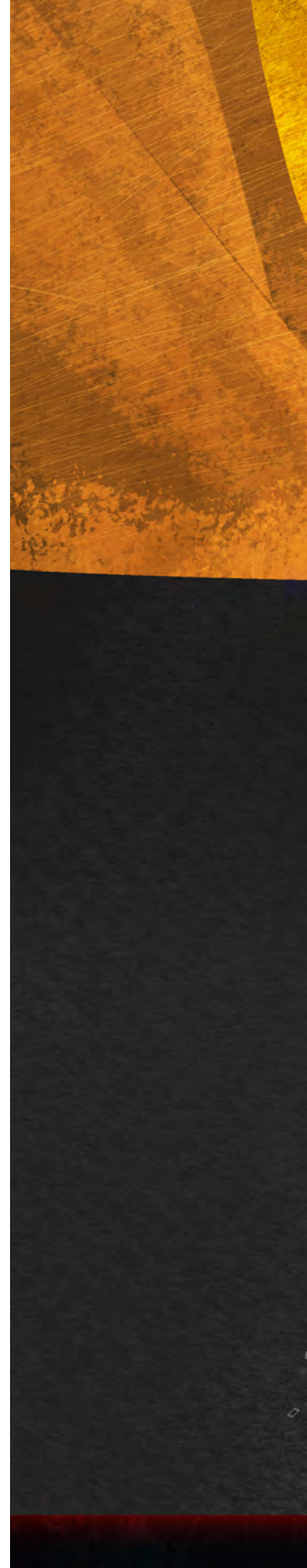


# Products

to unleash your welding potential



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# Trans-Steel

# TransSteel series

The TransSteel series is the SME's dream, offering a broad range of applications from a single device. From container and bridge construction through to yellow goods – with almost 170 optimized characteristics, TransSteel makes light work of the most important tasks that heavy steel construction has to offer. Applications involving aluminum and stainless steel are virtually child's play, especially for the variant with pulse function.

The TransSteel series – ready to ignite your welding potential.



Up to 30% faster and 70% less rework on variants with **pulse function**



MIG/MAG, TIG, and electrode welding with the TransSteel Compact series



As many as 170 optimized characteristics – depending on the model and version



Immediate commissioning in just 3 steps thanks to an intuitive operating concept





### Reliable welding data documentation:

With **Easy Documentation**, the TransSteel series offers a solution for recording welding data extremely conveniently. This represents a great labor-saver, not least in steel construction, where load-bearing steel structures, mass-produced products, or sensitive components often have to be traceable down to the final welding parameters.

For more information, please visit:  
[www.fronius.com/transsteel](http://www.fronius.com/transsteel)



# TransSteel Compact – Multiprocess

Compact welding systems for MIG/MAG, TIG, and electrode welding



## TransSteel 2200 C\*

Mains voltage: 230 V  
Weight: 15.2 kg  
Dimensions L/W/H: 560 x 215 x 370 mm  
Degree of protection: IP 23

Welding current:  
MIG/MAG 30/100% D.C.: **210/150 A**  
MMA 35/100% D.C.: **180/130 A**  
TIG 35/100% D.C.: **230/170 A**



## TransSteel 2700 C\*

Mains voltage: 380-460 V  
Weight: 30 kg  
Dimensions L/W/H: 687 x 276 x 445 mm  
Degree of protection: IP 23

Welding current:  
MIG/MAG 30/100% D.C.: **270/170 A**  
MMA 30/100% D.C.: **270/170 A**  
TIG 35/100% D.C.: **270/170 A**



## TransSteel 3000 C Pulse

Mains voltage: 3 x 380-460 V  
Weight: 36 kg  
Dimensions L/W/H: 747 x 300 x 497 mm  
Degree of protection: IP 23

Welding current:  
MIG/MAG 40/100% D.C.: **300/240 A**  
MMA 40/100% D.C.: **300/240 A**  
TIG 40/100% D.C.: **300/240 A**



## TransSteel 3500 C

Mains voltage: 3 x 380-460 V  
Weight: 36 kg  
Dimensions L/W/H: 747 x 300 x 497 mm  
Degree of protection: IP 23

Welding current:  
MIG/MAG 40/100% D.C.: **350/250 A**  
MMA 40/100% D.C.: **350/250 A**  
TIG 40/100% D.C.: **350/250 A**

\* Different tech. data apply to multi-voltage variants.

