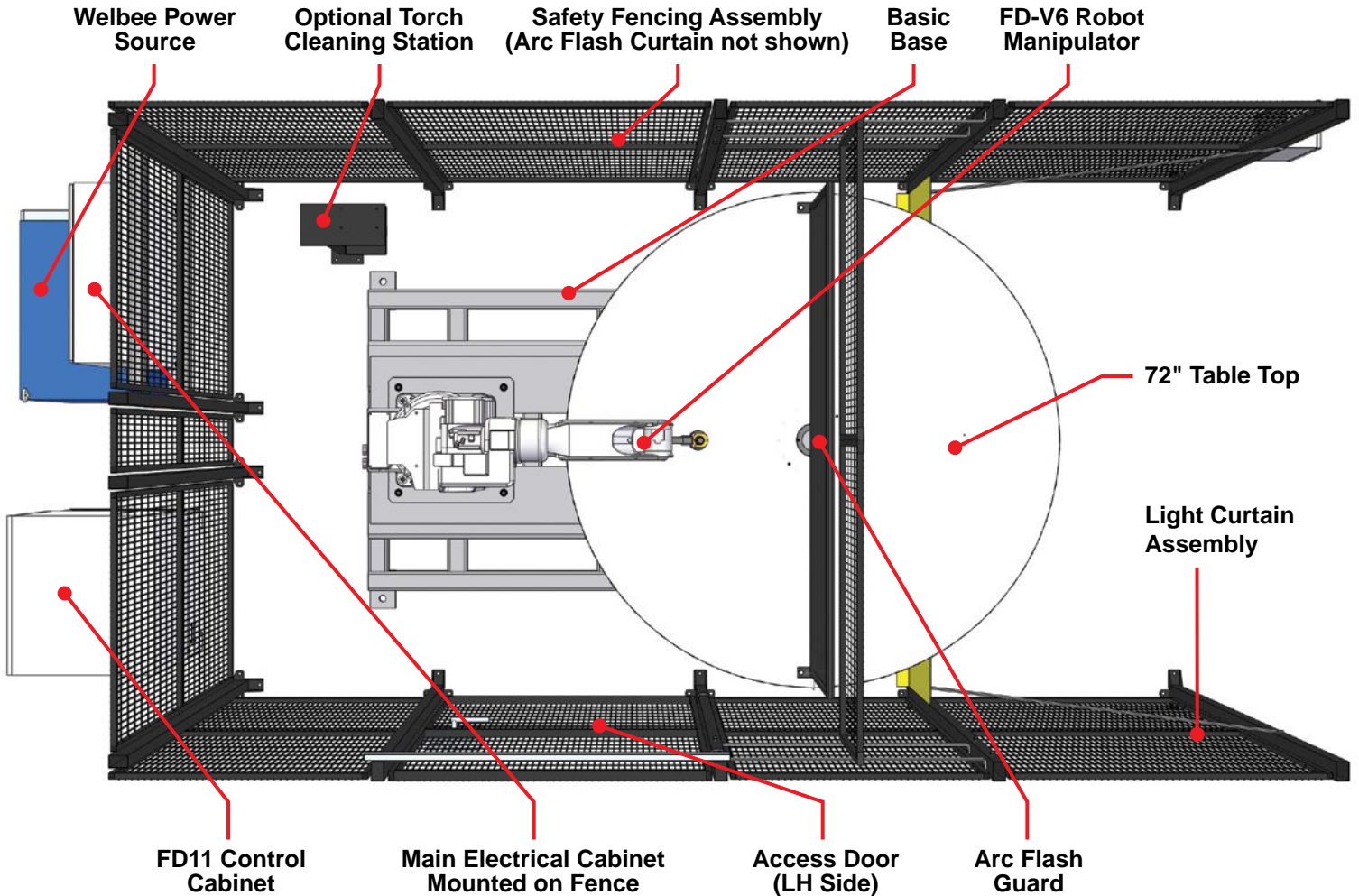
23 Inputs/24 Outputs  
(Additional Power Supply needed for Outputs)



**Additional Options:**

- A2PB-1000 Headstock instead of servo-table
- Fixture mounting pattern in table top
- Torch cleaning station
- Station Lighting
- Access door on RH side
- Safety Fence on Full Base
- Dual Manipulators
- Basic Layout (SERVO-ARC 720B)
- Extended I/O

