

SHADOW DX

Gantry Cutting Machine



The new Shadow DX offers large gantry design and performance in a compact package. The rugged gantry features all-steel construction with machined mating surfaces for stiffness and accuracy. Heavy duty H-beam weldments support triple machined T-rails to provide a sturdy, stable foundation, and easy installation on any concrete floor. Featuring a precision linear rail Y-axis guiding system, precision three-axis rack-and-pinion drives, digital AC drives and AC brushless motors, this machine delivers the cutting performance you would expect from much more expensive gantries.

The Shadow DX is a versatile machine, able to carry plasma, oxy-fuel, and marking tools. Plasma systems available on the Shadow DX range from small air-plasma systems with the PT-37 torch up to ESAB's m3 Precision Plasmarc 450 amp system with a PT-36 torch.

Solidly built, easy to use and providing unbeatable value for your investment, the Shadow DX sets completely new standards in its class.

Specifications

Shadow DX	3000	3500	4000
Machine Width	174.2" (4425 mm)	193.8" (4925 mm)	213.5" (5425 mm)
Rail Gauge	118.1" (3000 mm)	137.8" (3500 mm)	157.5" (4000 mm)
Maximum Table Width	94" (2388 mm)	114" (2896 mm)	134" (3404 mm)
Machine Height		76" (1935 mm)	
Parking Area		66" (1670 mm)	
Maximum Stations		4	
Maximum Plasma		1	
Speed Range	2 - 750 ipm (50.8 - 20000 mm/min)		
Power Requirement	230/460/575 VCA, 50/60 Hz, Single-Phase, 30 Amp (Special input voltages are available upon request)		

Notes

- + Rail systems are available in 5, 6, 10, 15 and 20 meter lengths
- + Machine Width does not include powertrack hose/cable carrier

Standard Features

- + **3 Axis Gantry with Rack-and-Pinion Drives**
- + **Reinforced Box Beam Design Provides a Solid, Precision Platform For the Cutting Tool**
- + **Precision Linear Rail Y-Axis Guide Way For Greater Accuracy**
- + **Trucks are Machined and Welded, with Oversized Wheel Bearings for Increased Stability and Accuracy**
- + **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: 750 ipm (20000 mm/min)**
- + **Cross Axis Powertrack Hose & Cable Carriers**
- + **Suitable for material up to 6" thick (150 mm)**
- + **Positioning Accuracy: +/- .010", Repeatability: +/- .005"**
- + **Precision drive rack mounted directly to machined surface for precise rack alignment**
- + **Heavy Duty H-Beam Rail Supports**
- + **Triple Machined T-Rail System for Accuracy and Durability**

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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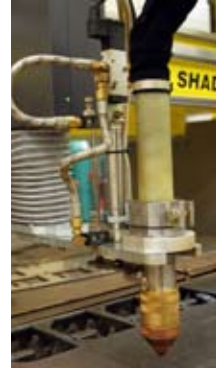
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Available Process Tools

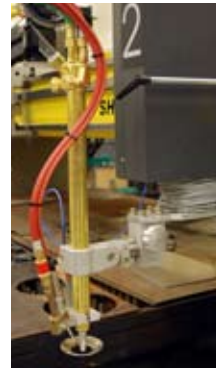
Plasma

The Shadow DX can be equipped with air plasma systems up to 100 amps or ESAB's m3 Precision Plasmarc System, which allows the machine to cut and mark with the same plasma torch. Available on the Shadow DX from 200 up to 450 amp configurations, the m3 plasma system combines multiple plasma cutting and marking features in a single easy-to-use system. The m³ system offers precision, production, and sever cutting modes with current ranges from 20 up to 450 amps, cutting gauge material up to 2.5" thick carbon steel or 1.75" stainless steel and aluminum up to 3" thick. The plasma station includes a tactile initial height sensor and Arc Voltage Height Control for accurate cutting and optimized cycle times. A magnetic break-away crash protection system prevents torch damage in case of tipped parts. The heavy duty torch lifter features a linear rail for stability and provides 8" (200 mm) of vertical stroke.



Oxy-Fuel

The Shadow DX may be equipped with up to 4 oxy-fuel cutting stations. The stations feature heavy duty motorized lifters with capacitive height control and pilot flame torch ignitors. The gas controls feature automatic High/Low Preheat switching and electronic pierce rate control, allowing the cutting oxygen pressure to ramp while piercing thick material.



Scribing

The Shadow DX can be equipped with a number of different processes tools, including an air scribe marker. Each of these processes can be accurately combined for use on the same parts.