# TransSteel

Powerful welding systems with external wirefeeder



## TransSteel 3500\*

Mains voltage: 3 x 380-460 V  
 Weight: 29 kg  
 Dimensions L/W/H: 747 x 300 x 497 mm  
 Degree of protection: IP 23

Welding current:  
 MIG/MAG 40/100% D.C.: **350/250 A**



## TransSteel 4000 Pulse\*

Mains voltage: 3 x 380-460 V  
 Weight: 32.5 kg  
 Dimensions L/W/H: 747 x 300 x 497 mm  
 Degree of protection: IP 23

Welding current:  
 MIG/MAG 40/100% D.C.: **400/340 A**



## TransSteel 5000\*

Mains voltage: 3 x 380 V  
 Weight: 32.5 kg  
 Dimensions L/W/H: 747 x 300 x 497 mm  
 Degree of protection: IP 23

Welding current:  
 MIG/MAG 40/100% D.C.: **500/360 A**



## TransSteel 5000 Pulse\*

Mains voltage: 3 x 380 V  
 Weight: 32.5 kg  
 Dimensions W/H/L: 747 x 300 x 497 mm  
 Degree of protection: IP 23

Welding current:  
 MIG/MAG 40/100% D.C.: **500/360 A**

# Functions and equipment features

	TransSteel 2200 C	TransSteel 2700 C	TransSteel 3000 C Pulse
Pulse welding			✓
SynchroPulse			✓
Multiprocess	✓	✓	✓
Spot and stitch welding	✓	✓	✓
Steel Transfer Technology	✓	✓	✓
Easy Jobs	2	5	5
PCS (Pulse Controlled Spray-Arc)			✓
Control panel lock			✓
Wire threading with torch trigger	✓	✓	✓
TIG pulse welding (TIG)	✓	✓	✓
TAC tacking function (TIG)	✓	✓	✓
Touchdown ignition (TIG)	✓	✓	✓
Anti-stick (MMA)	✓	✓	✓
HotStart (MMA)	✓	✓	✓
Arc-force dynamic (MMA)	✓	✓	✓
Cooling type	Gas	Gas	Gas/Water
Multivoltage	✓	✓	
Wirespool size	D 100/D 200	D 200/D 300	D 200/D 300
Easy Documentation			✓
Arc air gouging			

## Pulse function

For controlled welding in the intermediate arc range as well as optimal weldability for aluminum welding; the pulsed arc also reduces rework because there is less welding spatter.

## SynchroPulse

Our recommendation for welded joints with aluminum alloys where a rippled seam appearance is required; this effect is achieved by alternating the welding power between two operating points.

## Spot and stitch welding

Spot mode enables you to place welding spots at regular intervals. Stitch welding not only produces a rippled seam appearance, but the low level of heat input reduces any possible material distortion when working with light gage sheets.

## Multiprocess

One solution fits all: the TransSteel Compact series combines MIG/MAG, TIG, and electrode welding in a single device – and all without any drop in performance in the respective welding process compared with a dedicated single-process device.

TransSteel 3500 C	TransSteel 3500	TransSteel 4000 Pulse	TransSteel 5000	TransSteel 5000 Pulse
		✓		✓
		✓		✓
✓				
✓	✓	✓	✓	✓
✓	✓	✓	✓	✓
5	5	5	5	5
		✓		✓
✓	✓	✓	✓	✓
✓	✓	✓	✓	✓
✓				
✓				
✓				
✓				
✓				
Gas/Water	Gas/Water	Gas/Water	Gas/Water	Gas/Water
	✓	✓	✓	✓
D 200/D 300	D 300	D 300	D 300	D 300
✓	✓	✓	✓	✓
		✓	✓	✓

**Special 4-step mode**

Ideal for welding in the higher power range: in special 4-step mode, welding starts at a lower power, which makes the arc easier to stabilize.