# SERVO-ARC 720B



## Standard Option:

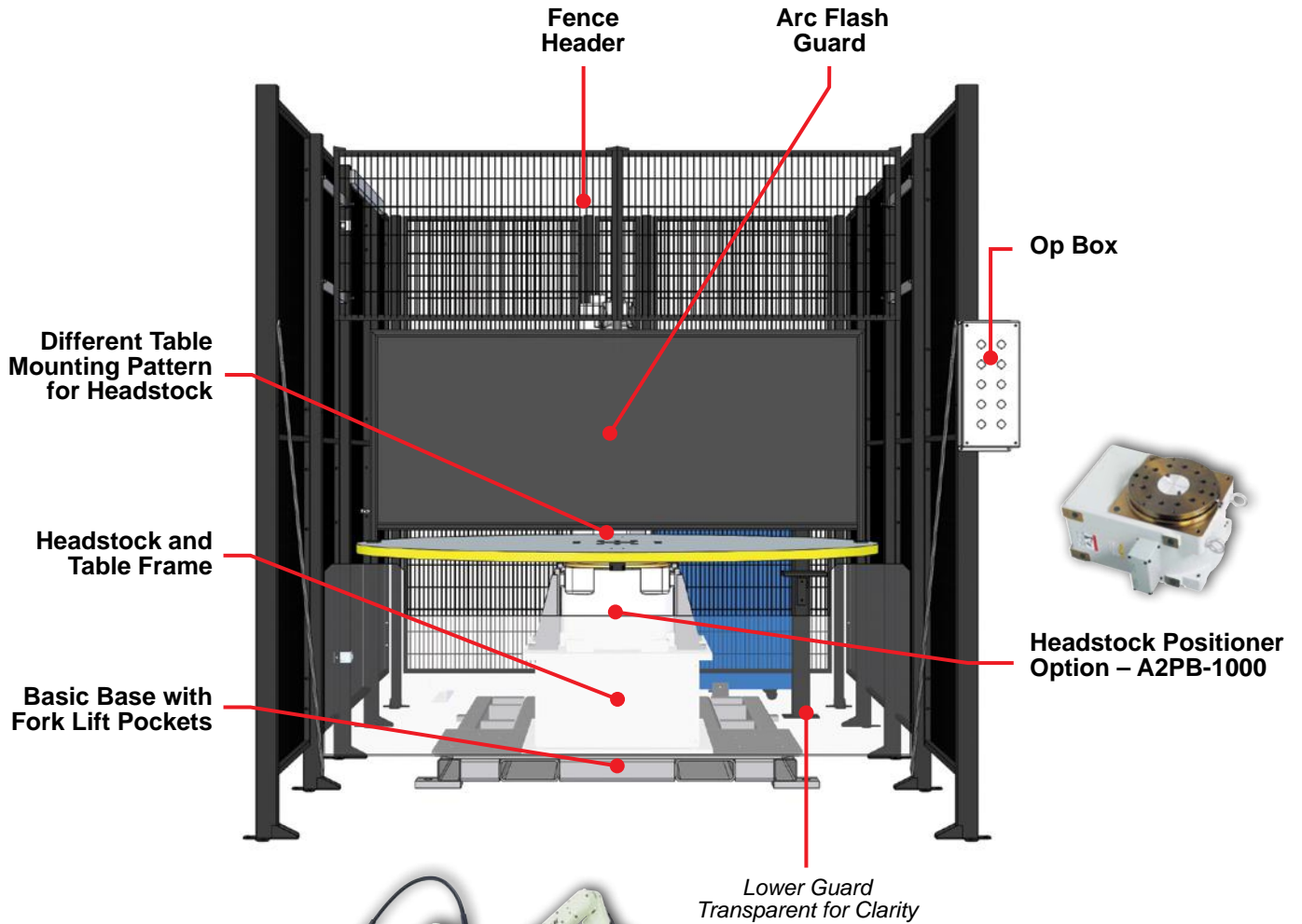
**SERVO-ARC 720B** – 72" servo-driven indexing table

### Details:

- 1.2kW Servo-motor, RV-40E Gearbox
- Omron 1495mm Light Curtains
- Omron Switch/Two Actuators for station designation
- 3" through hole diameter in table top
- Index Speed (180°) - 4.2 seconds

- Work Capacity – 250kg/side
- Weight – Approx. 2200kg
- Standard fork lift pockets
- Floor mounted safety fencing w/ arc flash curtains





## Specifications:

### Footprint Dimensions:

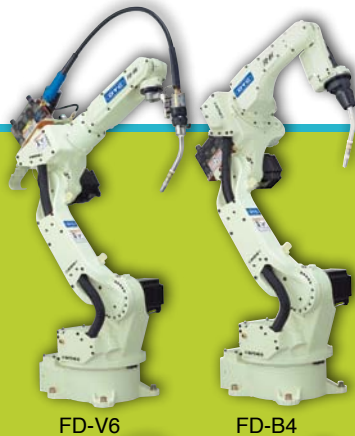
- Width: 2187mm (86.1")
- Height: 2200mm (86.6")
- Depth: 4564mm (179.7")

