

Ignis

150
180
250

Ready for any challenge:
Flexible electrode welding—
anytime and anywhere



No matter what happens:

Reliable in all situations

Each welding task brings its own specific requirements, but arc welding in particular is especially challenging for welding specialists. The seam has to withstand stresses and weathering of all kinds, regardless of whether it is located deep underground or high in the air. This applies even when there is no stable power grid available. Achieving good results is only possible with the right welding machine—such as the Ignis, which helps you produce the perfect weld even under adverse conditions.







The best result

with every
power grid



The Ignis makes a stable arc a reality, even with long grid leads or voltage fluctuations. This robust welding machine always delivers perfect results, even with unstable grids, generator-powered operation, or over a wide operating radius. All this makes the Ignis the perfect companion—especially on construction sites, for repair and maintenance work in industry and agriculture, and in any home workshop.

Your responsibility, your choice

Compact, robust,
reliable

The perfect weld seam every time, even under the most adverse conditions, in the smallest of spaces, indoors or outdoors – this is possible with the compact Ignis product family. External influences such as dust and moisture, cannot harm the robust and durable housing. Pioneering technologies and numerous functions help get welding off to a smooth start and continue to offer support throughout the whole welding process. So you can concentrate entirely on your job.





Portable and
resistant

All Ignis models are ideally suited for mobile use. At only 6.3 kg (Ignis 150) and 8.7 kg (Ignis 180), the two smaller models in particular are truly lightweight. The robust construction of the devices as well as the integrated stainless steel filter provide reliable protection even in demanding outdoor welding jobs or volatile weather conditions.



Full power even with
long grid leads

With the Ignis, perfect welding results are given even with grid leads up to 100 meters long. This is made possible by features such as the integrated PFC technology (Power Factor Correction), making the devices particularly energy-efficient while minimizing disruptive interference in the grid.



Easy and
user-friendly
operation

The intuitive operating concept and 7-segment display make it possible to quickly read the parameters that have been configured, and takes the hassle out of handling. Slightly set inwards, the user interface is also well protected against damage and external influences.



Wide range of
variants with
additional functions

The Ignis TIG models are a great way to get started with mobile TIG welding and offer convenient remote control operation. The Ignis 180 and 250 are also available in country-specific versions and can be used in regions with different mains voltages.



A stable arc with no exceptions

HotStart

In order to make the electrode easier to ignite, the current is increased for fractions of a second on the power source. The HotStart function was specially developed for welding with rutile and cellulosic electrodes.

SoftStart

This function ensures a stable arc at the start of welding and has been specially developed for basic electrodes that weld at a low welding current

Anti-stick

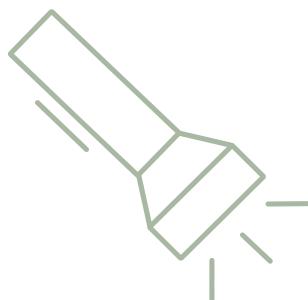
Prevents electrode burn-out: If the electrode sticks during manual arc welding—equivalent to a short circuit—the power output of the welding unit switches off immediately.

MMA Pulse

Beautiful welds and even faster welding thanks to the MMA pulse function—especially in restricted positions.

Made for everyday

welding



TrackingArc

This function acts like a flashlight. Igniting the arc with only eight amperes makes it easier to find the exact starting position when re-igniting after a welding stop or an electrode change. In this way, you can avoid welding errors such as insufficiently filled end-craters or notch effects as well as time-consuming rework. The TrackingArc function is specifically designed for applications that do not use an automatic welding helmet or shield.