**Easy Documentation**

Reliable welding documentation: thanks to Easy Documentation, the welding data are extremely easy to record. The data can be transferred directly to the device on a USB thumb drive and then exported in the form of a csv file.

**Easy Jobs**

Setting recurring welding tasks safely and quickly: not a problem with Easy Jobs. Depending on the model, as many as five jobs can be saved and accessed directly by pressing a key or using the Up/Down function on the welding torch.

## Options and accessories

The perfect accessories for the TransSteel product family



### Vizor Air/3x

Reliable fan filter unit: filters out up to 99.8% of hazardous particles from the ambient air breathed in by the welder



### Exento extraction kit

Removes the welding fumes as soon as they are created; installed directly on the welding torch



### TU Car 4 trolley

Practical trolley with attachment for the gas cylinder



### FK 5000 cooling unit

Filled as standard with FCL10 coolant and equipped with a coolant filter (flow temperature sensor an optional extra)



### ToolBox 210/260/300

Handy toolbox in different sizes for installation under the welding system



## Safety inspection\*

Fronius offers professional electrotechnical testing for every device.

### Benefits of electrotechnical testing

- Ensure safety in the workplace
- Prevent production stoppages and downtimes
- Legal protection for electricity-related accidents
- Adherence to legal standards and regulations (IEC 60974-4)

\*not available in the following countries: Brazil





WF 25i

Pulsar

# TPS/i

# TPS/i series

Exceptional power and flexibility: the TPS/i ranks as one of the most advanced MIG/MAG welding systems. The intelligent welding system is ideal for both manual and automated use, satisfying even the most demanding requirements.



With CMT (Cold Metal Transfer), the TPS/i has the most stable and most advanced welding process in the world. Reversing wire movements ensure particularly low heat input so that ultra-light gage sheets do not warp during welding.



Custom configuration: the modular design and easy system upgrade options make the TPS/i the ideal welding partner.



More than 500 ready-made characteristics for all welding applications (depending on the Welding Packages installed)



Ready for anything: with the help of different software packages, called Welding Packages, the TPS/i can be adapted or upgraded to meet new welding requirements at any time. This also applies to welding processes such as the "PMC" pulse process. The packages range from the entry-level package to a high-end solution.





### Ideal for mobile use:

In compact units in the lower power categories, the wirefeeder is integrated directly into the housing of the welding system. As a result, the devices are easier to use, especially for manual welding tasks.

For more information, please visit:  
[www.tps-i.com](http://www.tps-i.com)



# TPS/i Compact

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Compact welding systems with integrated wirefeeder



## TPS 270i C

Mains voltage: 3 x 400 V  
Weight: 32.7 kg  
Dimensions L/W/H: 687 x 276 x 445 mm  
Degree of protection: IP 23

Welding current:  
MIG/MAG 40/100% D.C.: **270/190 A**



## TPS 320i C

Mains voltage: 3 x 400 V  
Weight: 35.8 kg  
Dimensions L/W/H: 706 x 300 x 510 mm  
Degree of protection: IP 23

Welding current:  
MIG/MAG 40/100% D.C.: **320/240 A**

# TPS/i

Welding systems with  
external wirefeeder



## TPS 320i

Mains voltage: 3 x 400 V  
Weight: 35.8 kg  
Dimensions L/W/H: 706 x 300 x 510 mm  
Degree of protection: IP 23

Welding current:  
MIG/MAG 40/100% D.C.: **320/240 A**



## TPS 400i

Mains voltage: 3 x 400 V  
Weight: 36.5 kg  
Dimensions L/W/H: 706 x 300 x 510 mm  
Degree of protection: IP 23

