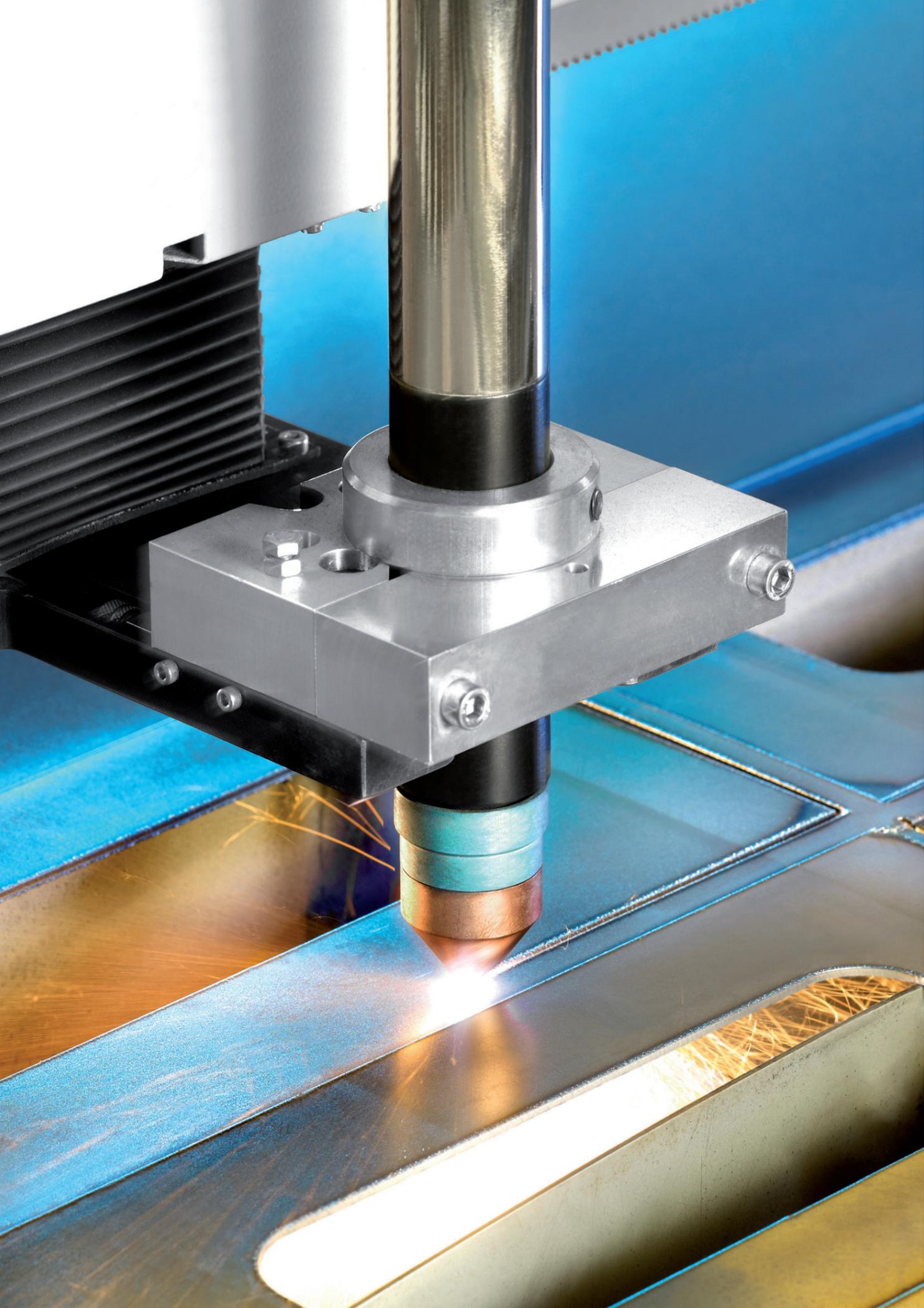


Air plasma solutions up to 100 A

CNC CUTTING TECHNOLOGY





Air plasma solutions.

High efficiency at low costs.

Our Air Plasma/PT-37 packages provide the flexibility you need in most material and thickness range applications. Our solutions are powerful and combine cut quality and speed advantages with low costs.

The PowerCut™ 900/1300 and ESP-101 Plasmarc™ power sources coupled with our PT-37 plasma torch cut construction and stainless steel as well as aluminum using air as the plasma cutting gas.

