Pi

A high-performance inverter welding machine for the most demanding TIG welding assignments. It is robust, reliable and delivers a stable arc for a perfect finish.

Water *or* air cooled

200, 250, 350 *or* 500 amps

DC, DC HP *or* AC/DC

MIGATRONIC

When success lies in the details

Pi is a powerful and durable welding machine that is known for its reliable performance. To professional TIG welders, Pi is the essential tool for the welding booth or assembly workshop. Use it for root passes or tube and pipe welding in mild steel, stainless steel and aluminium.

A faithful partner

Pi is a faithful partner in the workshop. The robust design, precise ignition and stable current flow makes it a first choice for many TIG welders and supervisors. It excels in welding stainless steel and aluminium pipes and containers for industries like Food, Pharma, Petro-chemical and Maritime industries. Pi can certainly live up to the high quality standards set by these industries.

The stunning TIG-weld

TIG welding is about precision, accuracy and perfectly executed welds. With Pi in the workshop, dedicated TIG welders can care for the details while striving to carry out stunning welds. It encourages good craftsmanship and empowers the user to deliver high-quality welded products.

Faster welding with pulse

Improve productivity when you use the pulse process for welding thin plate thicknesses and sheet metal. It gives a better control of the weld pool, no spatter, and the low heat input minimises the risk of damaging the steel.

Pi 200

This Pi is a great guy.

Choose a 1-phased Pi with 200 amps if you need a great and loyal partner for welding thin plate thicknesses. Choose air cooling for light use, repair, maintenance and assembly. Choose water cooling for heavy use in busy workshops. Choose AC/DC if you ever need to weld in aluminium.

Weight
From 22 kg

Cooling
Air or water

Control panel
DC HP or AC/DC

Current range
5-200 A

Pi
200-250 A

Pi 250

This Pi is your ally.

Choose a 3-phased Pi with 250 amps if you need a reliable and committed ally for various TIG welding operations. It is a versatile and talented machine that will not let you down. Choose air cooling for light use for repair, maintenance and assembly. Go for water cooling for heavy use in busy workshops. Choose AC/DC if you ever need to weld in aluminium.

Weight
From 23 kg

Cooling
Air or water

Control panel
DC HP or AC/DC

Current range
5-250 A

Pi 350

This Pi won't be shy.

Choose Pi with 350 amps for the demanding tasks that require a powerful and durable machine. It can handle tough conditions - it won't be shy. Choose air cooling for light use and water cooling for heavy use in busy workshops. Choose AC/DC if you ever need to weld in aluminium.

Weight
From 31 kg

Cooling
Air or water

Control panel
DC, DC HP or AC/DC

Current range
5-350 A

Pi
350-500 A

Pi 500

This Pi reaches for the sky.

Choose Pi with 500 amps if you want to achieve something big. This Pi certainly has high ambitions due to the high amps level. This water cooled machine is the perfect choice for heavy use in busy workshops with a high output level. Use it for thick plates in mild and stainless steel. Choose AC/DC if you ever need to weld in aluminium.

Weight
From 68 kg

Cooling
Water

Control panel
DC, DC HP or AC/DC

Current range
5-500 A

3 control panels

for efficient control

DC Basic

Control panel for TIG DC (direct current) welding with high-frequency ignition.

The panel is for Pi 350 and 500 where heavy use and welding thick plates without pulse is most common. For mild and stainless steel.

DC HP

Control panel for TIG DC with high-frequency ignition and pulse welding. The panel is for Pi 200-500 where pulse welding is preferred for sheet metal, and where finish is important.

All pulse functions are controlled using the middle row of buttons. Each function has its own button so it is easy to switch on/off or adjust parameters.

AC/DC

Control panel for TIG AC (alternating current) and DC with high-frequency ignition and pulse welding. The panel is for Pi 200-500 where pulse is preferred, and if you ever need to weld in aluminium. All AC functions are controlled using the top row of buttons.

On all panels, the top left shows the welding cycle with associated elements that are open for adjustments, e.g. pre gas flow, start amp, slope up/down and post gas flow.

4 functions

for efficient welding

TIG-A-Tack fixation

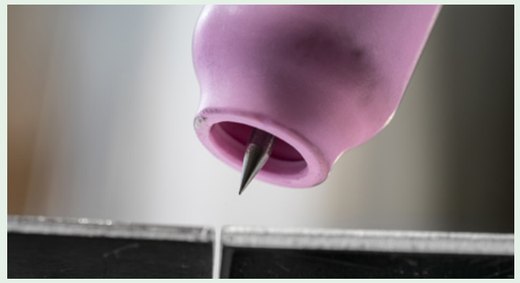
TIG-A-Tack is a semi-automatic process that makes extremely small and precise fixations in austenitic stainless steel. Usually it is possible to do without root protection gas. The ultra-small fixation points are invisible in the final weld. Use TIG-A-Tack for quick tack welding of sheet metal.