Welding current:  
MIG/MAG 40/100% D.C.: **400/320 A**



## TPS 500i

Mains voltage: 3 x 400 V  
Weight: 38 kg  
Dimensions L/W/H: 706 x 300 x 510 mm  
Degree of protection: IP 23

Welding current:  
MIG/MAG 40/100% D.C.: **500/360 A**



## TPS 600i

Mains voltage: 3 x 400 V  
Weight: 50 kg  
Dimensions L/W/H: 706 x 300 x 510 mm  
Degree of protection: IP 23

Welding current:  
MIG/MAG 40/100% D.C.: **600/500 A**

# Functions and equipment features

	TPS 270i	TPS 320i C	TPS 320i
Touch display		✓	✓
Operation – languages	15	34	34
Integrated wirefeeder	✓	✓	
External wirefeeder			✓
Cooling type	Gas/Water	Gas/Water	Gas/Water
WLAN, LAN, Bluetooth, NFC		✓	✓
SmartManager	✓	✓	✓
Jobs memory	1000	1000	1000
User management		✓	✓
Registration with NFC		✓	✓
Welding data documentation	✓	✓	✓
WeldCube Light	✓	✓	✓
WeldCube Basic	✓	✓	✓
WeldCube Premium	✓	✓	✓
Welding Packages (LSC, PMC, CMT)	✓	✓	✓
Penetration stabilizer	✓	✓	✓
Arc length stabilizer	✓	✓	✓
Arc air gouging			
Robot-compatible		✓	✓

## Easy Jobs

Setting recurring welding tasks safely and quickly: not a problem with Easy Jobs. Depending on the model, as many as 1,000 jobs can be saved and accessed directly by pressing a key or using the Up/Down function on the welding torch.

## Easy operation

For reliable and intuitive working, all welding parameters can be set via a user-friendly interface on a touchscreen display. The menu navigation is available in 34 languages.

## Top weld properties

For perfect welds: with well over 500 characteristics and a wide range of welding processes, the TPS/i effectively supports welders as they carry out their work. As unique as the requirements may be, the results speak for themselves.

## Central User Management

Minimal effort, maximum benefit: thanks to a central user management function, it is a simple matter to automatically transfer rights to new devices – saving time, money, and improving safety.



# Options and accessories

The perfect accessories  
for the TPS/i series



## TU Car 4 trolley

Practical trolley with attachment for the gas cylinder.



## Vizor Air/3x

Reliable fan filter unit that filters out up to 99.8% of hazardous particles from the ambient air breathed in by the welder.



## RC Panel Standard

Remote control with convenient operation via DOT matrix and 2 push/turn dials. The welding process, welding parameters, and mode

can be selected and 5 Easy Jobs accessed or saved on the device.



## RC Panel Basic

Practical remote control complete with 2 potentiometers for controlling the power and arc length.



## RC Panel Pro

Comprehensive remote control with 7" LCD touch display. The display has the same menu navigation as the power source and therefore

offers all the setting options incl. NFC for secure user management.



## Rental\*

Flexible and independent? Be it MMA, TIG, or MIG/MAG – all Fronius welding systems are also available to hire.

### Benefits of rental

- Avoid production bottlenecks – the fleet of welding systems can be flexibly extended when there is a peak in demand.
- No risk of failure – very well serviced equipment for the duration of the rental term
- Individual rental terms – welding systems can be hired for a minimum of one day.
- Always the newest products – benefit from the latest innovations.

\*not available in the following countries: Brazil

# MIG/MAG welding to



A close-up photograph of a mechanical device, possibly a vintage radio receiver, with a metal tool resting on its base. The word "Orches" is overlaid in white serif font. The image shows various metal components, including a cylindrical part with a circular opening and a metal plate with a hole. The lighting is dramatic, highlighting the textures and colors of the metal.

