TIG WELDING TORCH

FOR MANUAL WELDING APPLICATIONS

THE RIGHT WELDING TORCH FOR EVERY APPLICATION – WITH JUST ONE HOSEPACK.

A large or small handle for ergonomically correct handling?
An amperage regulator or even a JobMaster display to control the power source during welding via the welding torch?
Or perhaps you need various gas nozzles and torch bodies for greater component accessibility?

The new TIG welding torches can be customized to suit the welder's personal preferences as well as the application at hand.
Their modular design offers a range of sustainable and cost-effective options.

What´s your Welding Challenge?
Let's get connected.

THE BENEFITS

MODULAR DESIGN

In addition to different power categories, there are two handle versions that can be equipped with different operating elements and torch body versions.

ERGONOMIC AND NON-SLIP

The ergonomically designed handles of our new TIG welding torches protect users from fatigue, while soft components guarantee a non-slip, secure grip. The ball joint and the materials used make the hosepack very flexible and easy to handle, especially when the component is difficult to access.

COST SAVING AND SUSTAINABLE

The welding torch does not have to be thrown away if requirements change or in the event of damage. Instead, modules can simply be replaced. The component can be changed directly on site, without the help of a service technician, saving resources, time, and costs.

LONGER WEARING PART LIFETIMES

Perfect cooling right to the head of the torch body ensures reliable heat dissipation. This significantly increases the service life of the torch's wearing parts.

/ Standard

/ JobMaster

/ Potentiometer

STANDARD HANDLE

ONE HANDLE FOR ALL VERSIONS

/ Simple conversion* from the user interface, only one screw needs to be unscrewed.

*) Option only applies to standard handle

1. Start welding
2. Change the welding power using the up/ down key (+/-)
3. LED can be used to light up the welding area
4. Cap-shaping in connection with the TIG AC welding process
5. Intermediate lowering in connection with 4-step operating mode (I1 > I2)
6. Display for reading essential parameters
7. Adjust the essential parameters such as main current, lowering current, or final current directly on the welding torch

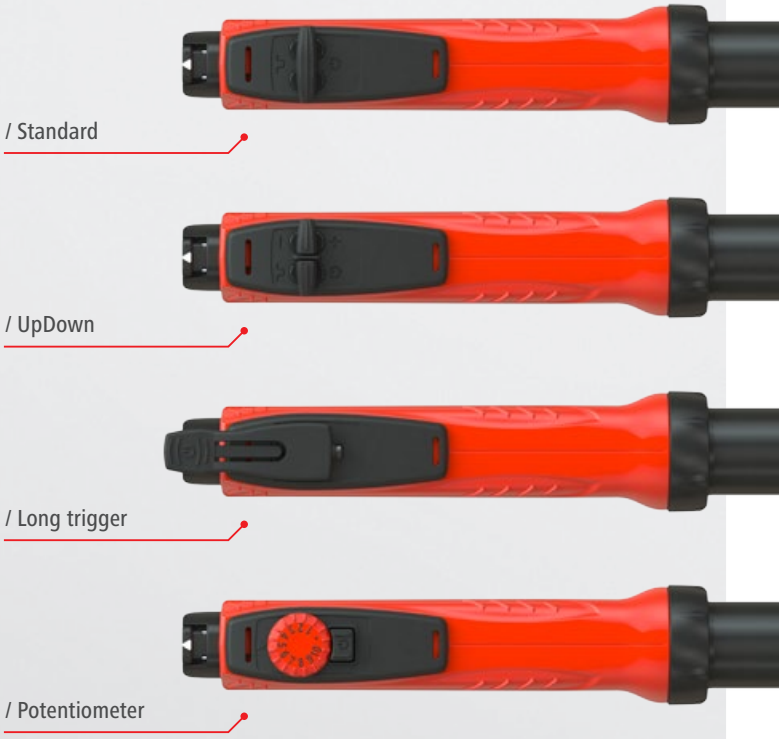
TECHNOLOGY + ERGONOMICS

OPERATION

Fronius welding torches represent the perfect blend of technology and ergonomics. The ergonomic handle with non-slip components sits comfortably and securely in your hand, allowing the torch to be guided with ease. Various operating concepts take care of the most varied welding requirements.

