Kjellberg®
FINSTERWALDE

the FINE FOCUS company

Plasma Cutting System

HiFocus 130

Cutting and Marking
in HiFocus Quality at Minimum Cost



Plasma cutting
from 0.5 mm up to 40 mm

made in Germany

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The HiFocus Technology with the PLUS for Highest Demands

Kjellberg Finsterwalde stands for plasma cutting at the highest level of precision. The outstanding features of the HiFocus^{PLUS}-technology are superior quality of the cut surface, making it possible to further process the workpiece without any after-treatment, and minimum costs per cutting metre.

Cutting results with high precision

Due to its excellent properties, the HiFocus 130 achieves optimum cutting results which are characterised by

- metallically clean, laser-like cut surfaces when cutting thin and medium range of thickness
- narrow cutting kerfs
- very low squareness tolerances according to DIN EN ISO 9013
- very small heat affected zones and, therefore, nearly no distortion, also on thin plates
- easy change from marking to cutting
- cutting and marking with the same consumables guarantees highest flexibility

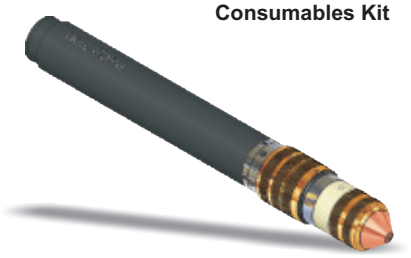
In connection with the new plasma torches PerCut 200 and PerCut 210, the system offers **diverse possibilities for cutting** mild steel, alloyed steel, aluminium and other electrically conductive materials with a thickness between 0.5 and 40 mm. The system meets the requirements of metal working and mechanical engineering, container construction and many other industries.



PerCut 200

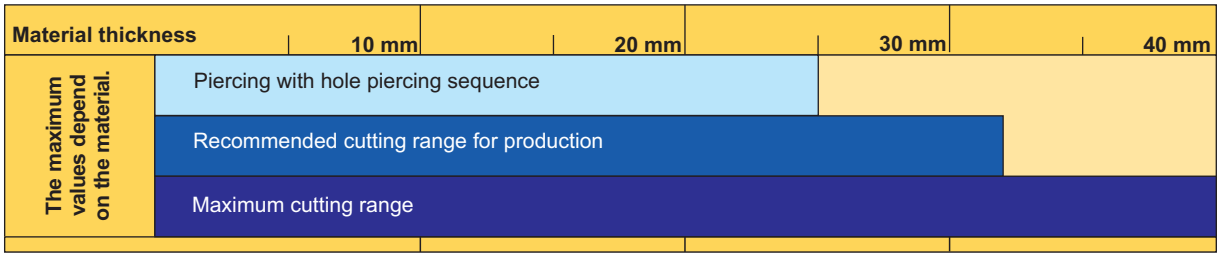


Consumables Kit



PerCut 210M

Fields of application



Optimal gas mixtures

In addition to the manual plasma gas control unit, the HiFocus 130 is also available with the automatic plasma gas console FlowControl. It makes it possible to select cutting data from pre-adjusted databases and modify them, if required.



FlowControl

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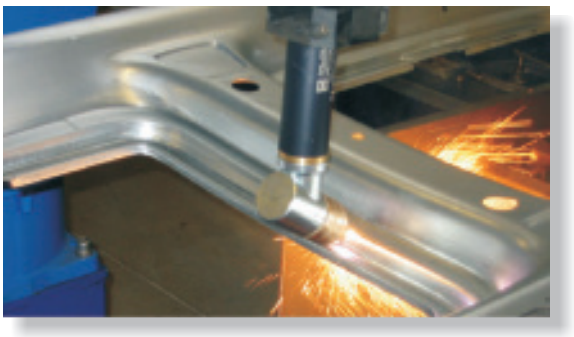
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Process stability and reliability for automated operation

Diverse fields of application in

- Metal cutting centres
- Automotive industry
- Offshore and shipyards





- Tube and profil cutting
- Plant and container construction
- Building industry

Latest torch technology

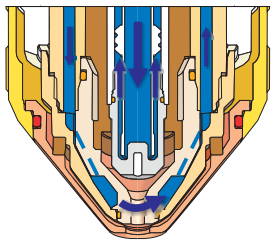
The HiFocus 130 is equipped with the plasma torch PerCut 200/210. Compared to the previous PerCut 160/170, the new torch is characterised by increased arc constriction of plasma, the use of smaller nozzle diameters, increased gas rotation and a more effective liquid cooling.

