PRE-ENGINEERED SYSTEMS OVERVIEW

[Image of pre-engineered system with robot inside a containment]
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**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

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
Standard Option:

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

Details:
- Pneumatic shutter 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. 2000kg
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)
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
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)
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
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

Available I/O Slots:
- 28 Inputs/26 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
- Standard Layout (PT-ARC 600)
- Extended I/O
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
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)
**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
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)
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
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
**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)