Intelligent Gas Control (IGC®)

With IGC®, the welding machine always uses the right amount of gas for every weld. When you have the optimum gas protection, you avoid porosity and impure welds. IGC® reduces the risk of failures created by insufficient gas flow or gas turbulence. Improve the weld quality and reduce your gas bill at the same time. IGC® is an optional feature.

Synergy Plus - pulse welding

Synergy Plus is a synergic pulse function for DC welding. The sound of frequency-controlled pulse can be stressful. With Synergy Plus, all disharmonic tones (frequencies) are filtered out and the machine will make clean metallic tones. It improves the work environment by reducing noise in the production.



Tungsten preheating

This AC welding function provides automatic preheating of tungsten electrodes to get the optimal ignition. It creates a reliable ignition and stable arc. Wearing of the tungsten electrode is reduced remarkably, especially for large tungsten diameters.

Creating hygienic joints for demanding industries

Welders' pursuit of accuracy in their welds in the Pharma, Food, Beverage, and Petrochemical industries is no joke. Hygienic joints with reduced risk of bacterial growth is the ultimate goal. Quality control is performed frequently and with an eye to every detail. The strict legal requirements in these industries put pressure on welders' craftsmanship and their equipment.

Pi: The essential tool for high-quality welds in Food, Pharma, and Petrochemical industries

The TIG welding process is known for precision and cleanliness. That is why it is used when manufacturing equipment for processing food, beverages, or medical supplies.

For every weld, there is a risk of weakening the corrosion resistance, so welders are concerned with clean surfaces to avoid contamination. Pi welding machines are designed to minimize these risks, which is crucial where even minimal contamination can have serious consequences.

With Pi, you can meet the strict quality requirements

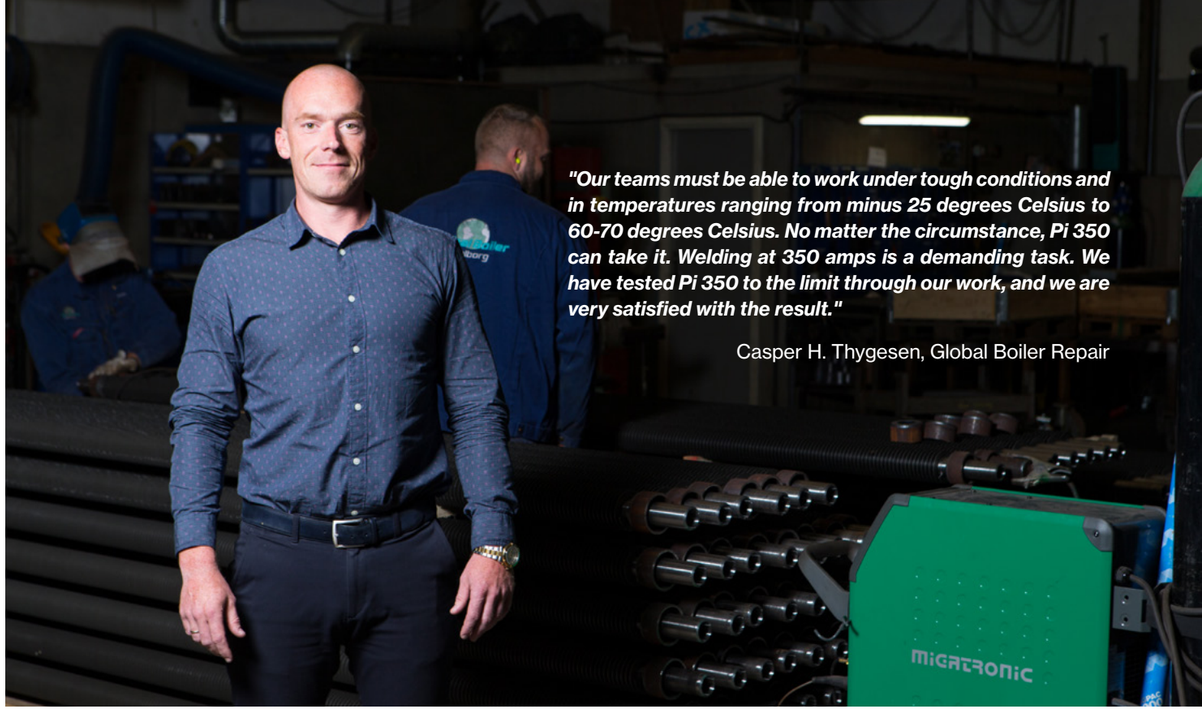
Pi can work in tight spaces and at various angles, making them a versatile choice. They fully live up to industry standards by providing welders with essential functions to produce a final product that satisfies strict quality requirements. The Pi machines also offer a high level of user-friendliness. They are easy to set up and use, which allows welders to focus on their work, without having to worry about complicated settings.