### Manipulator Types:

- FD-V6, FD-V6L
- FD-B4, FD-B4L

### Available I/O Slots:

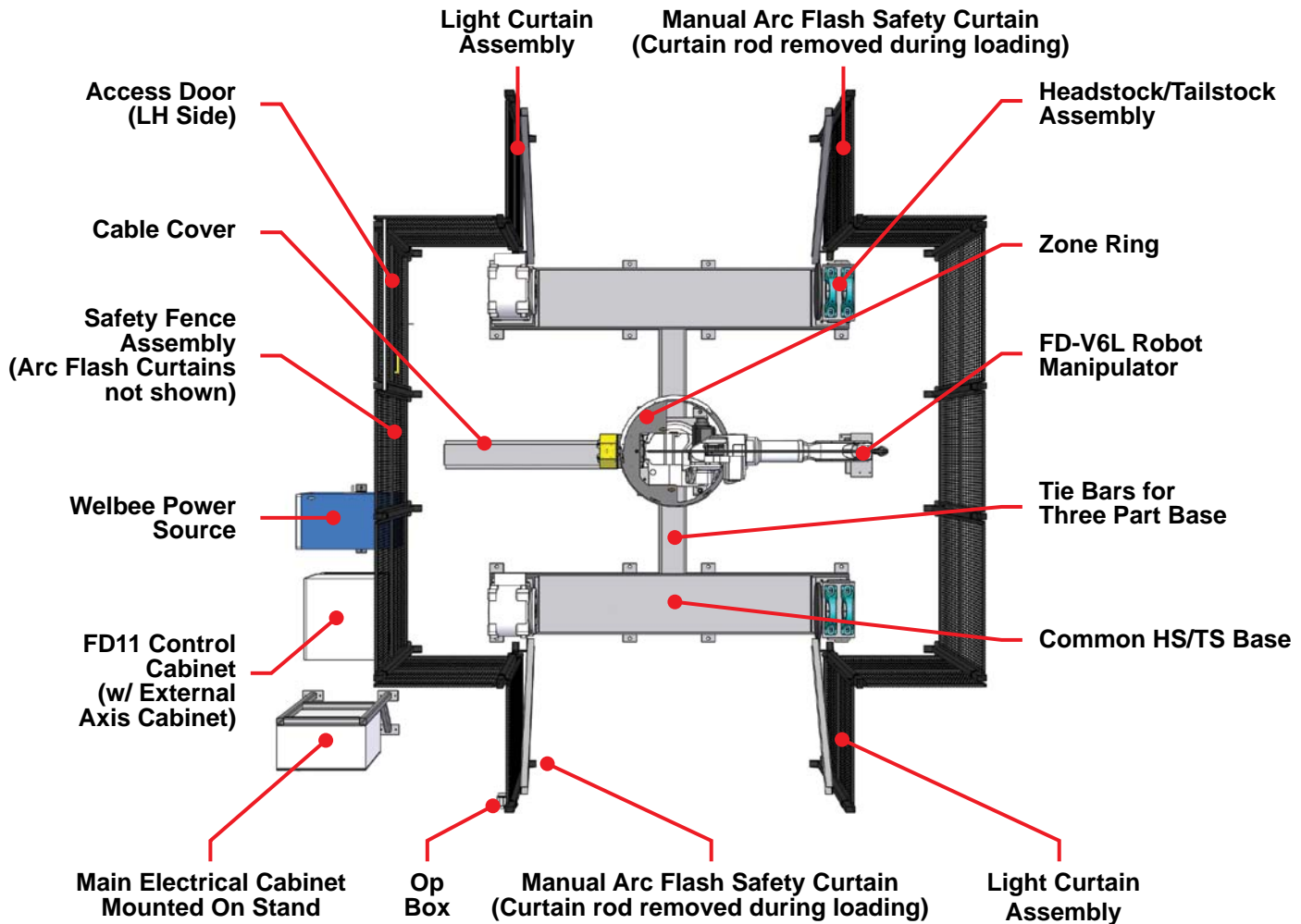
23 Inputs/24 Outputs  
(Additional Power Supply needed for Outputs)



## Additional Options:

- A2PB-1000 Headstock instead of servo-table
- Fixture mounting pattern in table top
- Torch cleaning station
- Station Lighting
- Access door on RH side
- Dual Manipulators
- Standard Layout (SERVO-ARC 720)
- Extended I/O
- Trailer (Base)