SMALL HANDLE

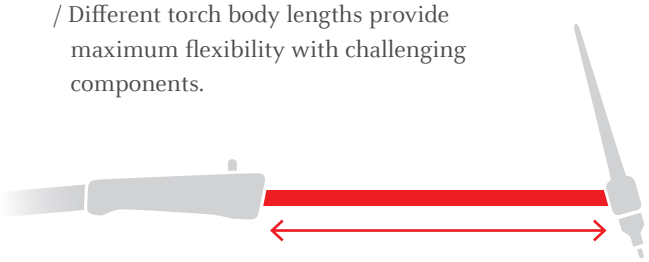
Depending on the application, welders can choose between a standard or a small handle hosepack. The small handle is a smaller version optimized for size. This compact version is also available with various control options.



OPTIMUM ACCESSIBILITY

TORCH BODY

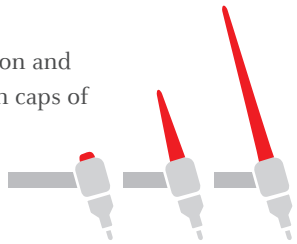
/ Different torch body lengths provide maximum flexibility with challenging components.



50 mm / 65 mm / 150 mm / 300 mm

TORCH CAPS

/ Depending on the application and component condition, torch caps of various sizes can be used.



FLEXIBLE TORCH BODIES

/ The flexible torch bodies can be bent into the desired position for difficult to access welding points.*

*/ Tested under standardized test conditions according to a defined test procedure, gas-cooled torch bodies can be bent up to 1,000 times and water-cooled torch bodies up to 200 times.

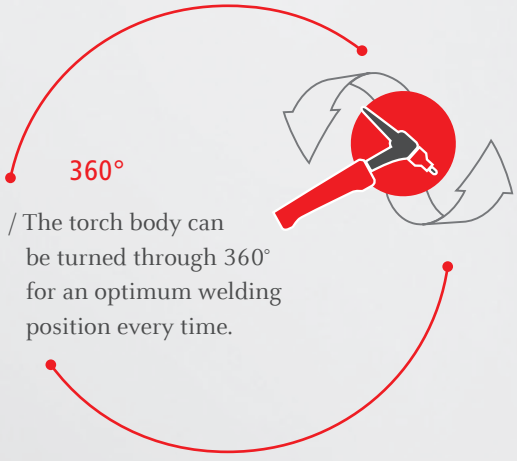
PATENTED INTERFACE

MULTILOCK

FOR FAST TORCH BODY CHANGES

PATENTED INTERFACE

/ The torch body can be changed quickly, easily and without the need for tools – no matter what the welding task.



360°

/ The torch body can be turned through 360° for an optimum welding position every time.

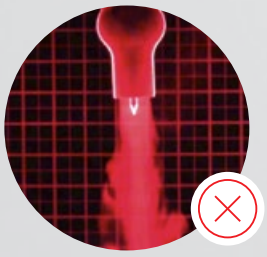
SYSTEM DESIGN

THE WELDING TORCH IN DETAIL

GAS LENS OPTION

BETTER GAS SHIELD

/ Turbulence-free gas flow
/ Optimum weld seam quality
/ Gas savings of 1-2 l/min
/ Low oxidation in high alloy materials



WATER COOLING

/ The service life of the wearing parts is increased by cooling right to the head of the torch body

PATENTED INTERFACE

MULTILOCK

/ Quick and easy torch body changes
/ Torch body can be turned through 360°
/ Over 40 different torch bodies

NON-SLIP

/ Soft components in the handle

TORCH BODY VERSIONS

/ Gas nozzle (push-on type) (A)
/ Gas nozzle (screw type) (P)

P-system

A-system

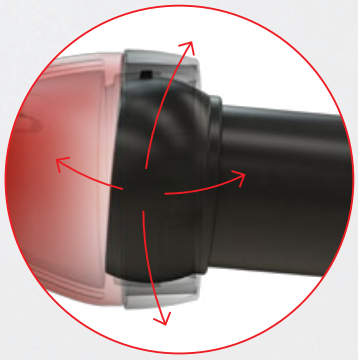
ILLUMINATION

/ Illumination of the welding area before and after welding

USER INTERFACE

/ The control units can be replaced at any time with just a few simple steps.