By investing in Pi equipment, you can ensure a safe and efficient production process. With their ability to offer precision, cleanliness, and versatility, Pi welding machines are an essential tool for any welder working in the Food, Pharma, and Petrochemical industries.

CASE - GLOBAL BOILER REPAIR - MARITIME INDUSTRY

Intelligent welding enhances reliability

Reliability and velocity are critical factors for the Danish service company of marine boilers, Global Boiler Repair A/S. To maintain its market leading position, the company relies exclusively on welding machines from Migatronic, including 35 Pi 350.



"Our teams must be able to work under tough conditions and in temperatures ranging from minus 25 degrees Celsius to 60-70 degrees Celsius. No matter the circumstance, Pi 350 can take it. Welding at 350 amps is a demanding task. We have tested Pi 350 to the limit through our work, and we are very satisfied with the result."

Casper H. Thygesen, Global Boiler Repair

Pi 350
35 pcs.
Active welding machines

365
Non-stop work, all year round

24/7
Day and night - always accessible

°C -25 / +70
Extreme working environment

Reliability is an essentail factor

Since 2011, Global Boiler Repair has provided swift and efficient boiler service for the international marine industry. Their experienced welders provide ambulance services for boilers on ships all over the world. 365 days a year and 24 hours a day.

According to Casper H. Thygesen, Department Manager at Global Boiler, a high degree of reliability and velocity are essential factors for Global Boiler's business, which is why the company has relied solely on welding machines from Migatronic:

"Migatronic welding solutions are characterised by a high level of durability and user-friendliness without compromising welding performance. In this way, they optimise our welders' efficiency, which is very important in our business where time is of the essence."

Time is money

Global Boiler has continuously invested in new welding equipment. The company's 30 welders have around 100 welding machines at their disposal – all wearing the Migatronic brand. According to Casper H. Thygesen, time efficiency is crucial in the marine industry:

"A ship that is out of service can cost the shipping company more than USD 100,000 a day. That's why time is an essential factor for our business, and a broken welding machine can have considerable consequences. Fortunately, with Pi 350, we do not have to worry about the reliability of our machines. We are confident that our welders always have the right equipment at hand so they can work for extensive periods and under tough conditions."

Impeccable service

Every Migatronic welding solution comes with impeccable servic. The same goes for Global Boiler that, because of the company's global operations, requires a worldwide service agreement:

"Migatronic's service is exceptional and its service units are always ready to provide swift and efficient service and maintenance. Through its global network of service stations and subcontractors, Migatronic is always nearby – from Singapore and China to Panama and USA. That kind of service level is remarkable and essential for a global company like ours", **says Casper H. Thygesen.**

Meet the ergonomic welding torch

TIG welding torches

Experience 360 degrees of freedom

TIG welding entails many repetitive movements. By optimising hand ergonomics, welders work in a safer and more comfortable work environment with reduced risk of work-related injuries.

TIG Ergo and TIG Adjust welding torches are designed with focus on ergonomics and movability. The range includes various models – from small air cooled to heavy duty water cooled models.

With the TIG Adjust range of flexible torches, welders can turn the torch body in any direction. It is extremely durable and can handle the repeated adjustments that diverse TIG welding requires.

Control units

Find the perfect adjustments

Add a control unit to the TIG torch and be able to adjust welding parameters at the handle. Welders can fine-tune settings precisely without being right next to the welding machine.

Control units are useful for TIG welders who care for every detail. They can quickly familiarise themselves with the key pad and control knob, and in that way find the right adjustments. The units can help welders stay concentrated and eliminate distractions.

Find the unit that best supports your specific welding tasks and place it on the torch handle without using any tools.

