

REDUCE COSTS ASSOCIATED WITH NITROGEN USAGE

EZ Cut System



The EZ-Cut System from Amada is an optional feature for Amada Lasers that is designed to reduce costs associated with nitrogen usage. It is also a highly reliable alternative for providing clean, dry and high pressure air required for shop air cutting.

FEATURES

- Two-skid design for easy handling
- Compact unit requires a minimum amount of floor space
- Combination compressor/dryer unit for air supply with automatic electronic drains for condensation
- Clean, dry, shop air for assist gas
- Air supply for machine operation, dust collection unit and Orion beam purge unit (*where applicable*) with a 120 gallon air receiver tank
- Nitrogen generating membrane filter with four easily accessible pre-filters
- 95% pure nitrogen with 30 gallon receiver tank
- Hand valve selector for switching from nitrogen to air assist gas
- Quick connect fittings for machine supply, dust collector and Orion purge unit

SPECIFICATIONS

Voltage	208V / 230V / 460V	Horsepower	40
Phase	3	Psi. Gauge (psig.)	217
Hz	60	Cubic Ft. Per Min. (cfm.)	109

EZ CUT SYSTEM VS. BOTTLED NITROGEN

Metal	Thickness	EZ Cut		Nitrogen (Bulk)	
		Feed Rate	Gas Usage	Feed Rate	Gas Usage
Stainless Steel	.125"	120 ipm.	0	160 ipm.	14.34 cfm.
	.187"	80 ipm.	0	100 ipm.	16.94 cfm.
	.250"	65 ipm.	0	80 ipm.	32.27 cfm.
Mild Steel	.125"	120 ipm.	0	150 ipm.	14.34 cfm.
	.187"	90 ipm.	0	100 ipm.	38.12 cfm.
	.250"	55 ipm.	0	65 ipm.	38.12 cfm.
Aluminum	.125"	140 ipm.	0	140 ipm.	14.34 cfm.
	.187"	80 ipm.	0	90 ipm.	14.28 cfm.
	.250"	70 ipm.	0	80 ipm.	32.27 cfm.

Note: Multiple factors can affect cut quality and capacity. Therefore, Amada recommends cutting a sample part using the EZ Cut System to verify that the quality is acceptable for your application. Amada provides generic capacities only (*due to the variation in acceptable quality*). The geometry of the part will dictate the feed rate and processing time required to produce a part.

EDGE QUALITY

When cutting stainless steel, as material thickness increases the edge finish becomes dull while remaining very smooth.

The image shows three rows of metal cut edges. The top row is stainless steel, the middle is galvanized material, and the bottom is aluminum. Each row has two samples: one cut with Bottled Nitrogen and one cut with the EZ Cut System. The EZ Cut System consistently shows a more polished and smoother edge finish compared to the Bottled Nitrogen system.

- On thinner material, the edge has a more polished finish with a slight gold tint.
- With galvanized material, the edge becomes less polished and darker as material thickness increases.
- With aluminum, little difference can be seen between bottled nitrogen and the EZ Cut System.

COST OF OPERATION

	Elec.	DX Filter (2) (5.0 Micron)	BX Filter (1) (0.5 Micron)	Carbon Pellets (20lbs)	Total Cost Per Hour @ 100% ON
Voltage	481				
Avg Amps	29	2160	2160	17520	
Avg kVa	24.132				
Avg Usage (kW/Hr)	13.949				
Price (IL)	\$0.0637	\$334.00	\$336.00	\$576.00	
Cost Per Hour	\$0.89	\$0.15	\$0.16	\$0.03	\$1.23



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