



Kjellberg[®]
FINSTERWALDE

HiFocus 161i neo

Plasma Cutting from 0.5 to 50 mm



neo

new – efficient – original

Made in Germany

Cutting and Marking with Contour Cut

www.kjellberg.de

Plasma Cutting with HiFocus neo

neo: new – efficient – original

With HiFocus neo the user benefits from high speed when cutting and marking electrically conductive materials, ensuring at the same time excellent quality and low process costs. Thanks to optimised technology, the consumables are protected and the plasma cutting process is more efficient.

The high-precision unit HiFocus 161i neo achieves best results when marking and cutting materials with a thickness from 0.5 to 50 mm.



neo

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 at a glance

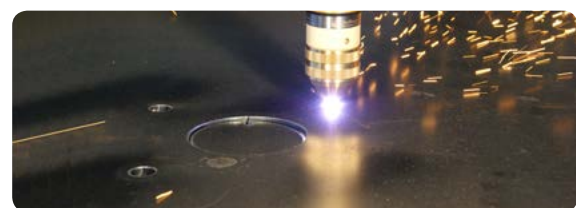
- Suited for all common guiding systems as there are CNC-controlled guiding systems, pipe cutting machines or robots
- High-quality reproducible cutting results due to automatic gas control unit
- Long lifetime of consumables
- Higher cutting speeds reduce the costs per cutting metre
- Nearly dross-free 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



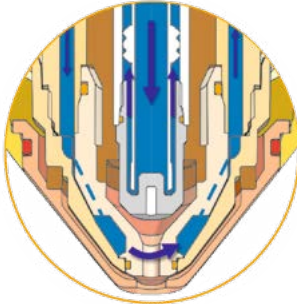
Marking and notching



Cutting of large and small contours

Components for flexible Use

Cost-saving Torch Technique



Liquid cooling system up to the torch tip

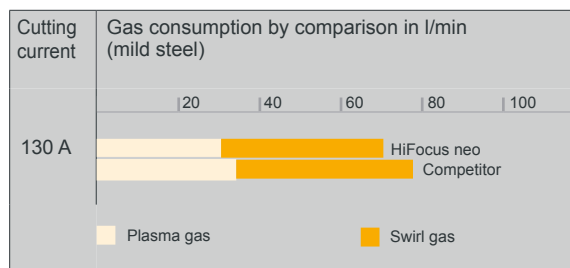
The Kjellberg plasma torches of the PerCut series are equipped with a unique liquid cooling system which guarantees a long lifetime of the consumables, thus making it possible to achieve savings in the gas consumption. Furthermore, the quick change head reduces the times for changing the consumables. 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.

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.



Robust Consumables

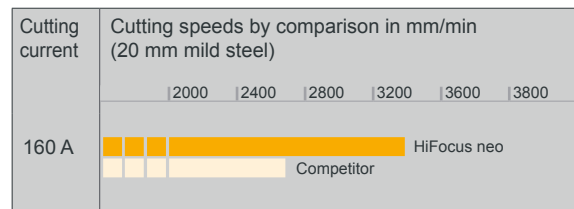


Copper cathodes for cutting with oxygen

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.

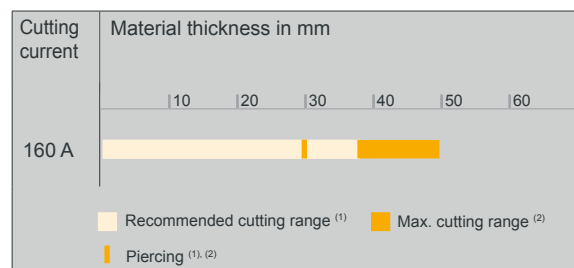
neo
new – efficient – original

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



⁽¹⁾ These data are depending on the materials to be cut and their compositions.
⁽²⁾ 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 ₂ ; Ar/H ₂ ; N ₂ |
| Marking gas | Ar |
| Swirl gas | O ₂ ; N ₂ ; Air; F5 ⁽¹⁾ |

⁽¹⁾ Forming gas F5 (95 % N₂, 5 % H₂)

Operating data (extract) ⁽²⁾

| Material thickness (mm) | Un- and low-alloyed 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) |
| 0,5 | 20 | 8000 | – | – | – | – |
| 1 | 20 | 5500 | 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 |

⁽²⁾ 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

Kjellberg Finsterwalde Plasma und Maschinen GmbH

Oscar-Kjellberg-Str. 20 | 03238 Finsterwalde | Germany
Phone: +49 3531 500-0 | Fax: +49 3531 500-8510
plasma@kjellberg.de | www.kjellberg.de

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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