Utilizing a “drawn arc” and an electronically controlled pilot arc, the PowerCut™ series sets a new standard for starting reliability, cutting characteristics and consumable life without any electronic interference.

Our reliable ESP-101 Plasmarc™ power source handles the full range of cutting tasks up to material thicknesses of 18 mm (30 mm edge cutting), proving how well performance and technology can work together.

Application platforms:

- Flat plate cutting
- Robotic platforms for 3D cutting and marking
- Plasma retrofit packages

CUTTING RANGE

CONSTRUCTION STEEL

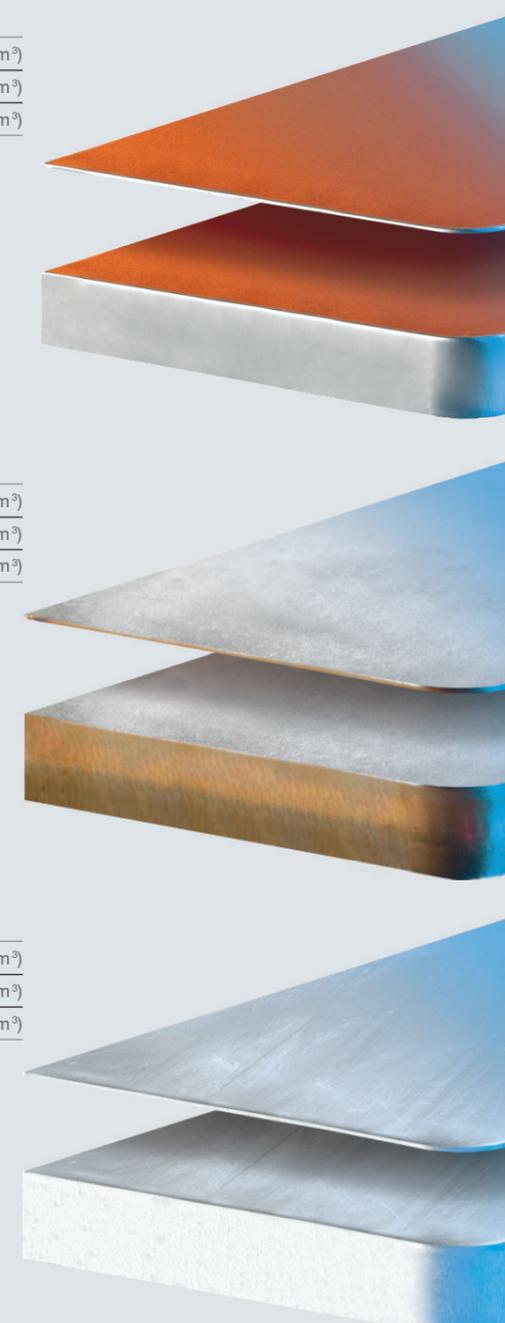
Power source	Material thickness
PowerCut™ 900	0.5 ¹ - 12 mm ² (16 mm ³)
PowerCut™ 1300	0.5 ¹ - 16 mm ² (20 mm ³)
ESP-101 Plasmarc™	0.5 ¹ - 18 mm ² (30 mm ³)

STAINLESS STEEL

Power source	Material thickness
PowerCut™ 900	0.5 ¹ - 10 mm ² (12 mm ³)
PowerCut™ 1300	0.5 ¹ - 14 mm ² (16 mm ³)
ESP-101 Plasmarc™	0.5 ¹ - 15 mm ² (25 mm ³)

ALUMINUM

Power source	Material thickness
PowerCut™ 900	0.5 ¹ - 10 mm ² (12 mm ³)
PowerCut™ 1300	0.5 ¹ - 14 mm ² (16 mm ³)
ESP-101 Plasmarc™	0.5 ¹ - 15 mm ² (25 mm ³)

