ITT

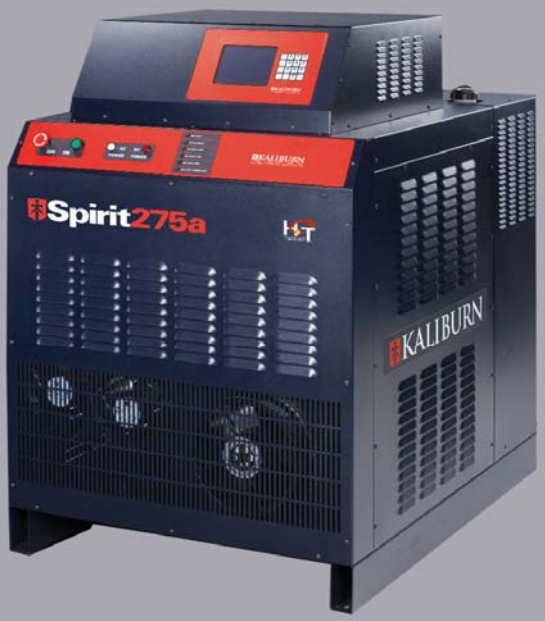
KALIBURN

Spirit275a

275 AMP HIGH CURRENT DENSITY PLASMA CUTTING SYSTEM

The KALIBURN Spirit275a provides precision high current density plasma cut edge quality. It delivers virtually dross free cuts with 2° or less cut edge bevel. The Spirit275a 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 Spirit275a 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.



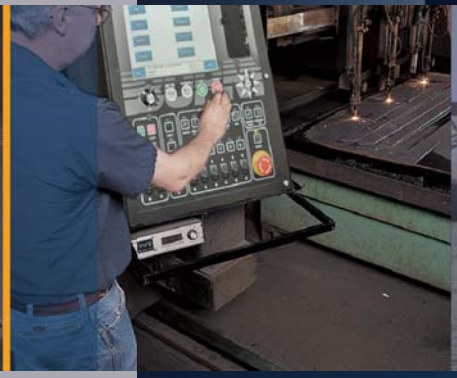
The Spirit275a by KALIBURN is a full function 275 amp high current density plasma cutting and marking system incorporating fully automated process control, cutting of most metals up to 1 ¼" (32.0mm) thick, and has a maximum capacity of 2 ½" (65.0mm). It is designed to be the ultimate process tool when 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 Spirit275a combines convenience with the ultimate in cut quality. The KALIBURN Spirit275a truly sets the standard in precision plasma cutting within its thickness range.

With the KALIBURN Spirit275a 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 Plus or Burny Phantom Control.

Mild Steel Production Capacity	Max. Thickness (Edge Start, with dross)
1.25" (32mm)	2.5" (65.0mm)

HT HAFNIUM OPTIMIZING TECHNOLOGY



3-YEAR POWER SUPPLY WARRANTY

SPECIFICATIONS

RATED 275 amps DC @ 100% duty cycle (@ 104° F / 40° C)

3 PHASE INPUT VOLTAGE & AMPERAGE

208V	60Hz	147A
230V	60Hz	133A
380V	50/60Hz	81A
415V	50/60Hz	74A
460V	60Hz	67A
575V	60Hz	53A

DIMENSIONS

POWER SUPPLY (including AGC)

WEIGHT	1315lb (596kg)
HEIGHT	48in (1219mm)
WIDTH	32.5in (826mm)
DEPTH	43in (1092mm)

GAS SUPPLY

PLASMA GAS

O_2	AIR	H17*	N_2

SHIELD GAS

AIR	O_2	N_2

* H17 = 50% N_2, 32.5% Ar, 17.5% H_2

FEATURES

- High current density cuts are virtually dross free and square (2° or less bevel)
- CSA and CE 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
- Dual 600 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_2 plasma O_2 shield
		0.075	65	2.0	1.615	
		0.135	40	3.0	1.285	
	50	0.075	200	2.5	4.885	O_2 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	
		1/4	120	5.0	3.265	
		3/8	75	6.0	3.105	
	100	1/4	150	6.0	3.950	
		1/2	65	12.0	1.850	
		3/4	35	20.0	0.800	
	150	1/4	165	6.0	4.305	
		1/2	90	12.0	2.485	
		1	40	25.0	1.040	
	200	1/4	230	6.0	6.100	
		1/2	120	12.0	3.160	
		3/4	75	20.0	1.810	
		1	50	25.0	1.310	
	275	1/2	125	12.0	3.290	
		3/4	90	20.0	2.190	
		1	65	25.0	1.690	
		1 1/4	45	32.0	1.120	
		1 1/2*	25	38.0*	0.645	
		2*	15	50.0*	0.395	
		2.5*	9	65.0*	0.202	
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	N_2 plasma N_2 shield
		0.120	65	3.0	1.685	
		1/4	40	6.0	1.075	
	70	0.135	120	3.0	3.210	
		3/8	50	6.0	2.050	
	100	3/8	80	10.0	1.935	
		1/2	55	12.0	1.540	
	150	1/4	150	6.0	3.910	
		1/2	85	12.0	2.330	
		3/4	45	20.0	1.030	
	200	1/4	200	6.0	5.220	
		5/8	75	16.0	1.890	
		1	40	25.0	1.050	
	275	1/2	120	12.0	3.220	
		3/4	80	20.0	1.940	
		1	55	25.0	1.435	
		1 1/4*	35	32.0*	0.880	
		1 1/2*	25	38.0*	0.640	
	70	3/16	80	5.0	2.030	H17 plasma N_2 shield
	100	1/4	100	6.0	2.625	
	150	1/2	60	12.0	1.610	
		3/4	40	20.0	0.940	
	200	3/8	80	10.0	2.010	
		5/8	60	16.0	1.515	
		1	35	25.0	0.915	
	260	3/8	85	10.0	2.140	
		3/4	55	20.0	1.315	
		1	33	25.0	0.875	
		1 1/4*	26	32.0*	0.650	
ALUMINUM	30	0.040	150	1.0	3.885	Air plasma N_2 shield
	50	0.080	90	2.0	2.360	
	70	0.080	250	2.0	6.400	
		3/16	80	5.0	1.920	
		1/2	30	12.0	0.820	
	100	1/4	105	6.0	2.710	
		3/8	90	10.0	2.210	
		1/2	70	12.0	1.890	
	150	1/4	145	6.0	3.770	
		1/2	90	12.0	2.430	
		3/4	45	20.0	0.990	
	200	1/4	190	6.0	4.955	
		1/2	110	12.0	2.995	
		3/4	65	20.0	1.575	
	275	3/8	160	10.0	3.930	
		1/2	125	12.0	3.375	
		3/4	85	20.0	2.055	
		1*	60	25.0*	1.565	
		1 1/4*	45	32.0*	1.120	
		1 1/2*	25	38.0*	0.645	

*Requires edge start or moving pierce

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

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