



Hydrocut LX

Waterjet Cutting Machine

The Hydrocut LX Waterjet Cutting System is a heavy-duty gantry cutting machine. Floor mounted crane rails and a rigid gantry are combined with digital AC drive amplifiers, brushless AC motors, and precision gearboxes. The result is a high-performance multi-process capable machine. The Hydrocut LX easily combines waterjet with other cutting and marking processes, such as plasma cutting, plasma marking, oxy-fuel cutting, ink-jet marking or drilling.

Waterjet is an extremely precise cutting process, but it is also an expensive process to operate. Many fabricators require parts cut with high precision for only a small portion of the entire part, while most of the part could be cut with a more economical process. By combining plasma and waterjet processes on the same machine, you have the ability to dramatically reduce the overall cost to produce those parts.



ESAB's Vision CNC fully automates all process control and setup, making operation easier and faster. Whether its waterjet, plasma, oxy-fuel, or marking, all parameters easily recalled from the on-board database simply by selecting material type, thickness, and process type.

Specifications

Hydrocut LX	3500	4000	4500	5000	5500	6000	6500
Maximum Table Width	118" (2992 mm)	137" (3492 mm)	157" (3992 mm)	177" (4492 mm)	197" (4992 mm)	216" (5492 mm)	236" (5992 mm)
Rail Gauge	137.8" (3500 mm)	157.5" (4000 mm)	177.2" (4500 mm)	196.9" (5000 mm)	216.5" (5500 mm)	236.2" (6000 mm)	255.9" (6500 mm)
Machine Width	183" (4653 mm)	203" (5153 mm)	222" (5653 mm)	242" (6153 mm)	262" (6653 mm)	281" (7153 mm)	301" (7653 mm)

General Machine Specifications

Machine Height	84" (2133 mm) to top of station
Parking Area	96" (2438 mm) not including allowance for bellows rail covers
Work Table Height	30" - 31" (762 - 787 mm)
Speed Range	0.1 - 1,400 ipm (2.5 - 35560 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.
- Machine Height is to top of station, does not include whip.

Tool Specifications

Cutting Processes	Waterjet + Plasma, Oxy-Fuel, Drill
Waterjet System Options	60 kpsi (4,137 bar) 40 HP to 200 HP 90 kpsi (6,200 bar) 60 HP or 125 HP
Max Cutting Thickness	max. 6 inch
Plasma System Options	Up to 720 Amps
Maximum Waterjet Stations	4
Maximum Plasma Stations	2
Maximum Oxy-Fuel Stations	4
Maximum Marking Tools	4 Plasma, Pneumatic, or InkJet Marker
Maximum Tool Carriages	4

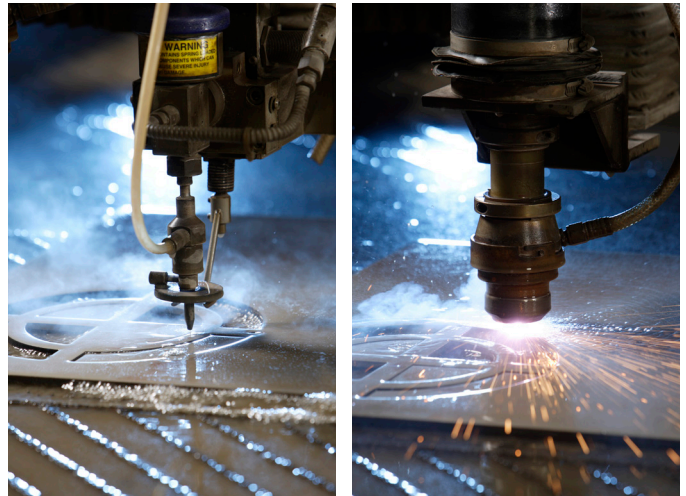
Standard Features

- **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**
- **Precision Linear Rail Drive Engagement**
- **Heavy-Duty 85# Machined Crane Rail System for Accuracy and Durability**
- **Adjustable steel mounting pads for adjusting height, level, straightness**
- **Precise Speed Control Down to 0.1" per Minute (2.5 mm/min)**
- **Contour Cutting Speed Range of 0.1 - 400 ipm (2.54 - 10160 mm/min)**
- **Maximum Machine Speed: 1,400 ipm (35560 mm/min)**
- **Positioning Accuracy: +/- .010", Repeatability: +/- .002"**
- **Wide Range of HP Intensifier Pumps Available**
- **Way Covers in both "Rail" and "Cross" Axes**
- **Wide variety of cutting and marking process tools available**

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

Process Tool Stations

The Hydrocut LX can be equipped with either 60,000 psi or 90,000 psi Ultra High Pressure intensifier technology. Users can select from a wide variety of pump sizes to suit any application. ESAB offers a choice of either the Autoline II or IDE Abrasive Cutting Heads from KMT, providing maximum cutting speeds with reduced operating costs and extremely simple maintenance. The Autoline II cutting nozzle features a pre-aligned cartridge body, orifice and focusing tube to produce a sharp and coherent water-abrasive stream, cutting faster than other nozzles while consuming less abrasive. Diamond orifice technology maximizes productivity for only pennies an hour.



ESAB's exclusive patent allows you to combine the non-thermal waterjet process with the thermal plasma cutting process on the same gantry. The Hydrocut LX can be equipped with ESAB's m3 Plasma systems from 200 up to 720 Amps. The air-curtain option allows the plasma to cut under-water, as well as the water jet. Fast switching and automatic process control allows both plasma and waterjet tools to be used on the same part.

ESAB brings you the performance and reliability of the Streamline SL-V Plus series intensifier pumps. The SL-V Plus intensifiers are designed to deliver optimum levels of component reliability and system uptime. Ease of installation and maintenance have made Streamline intensifiers the standard of the industry for both water and abrasive cutting applications.



ESAB Cutting Systems

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