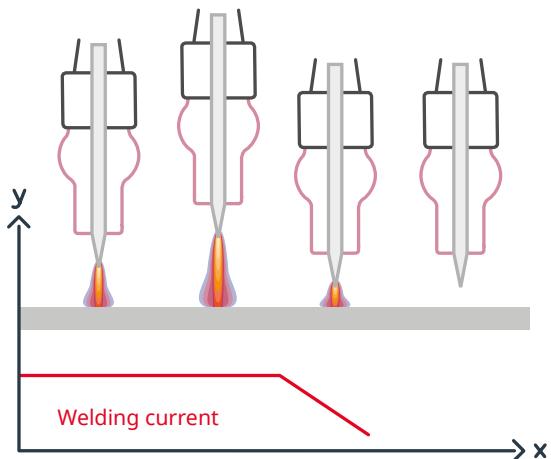
Arc-force dynamic

If basic electrodes are being welded with coarse droplet material transfer at a low current (under-loaded), there is a risk of sticking. To rule this out, more current is supplied for a split second so that the electrode burns freely, preventing sticking just before it occurs.



TIG Comfort Stop

Prevents annoying arc break at the end of welding: Once the welding process is finished, the welding current is automatically switched off after a specific change of the arc length. This ensures improved welding results in the area of the end-crater because the gas shield is also maintained.



TAC Tacking Function

For tacking, one point is enough. The pulsed arc sets the two weld pools in motion, making them merge into a single pool in no time. The TAC function is also very useful when welding light-gage sheets without filler metal.

TIG Pulse

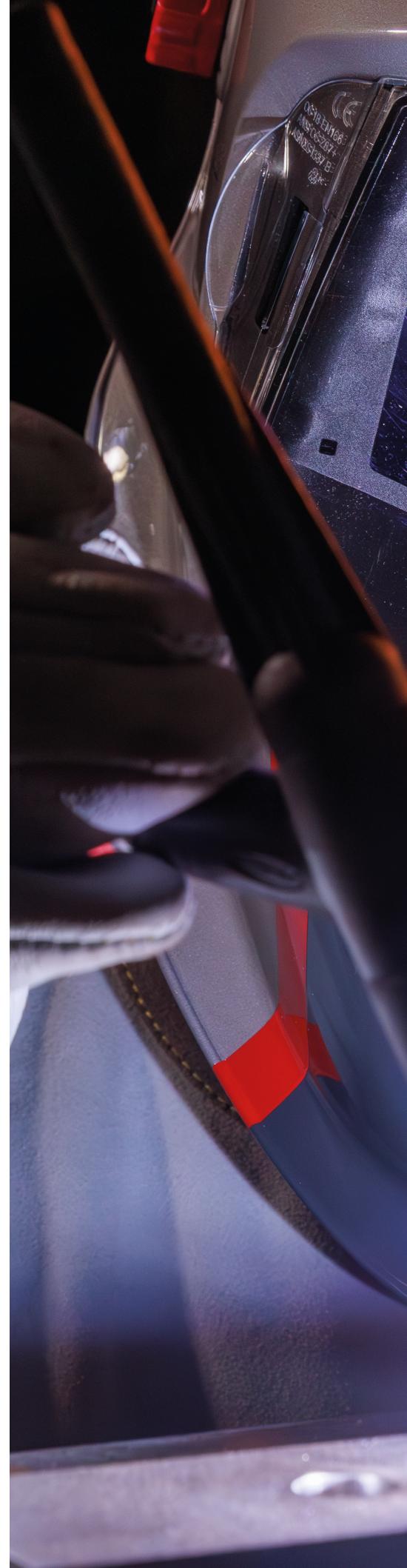
This function (up to 100 Hz) enables precise control over the weld pool and ensures excellent seam jointing. The pulsed arc makes it easier to work with very thin materials, because the temperature is slightly lower in the phases with less current.

TIG Multilock System

Simpler, more flexible welding: The Multilock System offers a variety of different and interchangeable torch bodies in different lengths and angles.

TIG Multi Connector (TMC)

One solution for everything: This universal connection for system components, such as welding torches with special functions (Up/Down, potentiometers) or remote controls, gives the user cross-product advantages.



