

电话: 0311-67664081

传真: 0311-67664082

手机: 189 3294 3688

-company -

# **Plasma Cutting Systems**

# FineFocus 450 / 600 / 800 / 1600

Simple • Reliable • Robust



Plasma cutting from 3 mm up to 160 mm





### FineFocus-Technology – our Know-how for Your Future Tasks

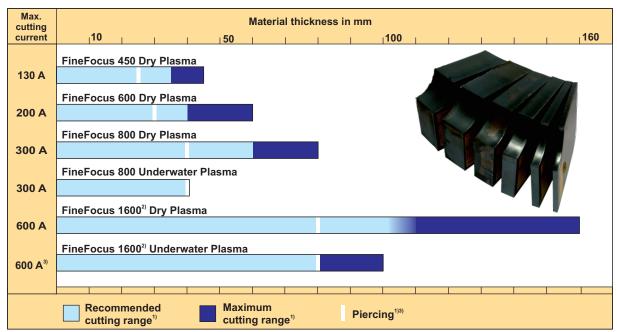
The strong and robust plasma cutting machines of the FineFocus series offer highest reliability and good cut quality even under extreme conditions. FineFocus systems are ideally suited for the metal-working industry as well as ship yards and steel service center.

With the right equipment, all cutting tasks on metallic materials can be performed effectively. In addition to the attractive price-performance-package FineFocus systems provide further benefits, like:

- Minimum cost due to optimized use of cutting gases and energy, better performance compared with other cutting technologies as well as competitors
- Reduced tolerance and increased cutting speeds on mild steel due to the FineFocusPLUS technology
- Long lifetime of consumables
- High productivity due to excellent functionality of the plasma torches, thus reducing additional costs and producing cut surfaces that require nearly no further work
- High efficiency and low running cost due to integrated or external closed-circuit cooling and therefore lower gas consumption
- Clean cut surfaces keep the required rework costs at a minimum



#### Range of Application







#### **FineFocus Systems Prove their Worth**

- High cut quality is achieved by a very smooth cutting current due to a 12-pulse circuit
- Nozzle saving high voltage ignition for start the pilot arc
- Precise and repeatable adjusting of the cutting process data
- Fulfillment of highest safety standards
- User friendly and extensive diagnostic and service system
- Quick and easy adaption to CNC guiding systems
- Long hose packages for large plants available

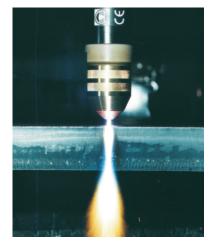


#### Versitile Use of the Plasma Cutting System FineFocus 800

The FineFocus 800 is the most powerful system of the FineFocus series. It is especially suited for cutting in combination with guiding systems and robots. This system can be used for straight, contour and bevel cutting up to 50°, for dry cutting as well as underwater cutting.

- The FineFocus "Single" is equipped with one plasma torch connection. With the machine torch materials up to 80mm can be cut.
- The FineFocus 800 "Twin" allows the connection of two plasma torches which can be operated alternately, one of them can be a manual torch.

The maximum cutting performance of 600 A is achieved by connecting two FineFocus 800 in parallel, thus forming a FineFocus 1600 with external water cooling. Preferably in CNC guiding systems the FineFocus 1600 will be used for the automated cutting of stainless steel and aluminium. It is possible to connect up to three different types of plasma torches.



Dry plasma cutting with FineFocus 450 / 600 / 800 / 1600



Underwater plasma cutting with FineFocus 800 / 1600



Plasma Cutting in combination with a robot with FineFocus 450 / 800

#### **Technical Data**

Power source FineFocus 450		FineFocus 600	FineFocus 800	FineFocus 1600		
Mains voltage <sup>1)</sup>	3 x 400 V, 50 Hz					
Fuse, slow	50 A	100 A	125 A	2x 160 A		
Connected load	34 kVA	60 kVA	83 kVA	2x 100 kVA		
Cutting current at 100 % d. c.	40 - 130 A	40 - 200 A	80 - 300 A	100 - 600 A		
Dimensions (L x W x H)	1025 x 711 x 970 mm	980 x 644 x 1320 mm	1375 x 870 x 1505 mm	2x 1375 x 870 x 1505 mm		
Weight	251 kg	370 kg	556 kg	2x 564 kg		
Plasma torch	PB-S47 W	PB-S60 W	PB-S80 W	PB-S 150W, PB-S 151W		
Plasma gases	O <sub>2</sub> , Air, Ar, H <sub>2</sub> , N <sub>2</sub>	O <sub>2</sub> , Air, Ar, H <sub>2</sub>	O <sub>2</sub> , Air, Ar, H <sub>2</sub>	Ar, H <sub>2</sub>		
Swirl gases	Air, N <sub>2</sub>	Air, N <sub>2</sub>	Air, N <sub>2</sub>	-		

<sup>1)</sup> Other voltages and frequencies on request.