BALL JOINT



FLEXIBLE HOSEPACK

/ For optimum handling – flexible and abrasion-resistant leather protection tube

CENTRAL CONNECTOR F/F++

/ Tool-free mounting
/ Shielding gas directly at the power connection
/ External water connections
/ Water-cooled bayonet connection for high performance

TMC CONTROL PLUG

GREEN THINKING

ECONOMICAL AND SUSTAINABLE

LOW STORAGE COSTS

The welding torches are modular and can be configured in a variety of ways.

EASY TO REPAIR.

Individual components such as torch bodies or user interfaces can be easily replaced by customers themselves if required, without the need for a service technician.

Thanks to the modular design and the Multilock System, you do not always need to replace the entire welding torch when worn.

THIS SAVES TIME, COSTS, AND RESOURCES

OVERVIEW

TIG WELDING TORCH

The Multilock welding torches can be fitted with different torch bodies and are available as gas-cooled or water-cooled versions. Different torch geometries ensure maximum flexibility.

Multilock torch body

Water-cooled / TTB

TTB 180P W ML	DC	180A 60 % D.C. 140A 100 % D.C.
	AC	140A 60 % D.C. 110A 100 % D.C.
TTB 300 W ML	DC	300A 60 % D.C. 230A 100 % D.C.
	AC	250A 60 % D.C. 190A 100 % D.C.
TTB 300 W ML flexible	DC	300A 60 % D.C. 230A 100 % D.C.
	AC	250A 60 % D.C. 190A 100 % D.C.
TTB 400 W ML	DC	400A 60 % D.C. 300A 100 % D.C.
	AC	320A 60 % D.C. 250A 100 % D.C.
TTB 400 W ML flexible	DC	400A 60 % D.C. 300A 100 % D.C.
	AC	320A 60 % D.C. 250A 100 % D.C.
TTB 500 W ML	DC	500A 60 % D.C. 400A 100 % D.C.
	AC	400A 60 % D.C. 300A 100 % D.C.

Multilock hosepacks

Water-cooled / THP

THP 300i W ML	DC	300A 60 % D.C. 230A 100 % D.C.
	AC	250A 60 % D.C. 190A 100 % D.C.
THP 400i W ML	DC	400A 60 % D.C. 300A 100 % D.C.
	AC	350A 60 % D.C. 270A 100 % D.C.
THP 500i W ML	DC	500A 60 % D.C. 400A 100 % D.C.
	AC	400A 60 % D.C. 300A 100 % D.C.

Multilock hosepacks small handle

Water-cooled / THP

THP 300 W SH ML	DC	300A 60 % D.C. 230A 100 % D.C.
	AC	250A 60 % D.C. 190A 100 % D.C.

Extension hosepack

Water-cooled / HPT

HPT 400i EXT W	DC	400A 60 % D.C. 300A 100 % D.C.
	AC	350A 60 % D.C. 270A 100 % D.C.

Multilock torch body

Gas-cooled / TTB

TTB 80P G ML	DC	80A 35 % D.C. 60A 60 % D.C. 50A 100 % D.C.
	AC	30A 35 % D.C.
TTB 160 G ML	DC	160A 35 % D.C. 120A 60 % D.C. 90A 100 % D.C.
	AC	120A 35 % D.C. 90A 60 % D.C. 70A 100 % D.C.
TTB 160A G ML flexible	DC	160A 35 % D.C. 120A 60 % D.C. 90A 100 % D.C.
	AC	120A 35 % D.C. 90A 60 % D.C. 70A 100 % D.C.
TTB 160P G ML flexible	DC	160A 35 % D.C. 120A 60 % D.C. 90A 100 % D.C.
	AC	120A 35 % D.C. 90A 60 % D.C. 70A 100 % D.C.
TTB 220 G ML	DC	220A 35 % D.C. 170A 60 % D.C. 130A 100 % D.C.
	AC	180A 35 % D.C. 130A 60 % D.C. 100A 100 % D.C.
TTB 220A G ML flexible	DC	220A 35 % D.C. 170A 60 % D.C. 130A 100 % D.C.
	AC	180A 35 % D.C. 120A 60 % D.C. 100A 100 % D.C.
TTB 220P G ML flexible	DC	220A 30 % D.C. 160A 60 % D.C. 130A 100 % D.C.
	AC	170A 30 % D.C. 120A 60 % D.C. 100A 100 % D.C.
TTB 260 G ML	DC	260A 35 % D.C. 200A 60 % D.C. 150A 100 % D.C.
	AC	200A 35 % D.C. 160A 60 % D.C. 120A 100 % D.C.