# DT-ARC 500

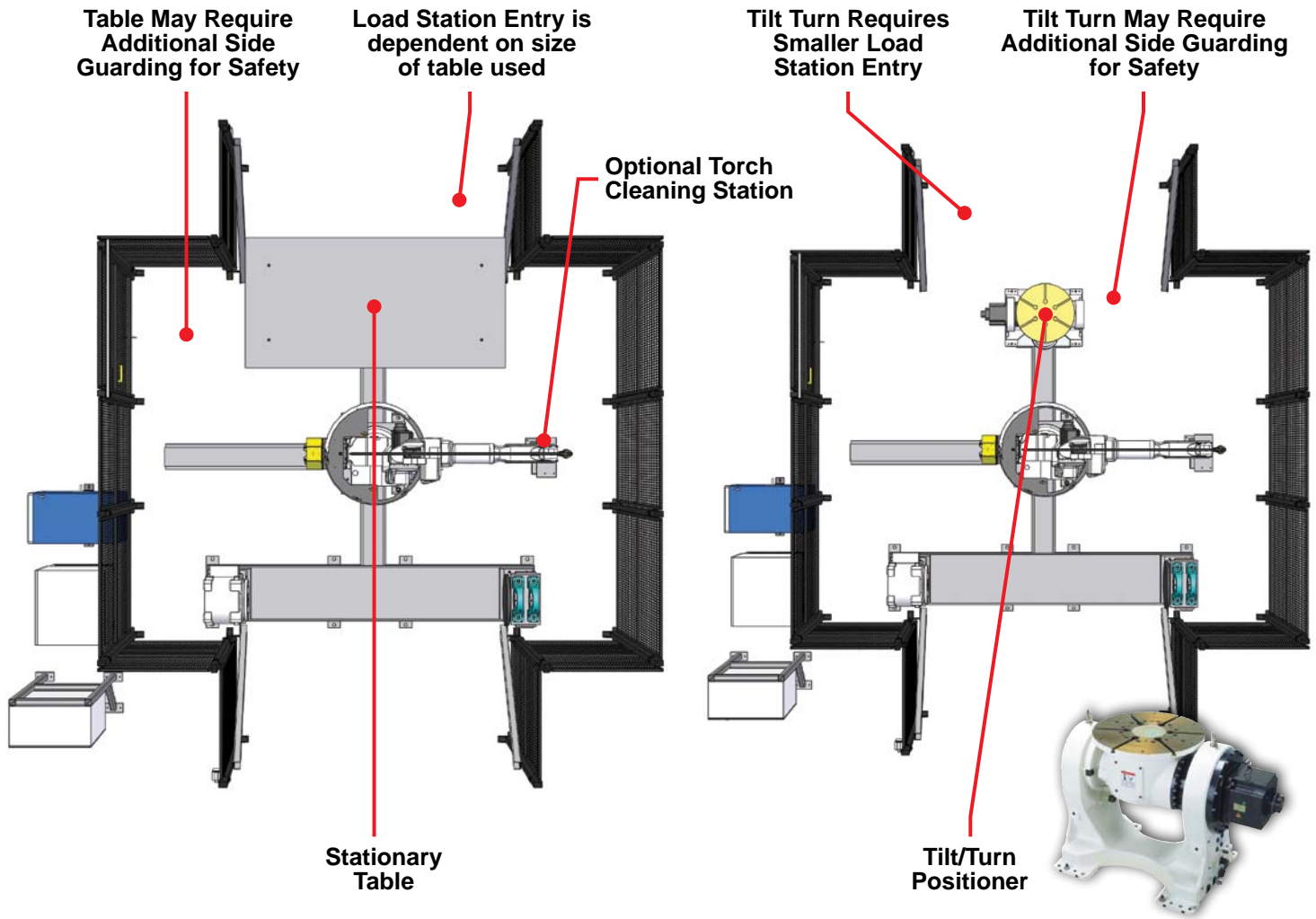


## Standard Option:

**DT-ARC 500** – Dual Servo-controlled Head and Tailstock Positioning Cell

### Details:

- Dual A2PB-500 Headstock positioners
- Work Capacity – 500kg/side
- Omron 1495mm Light Curtains
- Manual arc flash safety curtain at individual operator stations
- Weight – Approx. 3000kg
- Common base for HS/TS Assembly
- Three part base connected with tie bars
- Standard HS/TS span: 2000mm
- Maximum span: 3100mm
- HS/TS swing diameter: 1000mm
- Zone Ring for station designation
- Access door on LH side
- Arc flash curtain for cross station protection
- Floor mounted safety fencing w/ arc flash curtains



## Specifications:

### Footprint Dimensions:

Width: 4188mm (165")  
 Height: 2360mm (93")  
 Depth: 5770mm (227")

### Manipulator Types:

• FD-V6L • FD-B4L

### Cell Options:

• Stationary Table(s)  
 • H/S-T/S Assembly(s)  
 • Tilt/Turn Positioner(s)

### Headstock Options:

• A2PB-250 (250kg) • A2PB-1000 (1000kg)



### Tilt/Turn Options:

• A2PF-300 (300kg) • A2PF-500 (500kg)  
 • A2PF-1000 (1000kg)