Orches

# MIG/MAG welding torches



For the longest service life: each wearing part is designed for optimal heat dissipation. For example, a high-quality copper alloy (CuCrZr) is used for the contact tips.



Exceptional components maximize the service life of the welding torch. These include outer tubes for the torch body made from stainless steel, high-quality hosepack components, power cables with maximum flexibility, and a larger-dimensioned copper cross-section.



Fix it, don't bin it: faulty components can be easily swapped out and repaired. A comprehensive range of roughly 40 replaceable spare parts on water-cooled manual welding torches enable a sustainable approach.



Easy and flexible welding is achieved thanks to the Multilock System, which offers a choice of over 80 different torch bodies of different lengths and angles. Torch bodies can also be produced to customer-specific requirements at lengths of up to 1.2 m and angles of 0-90°.



For more information, please visit:  
[www.fronius.com/migmag-torches](http://www.fronius.com/migmag-torches)





### With JobMaster welding torches,

the welder can use the remote control with color display integrated into the handle to view and change the important welding parameters such as welding power, wire speed, and previously stored jobs.



### The Up/Down torch

offers complete control of the welding power in Synergic operation via the buttons on the welding torch itself.

# MTG

## Gas-cooled MIG/MAG welding torches



### MTG 2500S

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 40/100% D.C.: **230/170 A**  
Wire diameter: 0.8-1.2 mm  
Hosepack length: 3.5/4.5 m



### MTG 2100S

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 40/100% D.C.: **190/140 A**  
Wire diameter: 0.8-1.2 mm  
Hosepack length: 3.5/4.5 m



### MTG 250i

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 40/100% D.C.: **250/170 A**  
Wire diameter: 0.8-1.2 mm  
Hosepack length: 3.5/4.5 m

Control variants:  
– Standard  
– Up/Down  
– JobMaster



### MTG 320i

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 40/100% D.C.: **320/210 A**  
Wire diameter: 0.8-1.6 mm  
Hosepack length: 3.5/4.5 m

Control variants:  
– Standard  
– Up/Down  
– JobMaster



### MTG 400i

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 40/100% D.C.: **400/260 A**  
Wire diameter: 0.8-1.6 mm  
Hosepack length: 3.5/4.5 m

Control variants:  
– Standard  
– Up/Down  
– JobMaster



### MTG 550i

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 30/100% D.C.: **520/360 A**  
Wire diameter: 1.2-1.6 mm  
Hosepack length: 3.5/4.5 m

Control variants:  
– Standard  
– Up/Down  
– JobMaster

# MTW

## Water-cooled MIG/MAG welding torches



### MTW 250i

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 100% D.C.: **250 A**  
Wire diameter: 0.8-1.2 mm  
Hosepack length: 3.5/4.5 m

Control variants:  
– Standard  
– Up/Down  
– JobMaster



### MTW 400i

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 100% D.C.: **400 A**  
Wire diameter: 0.8-1.6 mm  
Hosepack length: 3.5/4.5 m

Control variants:  
– Standard  
– Up/Down  
– JobMaster



### MTW 500i

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 100% D.C.: **500 A**  
Wire diameter: 1.0-1.6 mm  
Hosepack length: 3.5/4.5/6 m

Control variants:  
– Standard  
– Up/Down  
– JobMaster



### MTW 700i

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 100% D.C.: **700 A**  
Wire diameter: 1.0-1.6 mm  
Hosepack length: 3.5/4.5 m

Control variants:  
– Standard  
– Up/Down  
– JobMaster

# Multilock

## Gas-cooled Multilock welding torches



### MHP 250i G ML

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 40/100% D.C.: **250/170 A**  
Wire diameter: 0.8-1.2 mm  
Hosepack length: 3.35/4.35 m

Control variants:  
– Standard  
– Up/Down  
– JobMaster



### MHP 400i G ML

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 40/100% D.C.: **400/260 A**  
Wire diameter: 0.8-1.6 mm  
Hosepack length: 3.35/4.35 m