Complete control



Perfect welds
in any position

The TIG versions of the Ignis 150 and Ignis 180 create scope for extended TIG functions in addition to electrode welding, making TIG welding with the Ignis much more convenient and versatile. Sophisticated additional functions such as TIG Comfort Stop and TIG Pulse improve arc stability and give you even better control over the weld pool.

Intuitive controls,
diverse settings

- Rotary pushbutton (can also be used when wearing gloves)
- A range of welding methods: MMA, CEL, TIG
- Setting values: Dynamics, welding current, HotStart/SoftStart, Pulse, and many more

Robust plastic housing,
protected interior

- Protection against contamination and damage to components (IP23 protection)
- Protected connection and operating area
- Fixing all components to the frame
- Quick replacement of prints and parts
- Improved and targeted air flow

Optimized rib elements

- Better protection against spray water
- Optimal cooling for a longer duty cycle
- Integrated dust filter for better protection of the electronics



Diverse, durable, intuitive



TIG variant

(only available for Ignis 150 and 180)

- Integrated gas solenoid valve
- TMC connection for the use of burners with Up/Down function or remote controllers
- TIG Pulse, TAC tacking function, 2-stroke mode and 4-stroke mode
- Contact ignition

Ignis 250: XT Variant

- Three-phase 200-575 V -10%/+10%
- Single-phase use up to 250 A (depending on mains fuse)
- Full generator compatibility
- Higher energy efficiency





Ignis 250 operation

Welding current indicator

Rotary and push button

Favorites button

Five EasyJob buttons

Ignis
250

Favorites button

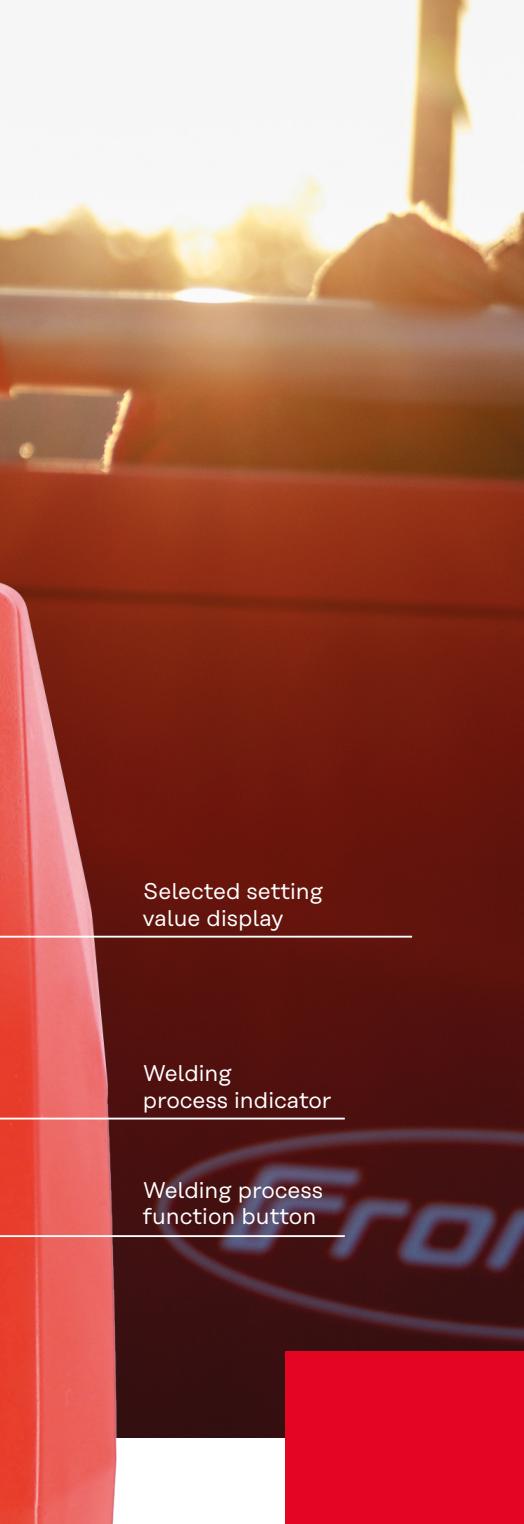
The Favorites button takes welding parameters from the background menu straight to the first menu level—for quick and convenient access.