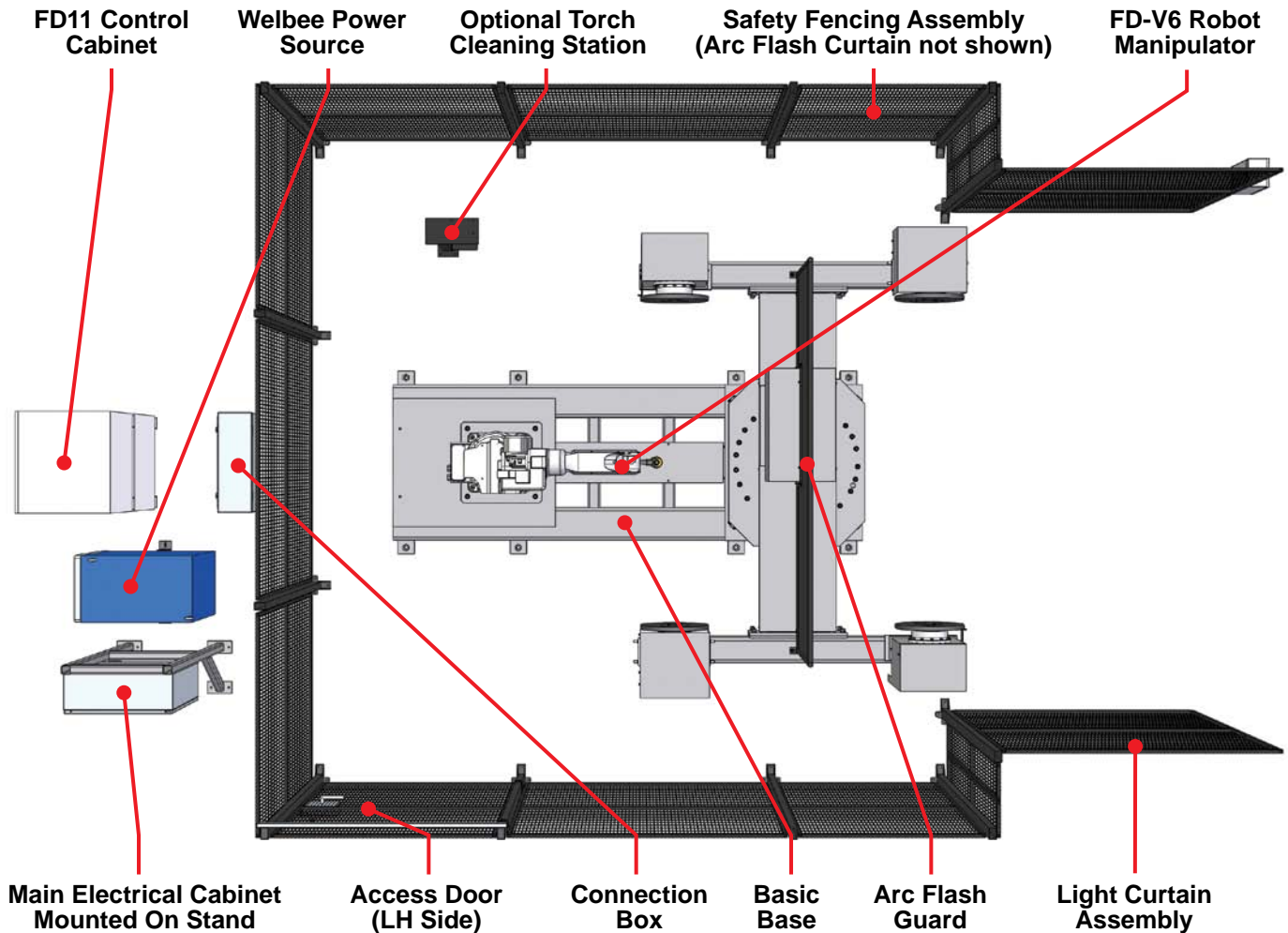
### Available I/O Slots:

15 Inputs/24 Outputs  
 (Additional Power Supply needed for Outputs)

### Additional Options:

- Roll up arc flash door at individual operator stations – OTC design or Frommelt
- Full Base w/ steel wall assembly
- 120° configuration
- Torch cleaning station
- Access door on RH side
- Utility Trailer
- Multiple Manipulators w/ platform (connected with tie bars)
- Extended I/O