Control variants:  
– Standard  
– Up/Down  
– JobMaster



### MHP 550i G ML

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 30/100% D.C.: **520/360 A**  
Wire diameter: 1.2-1.6 mm  
Hosepack length: 3.35/4.35 m

Control variants:  
– Standard  
– Up/Down  
– JobMaster



### MHP 280i PullMig G

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 40/100% D.C.: **280/170 A**  
Wire diameter: 0.8-1.6 mm  
Hosepack length: 5.85/7.85/9.85 m

Control variants:  
– Standard  
– Up/Down  
– JobMaster



### MHP 280i PullMig G CMT

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 40% D.C.: **280 A**  
CMT 40% D.C.: **180 A**  
Wire diameter: 0.8-1.6 mm  
Hosepack length: 3.85/5.85/7.85 m

Control variants:  
– Standard  
– Up/Down  
– JobMaster

# Multilock torch bodies

Gas-cooled torch bodies – available in different lengths and angles



## MTB 200i G flex

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 40/100% D.C.: **200/160 A**  
Wire diameter: 0.8-1.2 mm



## MTB 360i G flex

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 40/100% D.C.: **360/240 A**  
Wire diameter: 0.8-1.6 mm



## MTB 250i G

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 40/100% D.C.: **250/170 A**  
Wire diameter: 0.8-1.2 mm



## MTB 400i G

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 40/100% D.C.: **400/260 A**  
Wire diameter: 0.8-1.6 mm



## MTB 320i G

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 40/100% D.C.: **320/210 A**  
Wire diameter: 0.8-1.6 mm



## MTB 550i G

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 30/100% D.C.: **520/360 A**  
Wire diameter: 0.8-1.6 mm



## MTB 330i G

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 40/100% D.C.: **330/220 A**  
Wire diameter: 0.8-1.6 mm

# Multilock

Water-cooled Multilock welding torches



## MHP 500i W ML

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 100% D.C.: **500 A**  
Wire diameter: 0.8-1.6 mm  
Hosepack length: 3.35/4.35/5.85 m

Control variants:

- Standard
- Up/Down
- JobMaster



## MHP 700i W ML

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 100% D.C.: **700 A**  
Wire diameter: 1.0-1.6 mm  
Hosepack length: 3.35/4.35 m

Control variants:

- Standard
- Up/Down
- JobMaster



## MHP 320i PullMig W

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 100% D.C.: **320 A**  
Wire diameter: 0.8-1.6 mm  
Hosepack length: 5.85/7.85/9.85 m

Control variants:

- Standard
- Up/Down
- JobMaster



## MHP 400i PullMig W CMT

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 100% D.C.: **400 A**  
CMT 100% D.C.: **280 A**  
Wire diameter: 0.8-1.6 mm  
Hosepack length: 3.85/5.85/7.85 m

Control variants:

- Standard
- Up/Down
- JobMaster

## Multilock torch bodies

Water-cooled torch bodies – available in different lengths and angles



**MTB 250i W**

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 100% D.C.: **250 A**  
Wire diameter: 0.8-1.2 mm



**MTB 400i W flex**

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 100% D.C.: **400 A**  
Wire diameter: 0.8-1.6 mm



**MTB 330i W**

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 100% D.C.: **330 A**  
Wire diameter: 0.8-1.6 mm



**MTB 500i W**

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 100% D.C.: **500 A**  
Wire diameter: 1.0-1.6 mm



**MTB 330i W flex**

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 100% D.C.: **330 A**  
Wire diameter: 0.8-1.2 mm



**MTB 700i W**

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 100% D.C.: **700 A**  
Wire diameter: 1.0-1.6 mm



**MTB 400i W**

Welding current (ArCO<sub>2</sub>):  
MIG/MAG 100% D.C.: **400 A**  
Wire diameter: 0.8-1.6 mm



## PullMig

Small, lightweight, and powerful

Thanks to the motor unit located directly on the welding torch, the PullMig welding torch ensures particularly stable and reliable wirefeeding – and therefore high levels of stability. This makes it especially suited to aluminum applications, thin wires, and situations where long hosepacks of up to 15 m are being used.