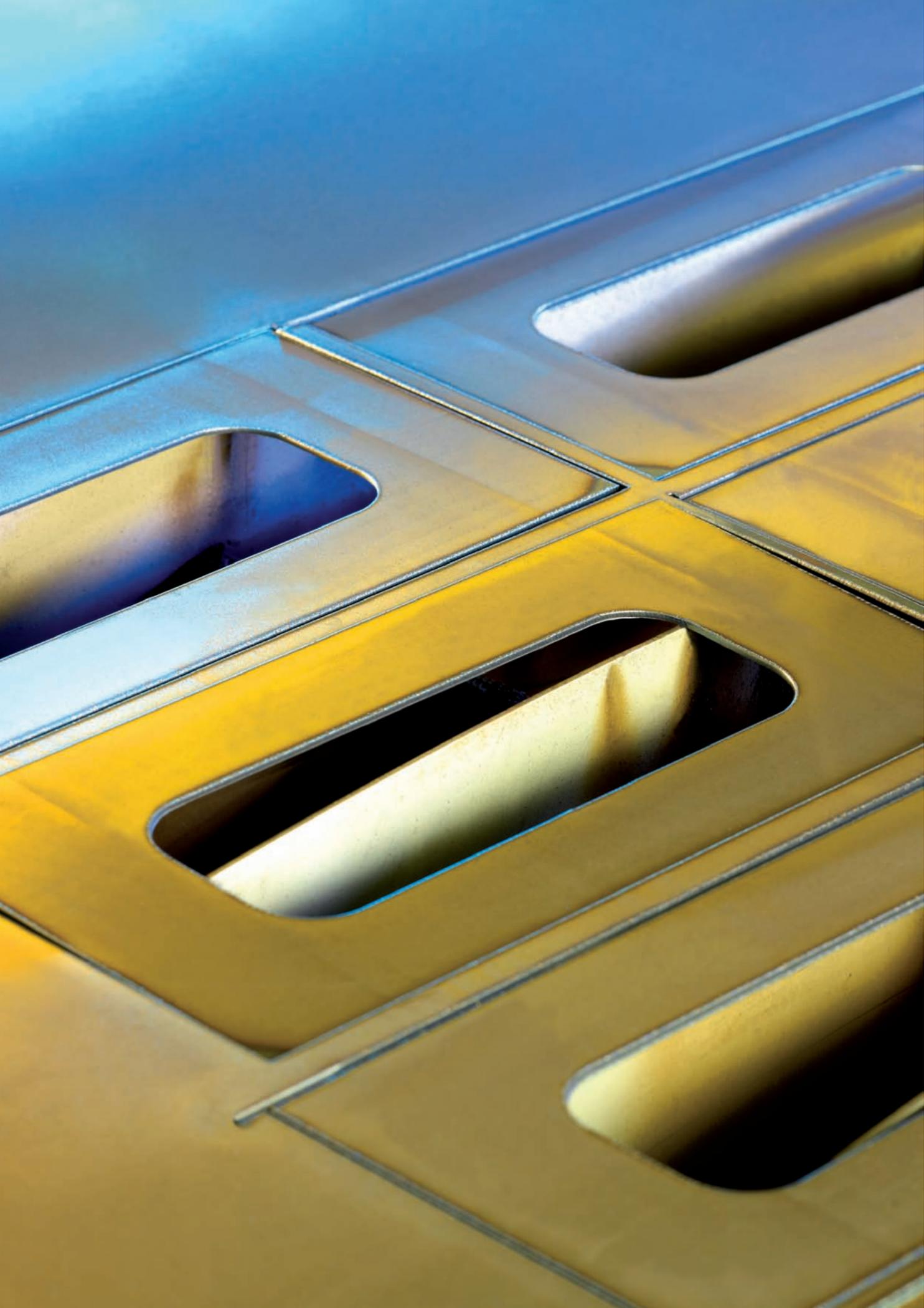


Note:

¹ Cutting plate thicknesses less than 1 mm require a torch station with plate rider mechanism

² Recommended cutting area in production including hole piercing

³ Edge cutting



Air plasma power sources: PowerCut™ 900/1300 and ESP-101 Plasmarc™.

More performance in every plasma cutting process.



INFORMATION

Technical specifications	PowerCut™ 900	PowerCut™ 1300	ESP-101 Plasmarc™
Output current	50 A	70 A	100 A
Duty cycle	50 A @ 100 %	70 A @ 100 %	100 A @ 100 %
Cutting gas: construction steel	Compressed air (Air) ¹	Compressed air (Air) ¹	Compressed air (Air) ¹
Cutting gas: stainless steel/aluminum	Nitrogen (N ₂)	Nitrogen (N ₂)	Nitrogen (N ₂)
Protection class	IP 22	IP 22	IP 22
Mains supply	400 V, 50/60 HZ	400 V, 50/60 HZ	400 V, 50/60 HZ
Mains fuse	3 x 13 A	3 x 18 A	3 x 35 A
Dimensions W x H x D	312 mm x 361 mm x 643 mm	323 mm x 378 mm x 706 mm	667 mm x 394 mm x 493 mm
Weight	32 kg	41 kg	56.7 kg

Note: ¹ Compressed air: dry, clean, oil-free

PowerCut™ 900 and 1300

Your benefits:

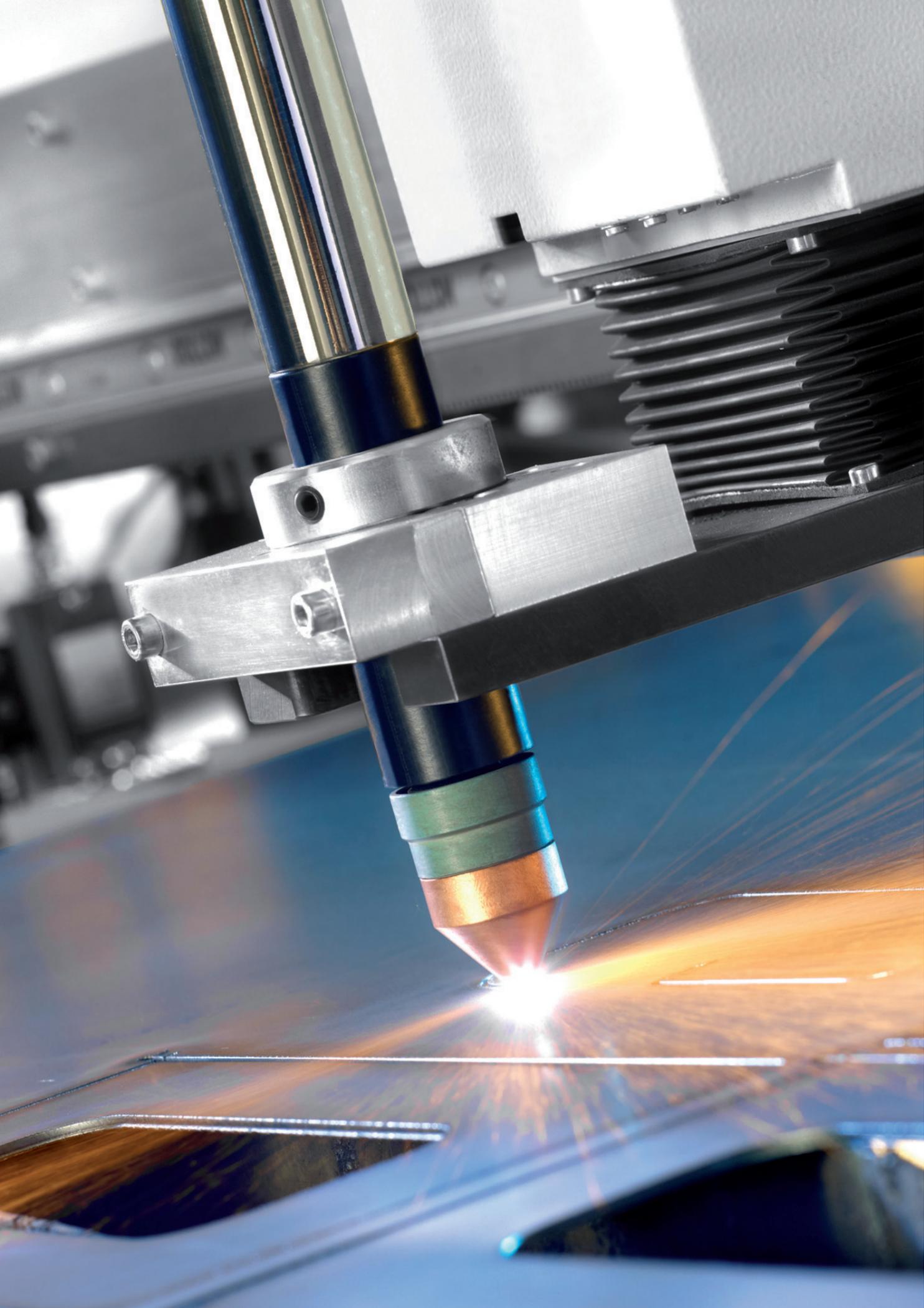
- “Drawn arc” technology eliminates high-frequency starting
- Digital readout display shows exact pressure or amperage
- Built-in line conditioner protects against damage from power line noise and spikes
- Tool-free quick disconnect torch
- Rugged design: durable, damage-resistant, corrosion-resistant and weather-resistant
- Lightweight for portability



ESP-101 Plasmarc™

Your benefits:

- 100 % duty cycle for enhanced productivity allowing for continuous operation even at maximum thickness
- Utilizes a “drawn arc” to initiate the cut which eliminates high-frequency interference from the starting circuits
- Electronically controlled pilot arc provides for consistent starting and longer consumable life
- Gouging mode allows for higher operating voltages at a reduced current for applications which require long arcs



PT-37 plasma torch.