# ROTA-ARC 1000

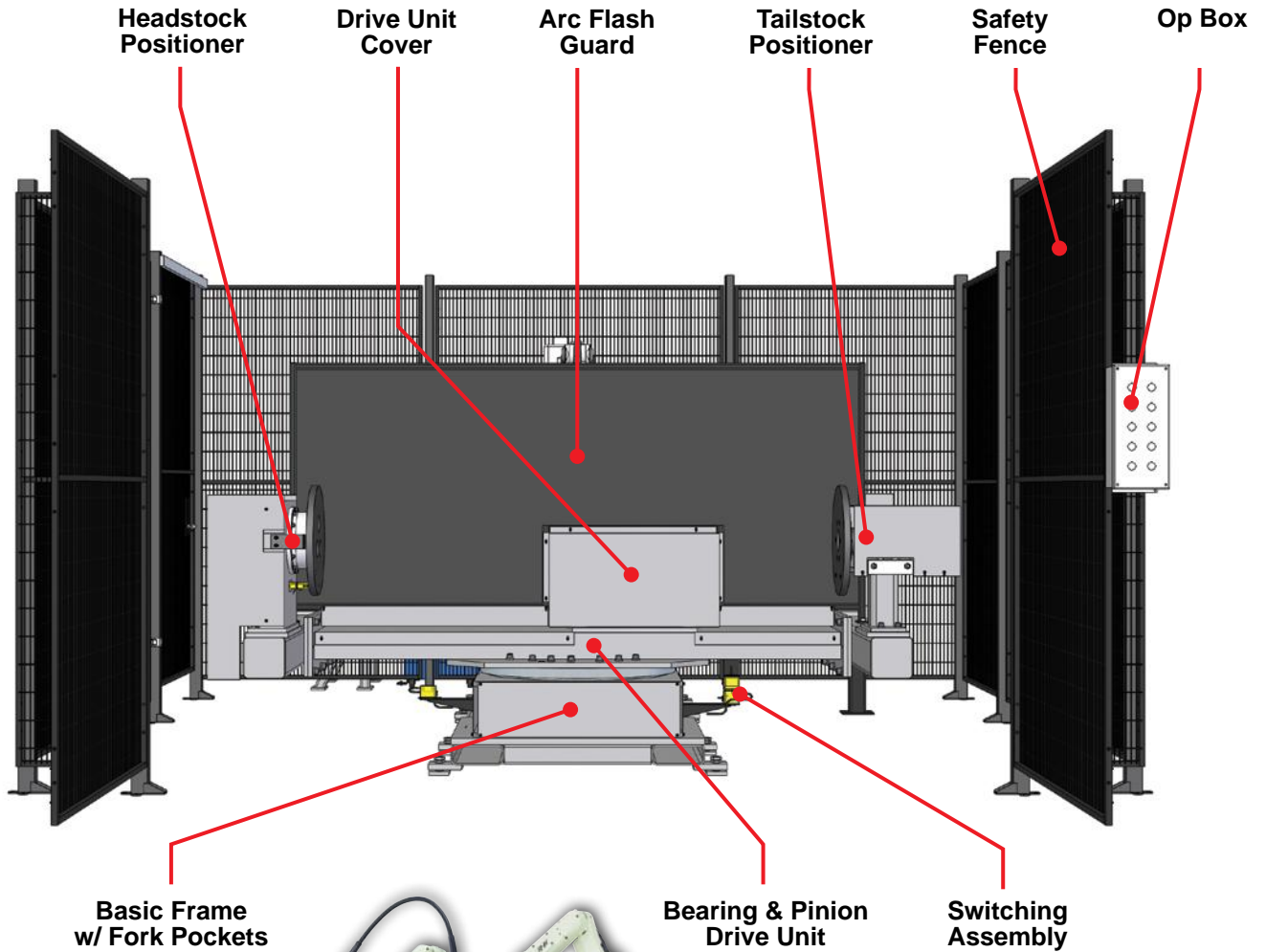


## Standard Option:

**ROTA-ARC 1000** – Rotating H-Frame w/ (2) Headstock/Tailstock assemblies

### Details:

- 3-Axis, Servo-controlled Positioner
- 4.5 kW motor for main axis rotation
- Omron 1495mm Light Curtains
- Omron Limit Switches for station designation
- Center mounted arc flash shield
- Index Speed (180°) - 6 seconds
- RV-110E gear box
- Work Capacity – 1000kg/side
- Weight – Approx. 2500kg
- Standard fork lift pockets in base
- Bearing and Pinion Design
- Standard HS/TS span: 1500mm
- HS/TS swing diameter: 1000mm
- Floor mounted safety fencing w/ arc flash curtains



## Specifications:

### Footprint Dimensions:

Width: 3398mm (133.8")

Height: 2200mm (86.6")

Depth: 6115mm (240.7")

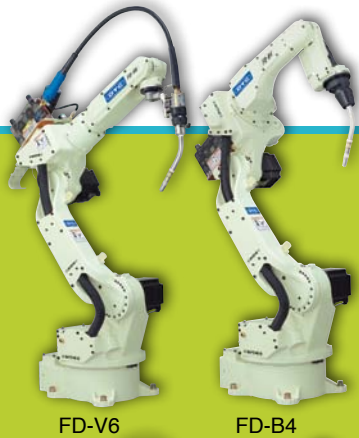
### Manipulator Types:

• FD-V6 • FD-V6L

• FD-B4 • FD-B4L

### Available I/O Slots:

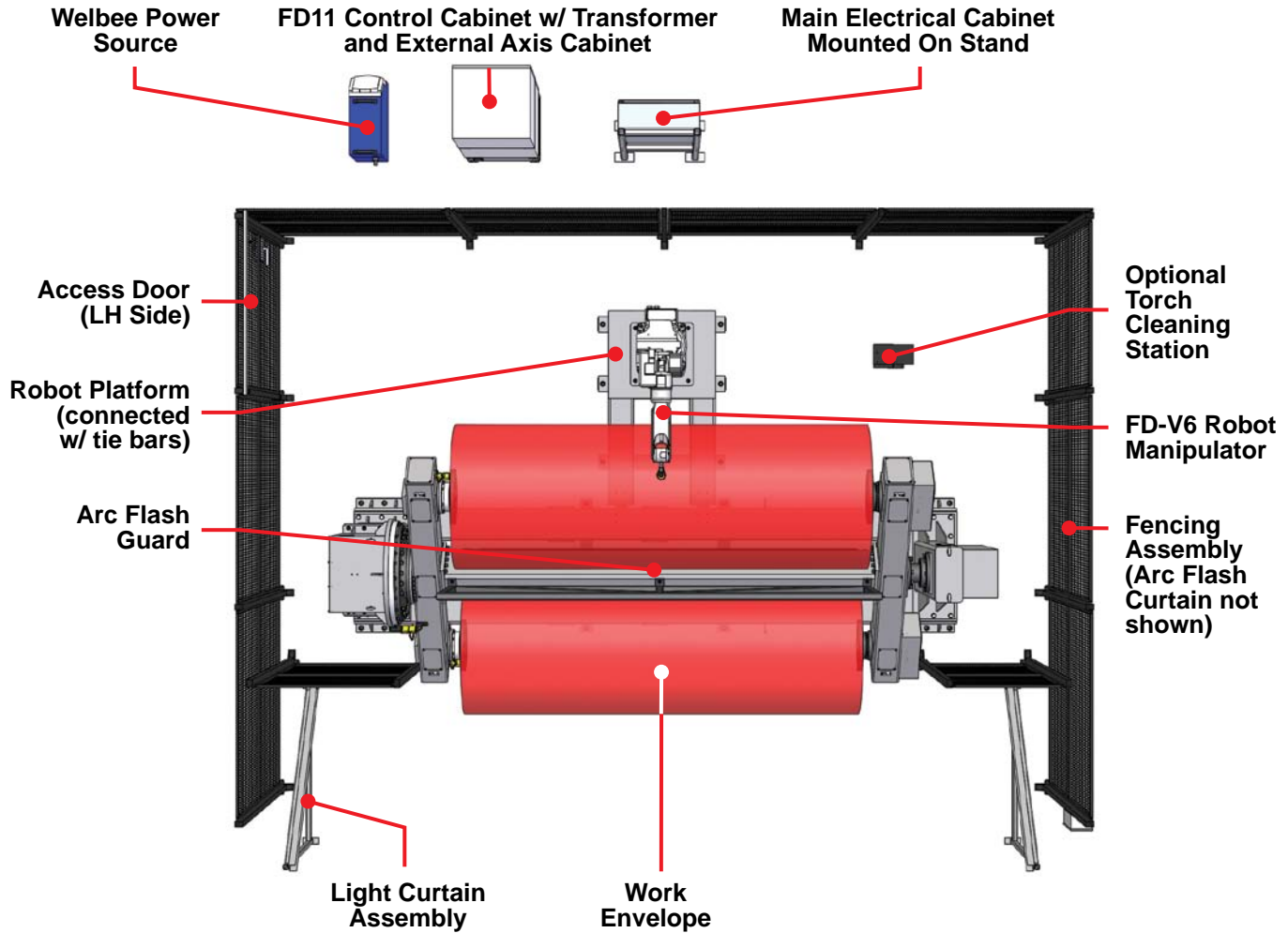
28 Inputs/26 Outputs  
(Additional Power Supply needed for Outputs)



## Additional Options:

- HS/TS span of 2000mm max. (with FD-V6L/FD-B4L Manipulators)
- Torch cleaning station
- Access door on RH side
- Utility Trailer
- Multiple Manipulators w/ platform (connected with tie bars)
- Extended I/O