Multilock hosepacks

Gas-cooled / THP

THP 160i G ML	DC	160A 35 % D.C. 120A 60 % D.C. 90 A 100 % D.C.
	AC	120A 35 % D.C. 90A 60 % D.C. 70A 100 % D.C.
THP 220i G ML	DC	220A 35 % D.C. 170A 60 % D.C. 130A 100 % D.C.
	AC	180A 35 % D.C. 130A 60 % D.C. 100A 100 % D.C.
THP 260i G ML	DC	260A 35 % D.C. 200A 60 % D.C. 150A 100 % D.C.
	AC	200A 35 % D.C. 160A 60 % D.C. 120A 100 % D.C.

Multilock hosepacks small handle

Gas-cooled / THP

THP 120 G SH ML	DC	120A 35 % D.C. 100A 60 % D.C. 80A 100 % D.C.
	AC	90A 35 % D.C. 70A 60 % D.C. 50A 100 % D.C.
THP 180 G SH ML	DC	180A 35 % D.C. 130A 60 % D.C. 100A 100 % D.C.
	AC	120A 35 % D.C. 90A 60 % D.C. 70A 100 % D.C.
THP 150 G SH ML/FS *	DC	150A 25 % D.C. 120A 35 % D.C. 100A 60 % D.C. 80A 100 % D.C.
	AC	110A 25 % D.C. 90A 35 % D.C. 70A 60 % D.C. 50A 100 % D.C.

*/ Fronius small connection, for TP 150 TIG

Extension hosepack

Gas-cooled / HPT

HPT 220i EXT G	DC	220A 35 % D.C. 170A 60 % D.C. 130A 100 % D.C.
	AC	180A 35 % D.C. 130A 60 % D.C. 100A 100 % D.C.

10 kV COMPATIBLE

Also available for digital and competitor products.

The welding current specifications apply to welding torches with a torch body length of 65 mm or more.

When using shorter torch bodies, the welding current is reduced by 30%.

The welding current specifications only apply when using the standard wearing parts.

When using gas lenses and shorter gas nozzles, the welding current is reduced.

ML	Multilock
FS	Fronius small connection
SH	Small handle
EXT	Extension
G	Gas-cooled
W	Water-cooled
TTB	TIG Torch Body
THP	TIG Hose Pack
A	Gas nozzle (push-on type)
P	Gas nozzle (screw type)

OPTIONS AND ACCESSORIES

/ EXTENSION HOSEPACK

Standard hosepacks can be extended by 10 meters with this option. The connection point is packed in a compact and robust pouch to prevent contamination and snagging.

/ LOCKING DEVICE MULTILOCK COUPLING

In order to prevent improper use of the Multilock System, hosepacks can be optionally equipped with a release lock.

/ NO TRIGGER

This option offers advantages when used with a foot controller or the touch HF ignition (the high-frequency ignition starts after the workpiece is touched by the electrode).

/ BUTTON OPERATION

Hosepacks can be converted to pushbutton operation for the digital device generation. Functions include start and end of welding as well as intermediate lowering.

/ WS2

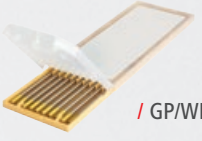
Tungsten with ~ 2.0% rare-earth oxide

/ WP

Pure tungsten

/ WC20

Tungsten with ~ 2.0% cerium oxide



/ GP/WL15

Tungsten with ~ 1.5% lanthanum oxide

/ TORCH CAP KEY

/ SETTING GAGE FOR ELECTRODE DISTANCE

/ WEARING PARTS BOX

/ Perfect Welding / Solar Energy / Perfect Charging

THREE BUSINESS UNITS, ONE GOAL: TO SET THE STANDARD THROUGH TECHNOLOGICAL ADVANCEMENT.

What began in 1945 as a one-man operation now sets technological standards in the fields of welding technology, photovoltaics and battery charging. Today, the company has around 5,440 employees worldwide and 1,264 patents for product development show the innovative spirit within the company. Sustainable development means for us to implement environmentally relevant and social aspects equally with economic factors. Our goal has remained constant throughout: to be the innovation leader.

Further information about all Fronius products and our global sales partners and representatives can be found at **www.fronius.com**

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