



Avenger 2

Heavy-Duty Gantry Cutting Machine

The Avenger 2 is the most versatile machine in the ESAB product line, providing a heavy-duty gantry structure which accommodates almost every available cutting and marking process. Large, all-welded end trucks support a machined beam and an independent reinforced deck structure. Up to twelve process stations may be installed, including up to four plasma cutting stations.

The Avenger 2 is also on the leading edge of machine technology, incorporating the industry's most reliable digital servo amplifiers, AC brushless motors, and precision planetary gearboxes. When equipped with ESAB's touch-screen based Vision T5 CNC, this machine easily becomes the most productive part of your cutting operation.

Available in widths to cover 12 to 30 feet, the Avenger 2 can carry a wide variety of cutting and



marking tools, including precision plasma torches, oxy-fuel torches, plasma or oxy-fuel bevel heads, punch markers, drills, and router stations. Additional options include a rider's platform, heat shields, and overhead cable track drag bracket.

Specifications

Avenger 2	4	5	6	7	8	9
Maximum Table Width	173" (4394 mm)	212.5" (5397 mm)	251.8" (6395 mm)	291.2" (7396 mm)	330.6" (8397 mm)	370" (9398 mm)
Rail Gauge	194.1" (4930 mm)	233.5" (5930 mm)	272.8" (6929 mm)	312.2" (7929 mm)	351.6" (8930 mm)	390.9" (9928 mm)
Machine Width	235.2" (5974 mm)	274.6" (6974 mm)	314" (7975 mm)	353.3" (8973 mm)	392.7" (9974 mm)	454.6" (11546 mm)

General Machine Specifications

Machine Height	118" (2997 mm)
Parking Area	96" (2438 mm)
Work Table Height	26" - 30" (660 - 762 mm)
Speed Range	2 - 1000 ipm (50 - 25400 mm/min)
Power Requirement	230/460/575 VAC, 50/60 Hz, 3-Phase, 30 Amp (Special input voltages are available upon request)

Notes:

- Rails are available in increments of 8' and 16' (2438 and 4876 mm)
- Machine Width does not include powertrack hose/cable carrier or optional rider's platform.
- Machine Height is to top of standard plasma station.

Tool Specifications

Cutting Processes	Plasma, Oxy-Fuel, Drill
Plasma System Options	Up to 720 Amps
Plasma Cutting Thickness	max. 6 inch, depending on plasma unit
Maximum Plasma Stations	4
Oxy-Fuel Cutting Capacity	72 Torch-Inch
Maximum Pierce Thickness	6 inch (max. recommended)
Maximum Oxy-Fuel Stations	12
Maximum Marking Tools	4 Plasma, Pneumatic, or other Marker
Maximum Total Stations	12
Maximum Bevel Stations	2

Standard Features

- **3 axis gantry with rack-and-pinion drives**
- **Reinforced fabricated welded beam for stiffness and accuracy**
- **Precision dual-linear rail Y-axis guiding system for greater accuracy**
- **Welded and machined end trucks with long wheel base for added stability**
- **Machined mating surfaces for high stiffness and accuracy**
- **Digital AC drive amplifiers for years of maintenance free operation**
- **AC brushless motors for wide speed range with accurate speed control**
- **Precision heavy-duty gearboxes for accuracy and smooth motion**
- **Maximum machine speed: 1000 ipm (25,400 mm/min)**
- **Cross axis powertrack hose & cable carriers**
- **Precision drive rack mounted directly to machined surface for precise rack alignment**
- **Heavy-Duty 85# Machined Crane Rail System for Accuracy and Durability**
- **Wide variety of cutting and marking process tools available**
- **Precision Linear Rail Drive Engagement**
- **Positioning Accuracy: +/- .015", Repeatability: +/- .005"**
- **Adjustable steel mounting pads for adjusting height, level, straightness**

Process Tool Stations

The Avenger 2 supports a wide array of process tool station options. Each machine is custom built-to-order depending on the application and customer needs. Tool configuration can include nearly any combination of the following:

- **Plasma Torch Station** - for vertical plasma cutting from 100 Amp to 720 Amp. Used for cutting mild steel up to 2.5 inch thick, or stainless steel and aluminum from gauge thickness up to 6 inch thick.
- **Plasma VBA Station** - for cutting both vertical and bevel cuts. For use with plasma up to 400 amps, allows cutting up to 1.25 inch thick at 45 degrees on mild steel.
- **Plasma Edge Prep Station** - for straight line bevel cuts in either X or Y direction.
- **Oxy-Fuel Torch Station** - for vertical cutting of mild steel up to 6 inches thick standard, thicker if necessary.
- **Oxy-Fuel Edge Prep Station** - three torch unit for weld edge prep cutting along a straight line in X or Y direction.
- **Oxy-Fuel Contour Bevel Station** - three torch unit has manually adjusted torches, but rotates automatically to cut a bevel along any contour.
- **Ink Jet Marker** - the fastest marking method for text marking on cut parts and plates.
- **Pneumatic Punch Marker** - air hammer type marking for lines or center point punch marks.
- **Plasma Marker** - high speed line marking with variable width and depth can also be used for lettering.
- **Drill Station** - drill stations are customized to the application but typically handle up to 3/4 inch holes in up to 2 inch plate.
- **Oxy-Fuel Grate Cutting Station** - for automated cutting of steel grating material.

Specifications are subject to change without notice. Please contact ESAB Cutting Systems for the most current specifications, numerical control, and available equipment.



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