EasyJobs

The five EasyJob buttons on the Ignis 250 let you save up to five current welding-related settings.

Welding current display

Gives you an overview of the current status of the welding current, for precise control throughout the entire welding process.



Clear and intuitive



Connected
by welding

United
by passion

We focus on connections—between people, industries, and metals.
Find out more here.



[www.fronius.com/
welding/aboutus](http://www.fronius.com/welding/aboutus)

Options

TU Car 2 Easy

Simple, space-saving trolley for all Ignis models.



Remote control

for starting the welding process and setting the main welding parameters.





Ignis 150/180 technical data	Ignis 150/Ignis 150 TIG	Ignis 180/Ignis 180 TIG	Ignis 180 XT/180 TIG XT		
Mains voltage -20%/+15%, 50/60 Hz	230 V	230 V	120 V (20 A)	120 V (15 A)	
Power consumption	5,52 kVA	5,75 kVA	5,75 kVA	3,48 kVA	2,28 kVA
Cos phi	0,99 (150 A)	0,99 (180 A)		0,99 (180 A)	
Efficiency	88 % (at 90 A)	89 % (at 120 A)		89 % (at 120 A)	
Welding current range					
Electrode	10–150 A	10–180 A	10–180 A	10–120 A	10–85 A
TIG	10–150 A	10–220 A	10–220 A	10–170 A	10–140 A
Electrode/welding current range at 10 min/40 °C (104 °F)	150 A (35 % ED) 110 A (60 % ED) 90 A (100 % ED)	180 A (40 % ED) 150 A (60 % ED) 120 A (100 % ED)	180 A (40 % ED) 150 A (60 % ED) 120 A (100 % ED)	120 A (40 % ED) 100 A (60 % ED) 90 A (100 % ED)	85 A (40 % ED) 70 A (60 % ED) 65 A (100 % ED)
TIG/welding current range at 10 min/40 °C (104 °F)	150 A (35 % ED) 110 A (60 % ED) 90 A (100 % ED)	220 A (40 % ED) 150 A (60 % ED) 120 A (100 % ED)	220 A (40 % ED) 160 A (60 % ED) 130 A (100 % ED)	170 A (40 % ED) 130 A (60 % ED) 100 A (100 % ED)	140 A (40 % ED) 110 A (60 % ED) 100 A (100 % ED)
Open circuit voltage	96 V		101 V		
Working voltage					
Electrode	20,4–26,0 V		20,4–27,2 V		
TIG	10,4–16,0 V		10,4–18,8 V		
Protection class			IP 23		
Dimensions l/w/h	365/130/285 mm 14,4/5,1/11,2 in.		435/160/310 mm 17,1/6,3/12,2 in.		
Weight	6,3 kg 13,89 lb.		8,7 kg 19,18 lb.		

Stay future-proof

Easy to maintain and repair

All the main Ignis components are easy to access, making maintenance work quick and straightforward. Defective parts are generally easy to pinpoint and replace. Plus, all Fronius devices can be opened and repaired using commercially available tools.



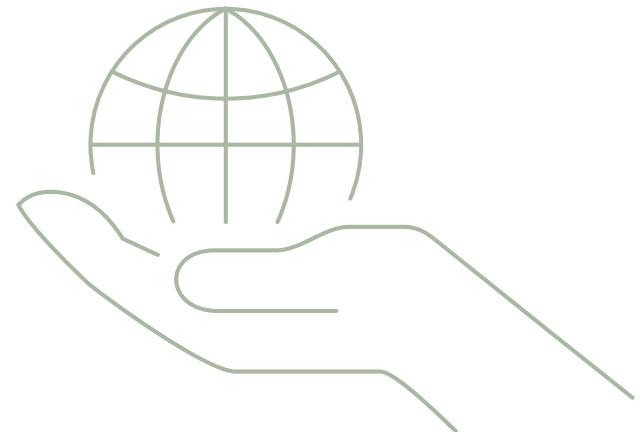
For more information, please visit: www.fronius.com/ignis

Durable

Long service life: The Ignis product family is designed and made with sustainability in mind. A high-quality stainless steel filter, robust housing, and 3.5 cm ground clearance guarantee the welding system will have a long service life.

