



**Kjellberg**<sup>®</sup>  
**FINSTERWALDE**

## HiFocus 161i neo

Plasma Cutting from 0.5 to 50 mm



Made in Germany

**Cutting and Marking with Contour Cut**

[www.kjellberg.de](http://www.kjellberg.de)

## Plasma Cutting with HiFocus neo

### neo: new – efficient – original

HiFocus neo systems offer a new higher level of performance. Users benefit from an excellent cutting and marking quality. High speeds improve productivity and lower process costs. Due to optimised technology, HiFocus neo delivers longer consumable life and consistent cut quality over entire parts life.

The high-precision unit HiFocus 161i neo can be used for diverse cutting tasks with material thicknesses from 0.5 to 50 mm.



**contour cut**  
SPEED



12 mm mild steel

### Cutting faster by 50 %

The patented Contour Cut technology stands for precision when cutting mild steel. Small contours, narrow webs and above all small holes with a hole diameter to material thickness ratio of 1:1 can be cut with Contour Cut in excellent quality. Contour Cut Speed allows the cutting of contours in similar quality with a speed that is up to 50 % higher.

### Advantages

- Suited for all common guiding systems as there are CNC-controlled guiding systems, pipe cutting machines or robots
- High-quality reproducible cutting results due to automatic gas control unit
- Long lifetime of consumables
- Higher cutting speeds reduce the costs per cutting metre
- Nearly dross-free cuts and therefore almost no rework required
- Low perpendicularity and surface roughness

### Application Areas

- Metal construction and engineering
- Steel service centres
- Steel and hall construction
- Plant and tank construction
- Pipeline engineering
- Shipbuilding
- Commercial vehicle industry
- Crane construction
- Offshore constructions
- Wind power plants



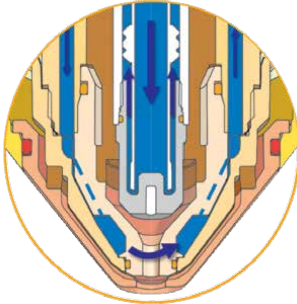
Marking and notching



Cutting of large and small contours

## Components for flexible Use

### Cost-saving Torch Technique



Liquid cooling system up to the torch tip

The Kjellberg plasma torches of the PerCut series are equipped with a unique liquid cooling system which guarantees a long lifetime of the consumables, thus making it possible to achieve savings in the gas consumption. Furthermore, the quick change head reduces the times for changing the consumables. Due to their acute-angled design, difficult-to-access areas can be reached easily and bevel cuts with an angle of up to 50° are possible.

### Robust Consumables



Copper cathodes for cutting with oxygen

With the long-living consumables made by Kjellberg, changeover times can be reduced and the productivity of the cutting process increased. The previously offered range of consumables for cutting with oxygen is expanded by powerful copper cathodes which convince with a long lifetime and an excellent price-performance ratio.

**neo**  
new – efficient – original

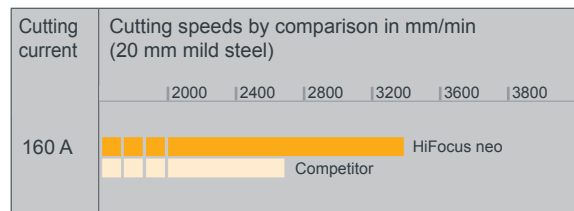
### Efficient Gas Supply



Automatic gas supply FlowControl

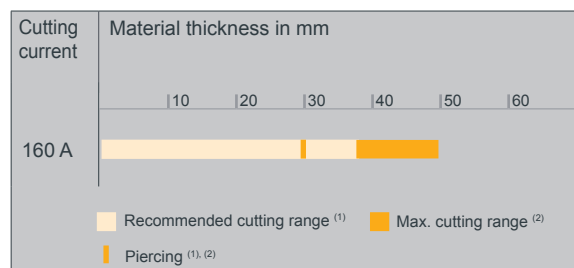
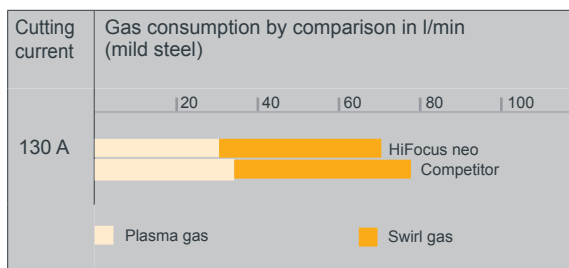
The adjustment and control of the plasma gases can be done manually or automatically. The automatic gas control unit FlowControl stores the adjusted values of the plasma gases and thus allows a constantly high quality and reproducible cutting results.

### Cutting Speed



The units of the HiFocus neo series show a considerably higher cutting speed compared to competitive products. The results are narrow kerfs and thus fewer emissions and waste. The lower energy consumption and time expenditure resulting therefrom save the environment as well as the user's resources.

### Cutting Ranges



<sup>(1)</sup> These data are depending on the materials to be cut and their compositions.  
<sup>(2)</sup> Observe piercing capability.

## Technical Data

Power source	HiFocus 161i neo
Mains voltage	3x 400 V; 50 Hz
Fuse, slow	50 A
Connected load, max.	28 kVA
Cutting current (100 % duty cycle)	10-160 A
Marking current (100 % duty cycle)	5-25 A
Dimensions (L x W x H)	985 x 570 x 1140 mm
Mass	206 kg

Plasma torch	PerCut
Standard version	PerCut 201
Quick change system	PerCut 211
Cutting range	0.5 to 50 mm
Clamping diameter	50.8 mm
Plasma gas	O <sub>2</sub> ; Ar/H <sub>2</sub> ; N <sub>2</sub>
Marking gas	Ar
Swirl gas	O <sub>2</sub> ; N <sub>2</sub> ; Air; F5 <sup>(1)</sup>

<sup>(1)</sup> Forming gas F5 (95 % N<sub>2</sub>, 5 % H<sub>2</sub>)

## Operating Data (extract) <sup>(2)</sup>

Material thickness (mm)	Mild steel		Stainless steel		Aluminium	
	Cutting current (A)	Cutting speed (mm/min)	Cutting current (A)	Cutting speed (mm/min)	Cutting current (A)	Cutting speed (mm/min)
0,5	20	6000	–	–	–	–
1	20	4200	55	5500	35	3800
4	60	4100	80	3200	50	1500
6	90	3700	130	1700	130	3500
10	130	3400	130	1400	130	1300
15	130	1900	160	1100	160	1500
20	130	1300	160	800	160	1300
25	160	1100	160	600	160	1100
30	160	800	160	500	160	600
40	160	500	160	300	160	400
50	160	200	160	100	160	100

<sup>(2)</sup> Listed cutting speeds are depending on material characteristics, gas parameters, guiding system as well as proper consumables. According to the quality requirements of the cutting task, the user may change the cutting speed.

### Kjellberg Finsterwalde Group

Welding Electrodes  
Welding Equipment  
Cutting Equipment  
Mechanical Engineering

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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 (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. 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 cannot be derived from this brochure.

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