30% lighter than comparable models: the PullMig welding torch weighs just 1.6 kg at a working height of 1 meter.



Uniquely cool: gas nozzle (screw type) and pointed contact tip for perfect heat dissipation.



Maximum flexibility is provided by the Multilock System with integrated water stop, which can also rotate 360° and features an anti-twist device.



LED light for illuminating the weld, control via 2-stage torch trigger.



### **PullMig CMT**

Specially developed for the CMT welding process: the PullMig CMT welding torch features a highly dynamic drive motor to guarantee high process stability.

## Options and accessories

The perfect accessories for the MIG/MAG welding torches



### WF 25i FlexDrive

Portable intermediate drive between wirefeeder and welding torch; extends the working radius to up to 25 m and thereby stabilizes the wirefeed



### Button extension

Enables even better ergonomic working, relieving the burden on the welder



### Heat shield

Made of a particularly heat-resistant material and can be fitted with ease by clicking into place



### Pistol grip

The simple mechanical button-to-button connection eliminates the need for an electrical connection and can be retrofitted



### Top torch trigger

For all those who prefer the torch trigger to be at the top of the welding torch



## Repair service

---

All Fronius products can be repaired to a great extent – including directly on site by expert technicians.

### Benefits of repair

- Minimal downtimes
- Fast support from experts
- Original spare and wearing parts from Fronius

# Artis



Vizor  
Crystal

FRONIUS  
EXTENDING THE LIMITS  
OF WELDING TECHNOLOGY (TVP 20)  
Gr. 10  
CE

# Artis series

We were uncompromising in our pursuit of a totally stable arc during the development of the Artis 170/210. This was achieved through the higher operating frequency of the inverter technology and the associated precise control. Other benefits of this optimized process technology are maximum efficiency in the duty cycle, the output power, and the mains voltage supply.



40% duty cycle at maximum output power – weld for four minutes without a break



30% mains voltage tolerance at maximum output power



Absolutely stable arc thanks to digital resonant intelligence



Complete MMA welding system which can also be used to weld with cellulose electrodes





Setting welding parameters with ease – no problem with Artis thanks to its intuitive knob and push-button operation.

It is also possible to apply numerous settings in the background menu. The operating area itself is set into the device and thereby optimally protected.

For more information, please visit:  
[www.fronius.com/artis](http://www.fronius.com/artis)



# Artis

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Compact welding systems for different TIG applications



## Artis 170

Mains voltage: -30%/+15%: 1 x 230 V  
Weight: 9.8 kg  
Dimensions L/W/H: 435 x 160 x 310 mm  
Degree of protection: IP 23

Welding current:  
TIG 40/100% D.C.: **170/140 A**  
MMA 40/100% D.C.: **150/110 A**



## Artis 210

Mains voltage: -30%/+15%: 1 x 230 V  
Weight: 9.8 kg  
Dimensions L/W/H: 435 x 160 x 310 mm  
Degree of protection: IP 23

Welding current:  
TIG 40/100% D.C.: **210/160 A**  
MMA 40/100% D.C.: **180/120 A**

# Functions and equipment features

	Artis 170	Artis 210
Multivoltage	✓	✓
HF ignition	✓	✓
Touch HF	✓	✓
Touchdown ignition	✓	✓
TAC tacking function (TIG)	✓	✓
Trigger Mode off	✓	✓
PFC	✓	✓
Gas pre-flow time	✓	✓
Spot and stitch welding	✓	✓
PTD pulse / TAC display	✓	✓
Up/Down welding torch	✓	✓
Gas test function	✓	✓
Anti-stick (MMA)	✓	✓
HotStart (MMA)	✓	✓
Electrode pulse welding	✓	✓
Arc-force dynamic (MMA)	✓	✓

## Touchdown ignition

Specially for sensitive application areas; touchdown ignition prevents the electromagnetic interference that can occur during HF ignition.