# TRI-ARC 1000

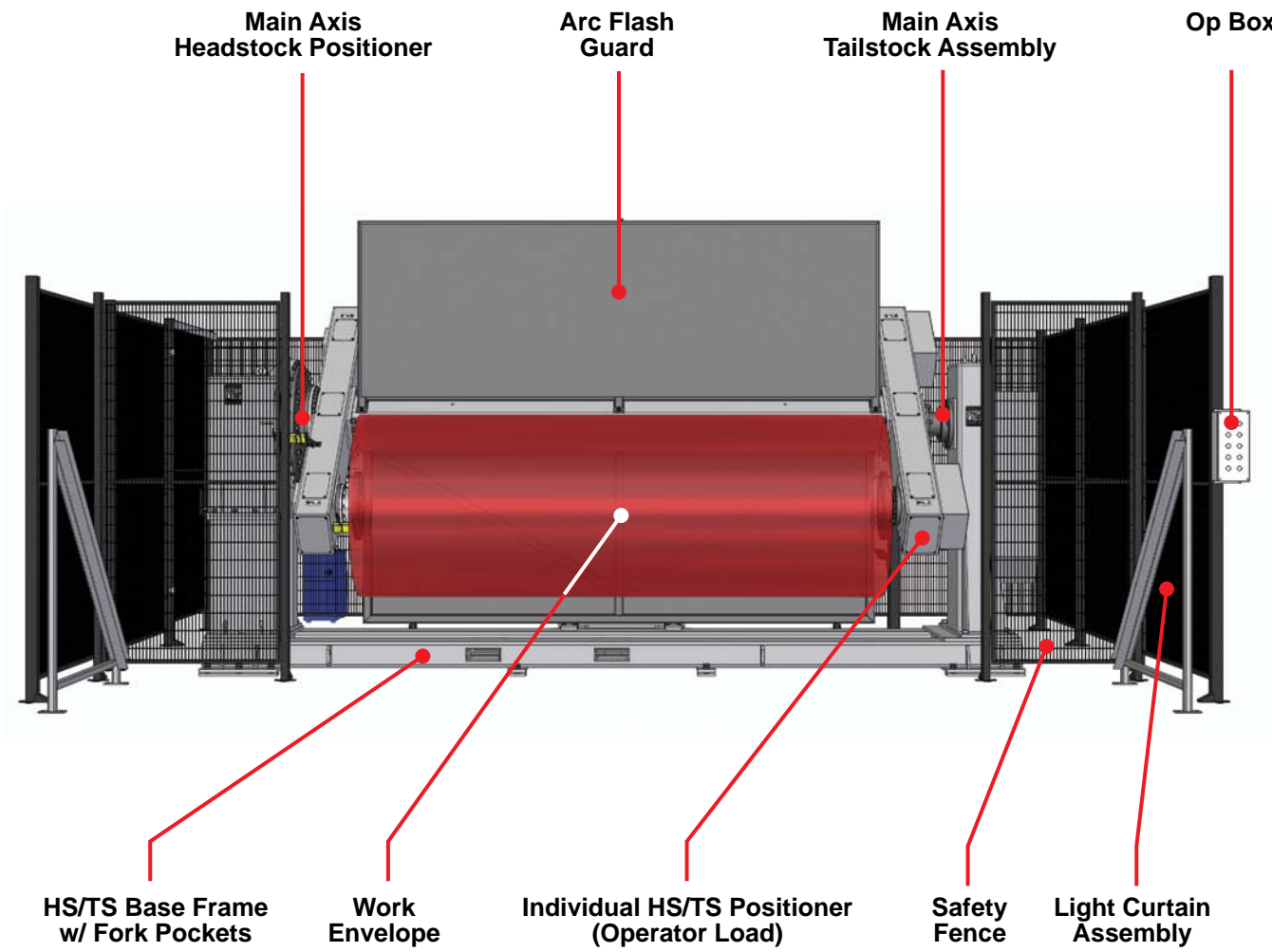


## Standard Option:

**TRI-ARC 1000** – Rotating Ferris Wheel w/ (2) Headstock/Tailstock assemblies

### Details:

- 3-Axis, Servo-controlled Positioner
- 4.5 kW motor for main axis rotation
- RV-320E Gear box for main axis
- Omron 1495mm Light Curtains
- Single Load/Unload point
- 2 kW motor for individual axis rotation
- RV-110E Gear box for individual axis
- Work Capacity – 1000kg/side
- Weight – Approx. 4100kg
- Standard fork lift pockets in base
- Standard HS/TS span: 3000mm
- Index Speed - 5 seconds
- HS/TS swing diameter: 1050mm
- Robot platform connected with tie bars
- Floor mounted safety fencing w/ arc flash curtains



## Specifications:

### Footprint Dimensions:

Width: 6258mm (246.4")  
 Height: 3048mm (120")  
 Depth: 5736mm (225.8")

### Manipulator Types:

- FD-V6L
- FD-B4L



### Available I/O Slots:

1 Input/10 Outputs  
 (Additional Power Supply needed for Outputs)

## Additional Options:

- HS/TS span of 3500mm max.
- Torch cleaning station
- Access door on RH side
- Utility Trailer
- Multiple manipulators w/ platform (connected with tie bars)
- Extended I/O (recommended)



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