## Cutting paramters (extract)<sup>2)</sup>

#### FineFocus 450

Material	Mild steel		Stainless steel		Aluminium	
Material thickness (mm)	Cutting current (A)	Cutting speed (mm/min)	Cutting current (A)	Cutting speed (mm/min)	Cutting current (A)	Cutting speed (mm/min)
6	130	2800	130	1900	130	8000
10	130	1900	130	1000	130	5000
15	130	850	130	750	130	3000
20	130	750	130	500	130	1800
25	130	450	130	430	130	1200
30	130	350	130	300	130	850
40	130	200	130	200	130	500

#### FineFocus 600

Material	Mild steel		Stainless steel		Aluminium	
Material thickness (mm)	Cutting current (A)	Cutting speed (mm/min)	Cutting current (A)	Cutting speed (mm/min)	Cutting current (A)	Cutting speed (mm/min)
6	60	3600	200	3800	60	2500
8	120	3100	200	3200	100	4600
10	120	2500	200	2400	100	3800
15	200	2600	200	1900	200	4200
20	200	2300	200	800	200	3800
30	200	1000	200	600	200	1200
40	200	650	200	350	200	950
50	200	300	200	250	200	750
60	200	250	200	150	200	500

<sup>&</sup>lt;sup>2)</sup> The listed cutting speeds depend on material, gas parameter, guiding system as well as proper consumables. According to quality requirements cutting speeds may differ.

#### FineFocus 800

Material	Mild steel		Stainless steel		Aluminium	
Material thickness (mm)	Cutting current (A)	Cutting speed (mm/min)	Cutting current (A)	Cutting speed (mm/min)	Cutting current (A)	Cutting speed (mm/min)
6	200	7500	200	3800	200	9000
8	200	5000	200	3000	200	8000
10	200	4500	200	2400	200	7000
15	250	3800	250	2200	250	4500
20	250	2300	250	1600	250	3700
30	300	1500	250	1000	250	2200
40	300	1100	250	700	250	1400
50	300	600	300	450	250	1200
60	300	350	300	250	250	800
70	300	200	300	150	250	250
80	300	100	300	100	250	150

#### FineFocus 1600

Stainless steel						
PB-S1	51 W (only	Ar/H <sub>2</sub> )	PB-S100 WU			
Material thickness (mm)	thickness current speed		Material thickness (mm)	Cutting current (A)	Cutting speed (mm/min)	
60	500	400	60	500	400	
70	500	300	70	500	300	
80	600	250	80	600	170	
100	600	200	100	600	180	
120	600	150	120	600	195	
150	600	100	150	600	100	

Kjellberg plasma cutting units are CE-conform and correspond with the valid guidelines and instructions of the European Union. They are developed and fabricated on basis of the standard EN 60974. The plasma cutting units are labelled with the S-sign and therefore applicable to environments with increased hazard of electric shock. The fabrication takes place according to DIN EN ISO 9001. The factory-owned quality assurance comprises piece and cutting performance tests, documented by test certificate.

Our products represent a high level of quality and reliability. We reserve the rights to change design and/or technical specification during the series fabrication. Claims of any kind can not be derived from this brochure.



Kjellberg Finsterwalde Plasma und Maschinen GmbH many D - 03238 Finsterwalde Leipziger Str. 82 Tel.: +49 3531 500-0 Fax: +49 3531 500-229 Germany

E-Mail: plasma@kjellberg.de Internet: www.kjellberg.de

 INSTERNALDE, FINE F⊕CUS, ⊕, YellowXLife, XL,

 HiFocus, PGC, PerCut and Contour Cut are trademarks of the

Kjellberg-Foundation/ Kjellberg Finsterwalde and may be registered in Germany and/or other countries.

Copyright © 2012 Kjellberg Finsterwalde Plasma und Maschinen GmbH Alle Rechte vorbehalten.