The PerCut 200 is suited for standard applications as well as for high-precision bevel cutting. Thanks to the quick change system of the PerCut 210, the installation of the torch head is quick and handy.

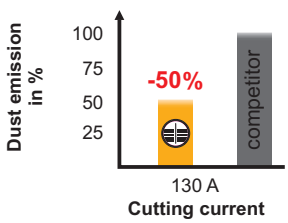
Advantages of the new torch PerCut 200/210 :

- Higher cutting speeds reduce the costs per cutting metre (e.g. lower gas consumption and less emissions)
- Long lifetime of the consumables saves resources
- Narrower cutting kerfs and, therefore, less emissions and waste
- Significant lower gas consumption compared to competitive products due to more effective liquid cooling system
- Due to lower gas consumption comparatively low noise level
- Lower diversity of consumables
- Bevel cutting up to 50 degrees with standard consumables
- Cutting and marking with the same consumables

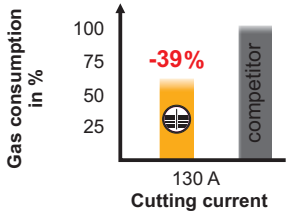
Effective liquid cooling system



Dust emission



Gas consumption



Technical Data

Power source	HiFocus 130
Mains voltage[1)]	3x 400 V, 50 Hz
Connected load	32 kVA
Cross section, Cu	4 x 10 mm^2
Fuse protection	T50A
Cutting current	20-130 A (100 % d. c.)
Marking current	16 A
Open circuit voltage	400 V
Ignition	High voltage
Protection class	IP 22
Insulation class	F
Dimensions (H x W x D)	1050 x 540 x 960 mm
Weight	251 kg

1) Other voltages and frequencies on request

Plasma torch	PerCut 200/210
Standard version Quick Change system	PerCut 200 PerCut 210
Max. cutting current	200 A
Duty cycle	100 %
Clamping diameter	50.8 mm
Max. cutting range	60 mm (200 A)
with HiFocus 130	40 mm (130 A)
Cooling	coolant „Kjellfrost“
Plasma gases	O_2, Ar/H_2, N_2
Marking gas	Ar
Swirl gases	O_2, N_2, Air, F5*

*) Forming gas F5 (95% N_2, 5% H_2)

Cutting parameters (extract) [1)]

Material-thickness (mm)	Unalloyed steels		Alloyed steels		Aluminium	
	Cutting current (A)	Cutting speed (mm/min)	Cutting current (A)	Cutting speed (mm/min)	Cutting current (A)	Cutting speed (mm/min)
1	20	5500	60	6000	35	3800
2	35	2800	80	5000	35	2800
3	35	2500	80	3500	35	2400
4	60	5000	80	3200	50	1500
5	60	4000	130	2300	50	1400
6	90	4000	130	1900	50	1300
8	90	3000	130	1300	130	2000
10	130	3800	130	1100	130	1500
12	130	2800	130	950	130	1400
15	130	2500	130	750	130	1100
20	130	1600	130	550	130	800
25	130	900			130	600
30	130	700				

1) The listed cutting speeds depend on material characteristics, gas parameters, the guiding system as well as the consumables. According to the quality parameters of the respective cutting task, the user can change the cutting speed.

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 the basis of the standard EN 60974 (VDE 0544). 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. In our house 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 right to change the design and/or technical specifications during the series fabrication. Claims of any kind can not be derived from this brochure.

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