Technical specifications

	Pi 200 DC HP | AC/DC	**Pi 250** DC HP | AC/DC	**Pi 350** DC | DC HP | AC/DC	**Pi 500** DC | DC HP | AC/DC
Current range (MIG)	5-200 A	5-250 A	5-350 A	5-500 A
Mains voltage +/÷ 15%	1 × 230 V	3 × 400 V	3 × 400 V	3 × 400 V
Fuse type C	16 A	10 A	25 A	32 A
Mains current, effective	17.5 A | 18.6 A	7.1 A | 7.3 A	18 A | 18 A | 17.3 A	26.1 A | 26.1 A | 27.2 A
Mains current, max.	24.3 A | 26 A	13.0 A | 10.3 A	23.1 A | 23.1 A | 22.7 A	33.7 A | 33.7 A | 35.1 A
Power, 100%	4.0 kVa | 4.3 kVa	4.9 kVa | 5.0 kVa	12.5 kVa | 12.5 kVa | 12.0 kVa	18.1 kVa | 18.1 kVa | 18.8 kVa
Power, max.	5.6 kVa | 6.0 kVa	9.0 kVa | 7.1 kVa	16.0 kVa | 16.0 kVa | 15.7 kVa	23.3 kVa | 23.3 kVa | 24.2 kVa
Open circuit voltage	95 V	95 V	95 V	95 V
Open Circuit Power	15 W | 17 W	9 W | 9 W	9 W | 9 W | 13 W	6 W | 6 W | 8 W
Efficiency	85 % | 80 %	87 % | 81 %	80 % | 80 % | 88 %	91 % | 91 % | 87 %
Power factor	0.90 | 0.93	0.94 | 0.94	0.93 | 0.93 | 0.86	0.93 | 0.93 | 0.89
Duty cycle 100 %/20 °C (TIG)	170 A | 160 A	170 A	340 A	475 A
Duty cycle 60 %/20 °C (TIG)	210 A | 200 A	210 A | 200 A	350 A	500 A
Duty cycle max./40 °C (TIG)	-	-	350 A/95 V	500 A/80 V
Duty cycle 100 %/40 °C (TIG)	150 A/16 V | 140 A/15.6 V	150 A/16 V	300 A/22 V | 290 A/21.6 V	420 A/26.8 V
Duty cycle 60 %/40 °C (TIG)	170 A/16.8 V	190 A/27.6 V | 180 A/17.2 V	350 A/24 V	500 A/30 V
Duty cycle max./40 °C (TIG)	200 A/40 %/18 V	250 A/35 %/20 V | 250 A/30 %/20 V	350 A/60 %/24 V	500 A/60 %/30 V
Application class	S/CE	S/CE | S/CE/CCC	S/CE/CCC	S/CE/CCC
Protection class	IP 23	IP 23	IP 23	IP 23
Standards	EN/IEC60974-1. EN/IEC60974-3. EN/IEC60974-10. Class A		EN/IEC60974-1. EN/IEC60974-2. EN/IEC60974-3. EN/IEC60974-10. Class A	
Dimensions (excl. trolley) (H x W x L)	360 mm × 220 mm × 520 mm		550 mm × 250 mm × 640 mm | 550 mm × 250 mm × 640 mm | 980 mm × 545 mm × 1090 mm	
Weight (excl. trolley)	22 kg | 24 kg	23 kg | 25 kg	31 kg | 31 kg | 72 kg	68 kg | 68 kg | 77 kg

We reserve the right to make changes.

	MCU 1000 Separate for 200/250	**MCU 1100** Separate for 350	**MCU** Integrated in 350/500
Cooling output 1 l/min.	900 W	1200 W	1200 W
Tank capacity	2,5 L	3.5 L	3.5 L
Max. pressure in cooling system	3 bar	3 bar	3 bar
Flow	1.2 bar, 60 °C, 1.75 L/min	1.2 bar, 60 °C, 1.75 L/min	1.2 bar, 60 °C, 1.75 L/min
Dimensions (H × W × L)	270 mm × 220 mm × 520 mm	270 mm × 240 mm × 560 mm	-
Weight	15 kg	16.5 kg	-

We reserve the right to make changes.

Get serviced by our large service network

Our network of Authorized Service Partners across Europe is ready to support your welding production. Authorized Service Partners have educated service technicians who are certified to perform professional service and maintenance. They know your welding machine and their service vehicles are packed with original spare parts, calibration measuring- and testing equipment.

Visit migatronic.com/service to find your nearby service partner.

Extend the warranty on your Pi

You can be sure of high-quality products when you buy Migatronic. In addition to the warranty period of 2 years for new welding machines, you can extend the warranty up to 5 years.

To maintain the extended warranty, a yearly service check is required.

Register your newly purchased Pi on migatronic.com/warranty no later than 30 days from the date of purchase. Then you get up to 5 years warranty on selected components.

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Pi

Explore more on migatronic.com

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