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# KALIBURN

## KALIBURN Spirit200a 200 amp High Current Density Plasma Cutting System



### Spirit200a

The Spirit200a by KALIBURN is a full function 200 amp high current density plasma cutting and marking system incorporating fully automated process control, cutting of most metals up to 1 1/4" (32.0mm) thick, and has a maximum capacity of 2" (50.0mm). It is designed to be the ultimate process tool when precise, square, and virtually dross-free cuts and ease of operation are important. Unparalleled consumable life is a benefit of all KALIBURN Spirit systems.

**The "a" is for automatic.** Automatic setting of process parameters equates to exceptional ease of operation. The KALIBURN Spirit200a combines convenience with the ultimate in cut quality. The KALIBURN Spirit200a truly sets the standard in precision plasma cutting within its thickness range.

With the KALIBURN Spirit200a automatic gas console (AGC) you simply select the material type and thickness or let your computer's serial port transmit the cutting parameters. The rest is automatic, and especially easy when interfaced to a Burny 10LCD+ or Burny Phantom Control.

Mild Steel Production Capacity	Max. Thickness (Edge Start, with dross)
1-1/4" (32.0mm)	2" (50.0mm)

The KALIBURN Spirit200a provides precision high current density plasma cut edge quality. It delivers virtually dross-free cuts with 2° or less cut edge bevel. The Spirit200a system is one of four fully automated systems in the KALIBURN Spirit family. Other Spirit systems offer identical cut quality but each has a unique amperage range and corresponding thickness capacity.

The KALIBURN Spirit200a is available with the optional INOVA Torch Height Control system. Also, a pneumatic safety switch can be added to protect the torch from collision damage.



KALIBURN HfOT™ (Hafnium Optimizing Technology) is proprietary technology that maximizes consumable life while ensuring superior cut quality. HfOT™ begins with the design of the torch and consumables. The components are designed to provide proper arc formation, constriction, and centering. HfOT™ includes a breakthrough method for starting and stopping the plasma arc, which is where the majority of the consumable wear occurs. HfOT™ minimizes consumable wear during the start up and shut down by uniquely and precisely controlling the relationship between the arc current and plasma gas. HfOT™ results in superior cut quality, extraordinary consumable life, and low operating cost.

## *Engineered for life*

## SPECIFICATIONS

**RATED 200 amps DC @ 100% duty cycle (@ 104° F / 40° C**

### 3 PHASE INPUT VOLTAGE & AMPERAGE

208V	60Hz	115A
230V	60Hz	104A
380V	50/60Hz	63A
415V	50/60Hz	58A
460V	60Hz	52A
575V	60Hz	42A

### DIMENSIONS

POWER SUPPLY (including AGC)	
WEIGHT	1255lb (569kg)
HEIGHT	48in (1219mm)
WIDTH	30in (762mm)
DEPTH	43in (1092mm)

### GAS SUPPLY

PLASMA GAS			
O <sub>2</sub>	AIR	H17*	N <sub>2</sub>
SHIELD GAS			
AIR	O <sub>2</sub>	N <sub>2</sub>	

\* H17 = 50% N<sub>2</sub>, 32.5% Ar, 17.5% H<sub>2</sub>

## FEATURES

-  High current density cuts are virtually dross free and square (2° or less bevel)
-   and  approval available
-  Cutting and marking with the same consumables
-  Sets all plasma torch parameters by material type and thickness
-  Displays torch parts for selected material and thickness
-  Advanced technology, high efficiency chopper-stabilized current output
-  400 ampere IGBT chopper transistor for high reliability
-  Current overshoot reduction circuitry for longer electrode and nozzle life
-  Very low transferred arc current sensing for higher starting height and longer nozzle shield life
-  Fast switch transferred arc for extended nozzle life
-  Performs self diagnostics
-  Tracks pierces, pierce errors and type of errors for the last six electrodes
-  Extends electrode life through a patented process
-  Communicates with optional INOVA torch Height Control and the x-y cutting table control via RS-422
-  Sets optional INOVA Torch Height Control automatically to proper pierce height, cutting height and arc voltage

	AMP	Thickness (in)	Speed (ipm)	Thickness (mm)	Speed (m/min)	GAS		
MILD STEEL	30	0.036	105	1.0	2.615	O <sub>2</sub> plasma O <sub>2</sub> shield		
		0.075	65	2.0	1.615			
		0.135	40	3.0	1.285			
	50	0.075	200	2.5	4.885	O <sub>2</sub> plasma Air shield		
		0.125	180	3.0	4.660			
		1/4	75	6.0	2.075			
	70	0.125	190	3.0	4.995	O <sub>2</sub> plasma Air shield		
		1/4	120	5.0	3.265			
		3/8	75	6.0	3.105			
	100	1/4	150	6.0	3.950	O <sub>2</sub> plasma Air shield		
		1/2	65	12.0	1.850			
		3/4	35	20.0	0.800			
150	1/4	165	6.0	4.305	O <sub>2</sub> plasma Air shield			
	1/2	90	12.0	2.485				
	1	40	25.0	1.040				
200	1/4	230	6.0	6.100	O <sub>2</sub> plasma Air shield			
	1/2	120	12.0	3.160				
	3/4	75	20.0	1.810				
	1	50	25.0	1.310				
	1 1/2*	17	38.0*	0.435				
	2*	7	50.0*	0.195				
	STAINLESS STEEL	30	0.036	200		1.0	4.855	AIR plasma AIR shield
			0.075	90		1.5	3.260	
		50	0.075	105		2.0	2.565	AIR plasma N <sub>2</sub> shield
			0.120	65		3.0	1.685	
70		0.120	40	6.0	1.075	AIR plasma N <sub>2</sub> shield		
		1/4	40	6.0	1.075			
100		0.135	120	3.0	3.210	AIR plasma N <sub>2</sub> shield		
		3/8	50	6.0	2.050			
150		3/8	80	10.0	1.935	AIR plasma N <sub>2</sub> shield		
		1/2	55	12.0	1.540			
200		1/4	150	6.0	3.910	AIR plasma N <sub>2</sub> shield		
		1/2	85	12.0	2.330			
ALUMINUM	30	0.040	150	1.0	3.885	AIR plasma N <sub>2</sub> shield		
		0.080	90	2.0	2.360			
	50	0.080	250	2.0	6.400	AIR plasma N <sub>2</sub> shield		
		3/16	80	5.0	1.920			
	70	1/2	30	12.0	0.820	AIR plasma N <sub>2</sub> shield		
		1/4	105	6.0	2.710			
	100	3/8	90	10.0	2.210	AIR plasma N <sub>2</sub> shield		
		1/2	70	12.0	1.890			
	150	1/4	145	6.0	3.770	AIR plasma N <sub>2</sub> shield		
		1/2	90	12.0	2.430			
200	3/4	45	20.0	0.990	AIR plasma N <sub>2</sub> shield			
	1/4	190	6.0	4.955				
	1/2	110	12.0	2.995				
	3/4	65	20.0	1.575				
	1*	35	25.0*	0.940				

\* Requires edge start or moving pierce

## 3-YEAR POWER SUPPLY WARRANTY



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