Energy efficient

The integrated PFC technology (Power Factor Correction) also ensures minimal energy loss, even with long grid leads. This makes the Ignis highly energy-efficient, and minimizes disruptive repercussions in relation to the grid. The optionally adjustable automatic time shutdown (300 or 900 s) also ensures that no valuable energy is wasted even in standby mode.



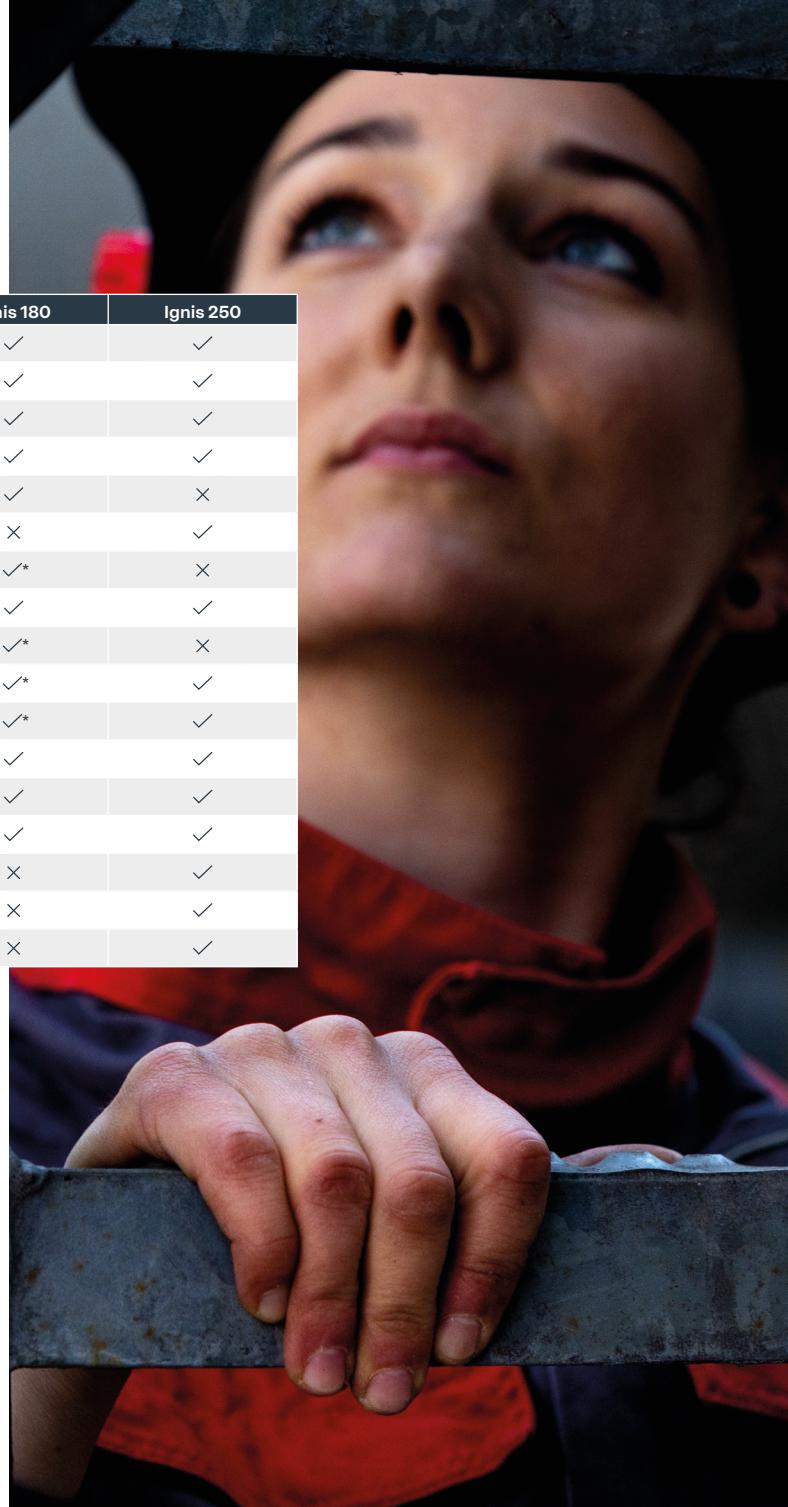
Ignis 250 technical data	Ignis 250	Ignis 250 XT
Mains voltage -20%/+15%, 50/60 Hz	3 x 400 V	3 x 200–575 V / 1 x 230 V
Power consumption	7,2 kVA	5,6 kVA
Cos phi	0,99	0,99
Efficiency	89 % (at 250 A)	89 % (at 250 A)
Welding current range Electrode TIG	10–250 A 3–300 A	
Electrode/welding current range at 10 min/40 °C (104 °F)	250 A (40 % ED) 220 A (60 % ED) 180 A (100 % ED)	250 A (40 % ED) 220 A (60 % ED) 180 A (100 % ED)
TIG/welding current range at 10 min/40 °C (104 °F)	300 A (40 % ED) 260 A (60 % ED) 210 A (100 % ED)	300 A (40 % ED) 260 A (60 % ED) 230 A (100 % ED)
Open circuit voltage Electrode	101 V	
Working voltage Electrode TIG	20,4–30,0 V 10,3–22,0 V	
Protection class	IP 23	
Dimensions l/w/h	488 x 210 x 369 mm 19,2 x 8,4 x 14,5 in.	
Weight	17,96 kg 39,6 lb.	17,3 kg 38,1 lb.