More reliability, durability and ease of maintenance.

All systems are equipped with the patented PT-37 torch with long-life consumables which minimize operating costs. The robust machined torch components provide for reliability even in toughest cutting conditions. Make a fresh start in terms of economy.

Your benefits:

- Cuts the entire working range with a single set of consumables
- That means: reduced wear-parts inventory, reduced number of required setups
- Four nozzles are available, each optimized for gauge material or plate cutting
- Machined torch body fits standard torch holders
- Metal nozzle and retaining cup stand up to the toughest cutting conditions

CUT SPEED

CONSTRUCTION STEEL

Current (A)	Material thickness (mm)	Optimum speed (mm/min)	Maximum speed (mm/min)
30/40	0.5	12300	17000
	0.7	10800	14600
	0.8	9800	13200
	1.0	8200	10700
	2.0	5400	6200
	3.0	3100	4100
50	6.0	1300	1675
	1.5	9800	11200
	2.0	8000	9300
	4.0	3000	4100
	6.0	1800	2400
	8.0	1250	1625
70	12.0	600	775
	16.0	250	300
	3.0	5900	7200
	4.0	4800	6000
	5.0	3800	4800
	6.0	2700	3700
100	8.0	1800	2400
	10.0	1200	1575
	12.0	900	1250
	14.0	700	950
	16.0	550	675
	20.0	225	325
100	6.0	3600	4400
	8.0	2700	3300
	12.0	1550	1950
	16.0	1000	1150
	20.0	625	825
	25.0	425	525
32.0	250	325	

STAINLESS STEEL

Current (A)	Material thickness (mm)	Optimum speed (mm/min)	Maximum speed (mm/min)
30/40	0.8	9800	14700
	1.0	8700	12200
	2.0	7400	9500
	3.0	3700	5600
	4.0	2200	3300
	5.0	1500	2275
50	6.0	850	1300
	1.5	8000	12100
	2.0	5700	8400
	4.0	3000	4400
	6.0	1150	1575
	8.0	750	1075
70	10.0	475	725
	12.0	350	525
	3.0	4300	9200
	4.0	3600	7200
	5.0	2900	5200
	6.0	2200	3300
100	8.0	1500	1950
	10.0	1050	1350
	12.0	750	1000
	14.0	525	725
	15.0	475	650
	16.0	285	330
100	6.0	4000	5400
	8.0	1800	2375
	10.0	800	1036
	12.0	650	878
	15.0	450	600
	20.0	390	560
25.0	250	375	

ALUMINUM

Current (A)	Material thickness (mm)	Optimum speed (mm/min)	Maximum speed (mm/min)
30/40	0.8	10500	16400
	1.0	8900	13300
	2.0	6100	8400
	3.0	3600	5400
	4.0	2600	3800
	5.0	1900	2550
50	6.0	1425	1875
	1.5	8300	11700
	2.0	7200	10000
	4.0	3500	4700
	6.0	2000	2500
	8.0	1350	1725
70	10.0	850	1200
	12.0	600	875
	3.0	7300	10900
	4.0	5700	7900
	5.0	4300	5400
	6.0	3000	4400
100	8.0	1900	3100
	10.0	1250	2100
	12.0	975	1700
	14.0	725	1275
	15.0	600	1050
	16.0	500	825
100	6.0	4500	5700
	8.0	3300	4300
	10.0	2200	3000
	12.0	1525	2375
	15.0	1275	1800
	20.0	775	1175
25.0	425	650	

INFORMATION

Technical specifications

Cutting current	Max. 100 A
Torch cooling	Air cooling technology
Plasma gas / cutting gas	Compressed air: dry, clean, oil-free
Operating pressure	Max. 6 bar

PT-37

ESAB CUTTING SYSTEMS.

Your partner in cutting.



Seven decades of experience and consistent focus on the needs of our customers form the basis of our successful and comprehensive range of cutting machines. In keeping with the thermal cutting processes – plasma cutting, oxy-fuel cutting and laser cutting – ESAB has developed a range of machines that efficiently combine the highest cut quality

with high cutting speeds, allowing intelligent integration into automated production processes. So in many sectors, the Air Plasma/PT-37 package contributes to optimising production and raising the profitability of our customers.

ESAB sales and service offices worldwide



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