Function overview

	Ignis 150	Ignis 180	Ignis 250
HotStart	✓	✓	✓
SoftStart	✓	✓	✓
Anti-stick	✓	✓	✓
MMA Pulse	✓	✓	✓
TIG variant	✓	✓	✗
Cel function	✗	✗	✓
TAC tacking function (with TIG variant)	✓*	✓*	✗
TIG Comfort Stop	✓	✓	✓
TIG Pulse (with TIG variant)	✓*	✓*	✗
TIG Multi Connector	✓*	✓*	✓
Remote control operation	✓*	✓*	✓
Time shutdown (300 s/900 s/off)	✓	✓	✓
TrackingArc	✓	✓	✓
XT variant	✗	✓	✓
Extended XT functionality	✗	✗	✓
5 EasyJobs	✗	✗	✓
Favorites button	✗	✗	✓

*Ignis 150/180 only with TIG variant



Warranty activation



for your welding unit



Fronius Canada Ltd.
2875 Argentia Road, Units 3, 4, 5 & 6
Mississauga, ON L5N 8G6
Canada
T +1 905 288-21 00
F +1 905 288-21 01
sales.canada@fronius.com
www.fronius.ca

Fronius USA LLC
6797 Fronius Drive
Portage, IN 46368
USA
T +1 877 FRONIUS
sales.usa@fronius.com
www.fronius-usa.com



Further information

on the Ignis 150/180/250 can be found here: www.fronius.com/ignis

Fronius UK Limited
Maidstone Road, Kingston
Milton Keynes, MK10 0BD
United Kingdom
T +44 1908 512 300
F +44 1908 512 329
info-uk@fronius.com
www.fronius.co.uk

Fronius International GmbH
Froniusplatz 1
4600 Wels
Austria
T +43 7242 241-0
F +43 7242 241-95 39 40
sales@fronius.com
www.fronius.com