## Touch HF

The contactless and gentle high-frequency ignition is the easiest option for igniting the arc.

## Trigger Mode off

At the end of the welding process, the automatic shutdown of the welding current follows a specific change of the arc length.

## Lowering current I<sub>2</sub> / High frequency ignition

Reducing or increasing the main current as desired during the welding process is made possible by the lowering current, which is only used for TIG 4-step welding.

## TD pulse / TAC display

Can be used to add two additional welding parameters – “Pulse” and “TAC” – to the function curve on the control panel.

## Spot and stitch welding

Apply welding spots at even intervals: with the freely adjustable interval pause time, these can also be continued as stitch welding.

## Gas pre-flow time / Gas post-flow time

Improves the gas shield at the weld end and for the tungsten electrode: Artis automatically calculates the duration of the optimal gas post-flow time according to the set welding current.

# Options and accessories

The perfect accessories for the Artis series



## Junior gas pressure regulator

Gas pressure regulator with stable housing surface and corrosion-resistant blow-off valve; robust manometer display 0-24 l/min, input pressure of up to 200 bar, outflow 1/4"



## Tungsten electrodes

The ceriated WC20 electrode is the universal electrode for almost all applications. Excellent ignition properties – including reignition when the electrode is warm – with a long service life and high current carrying capacity



## Wearing-part box

Ideal for the storage and transport of small parts such as the torch's wearing parts, device fuses, small tools, etc.



## TIG Grinder Mobile

Practical transport case: space for all the essential parts for use on construction sites. Electrode welding possible without additional holder



## HighEnd TIG gloves

Made from soft sheepskin nappa leather, 0.8 mm thick, pulse protection and Kevlar seam, long split leather cuff, 35 cm in length. Category II as per EN 388, EN 12477



## Maintenance

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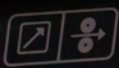
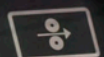
Fronius offers custom services for every device.

### Benefits of maintenance

- High availability of welding systems
- Perfectly adapted to individual circumstances and needs
- Customized maintenance packages can be compiled
- Adherence to legal regulations/standards



iWave AC/DC  
400L



A blurred night scene of a city street. The background is dark with numerous out-of-focus lights in shades of blue, white, and red, creating a bokeh effect. On the right side, there is a dark, vertical structure that appears to be part of a building or a street fixture. The overall atmosphere is that of a busy urban environment at night.

**iwave**

# iWave series

Everything within your grasp and a single system to cover every welding process and process variant: from TIG and MIG/MAG through to MMA. Equip yourself for the future with a welding system that meets all the requirements of Industry 4.0.



## Targeted heat input

Control over the weld pool  
CycleTIG gives you maximum control over the arc and the heat input. Short welding times let you weld even the thinnest material with ease.



## Ready for Industry 4.0

Contactless data transfer and authentication  
iWave supports the most important connection standards, from WLAN to Bluetooth and NFC.



## Reproducible ignition

Up to 71% less ignition delay  
Fast and reproducible ignition, regardless of material condition and without any manual adjustment of the ignition parameters: all thanks to RPI auto, our intelligent ignition function.



## Self-explanatory operation

Graphical, dynamic menu navigation – in over 30 languages!  
No additional documentation, straightforward and self-explanatory: with our intuitive menu structure you can easily change settings and get right back to welding.





Multiprocess Pro – one system for every process (iWave 300i–500i) iWave and Multiprocess – a new dimension:

In addition to all the TIG functions you can think of, you can now also weld all MIG/MAG process variants. The modular design allows you to expand your high-tech welding system platform according to your exact needs with the Welding Packages Standard, Pulse, PMC, LSC, and CMT. MMA welding is of course also possible – especially welding with Cel electrodes.

For more information, please visit:  
[www.fronius.com/iwave](http://www.fronius.com/iwave)



# Dynamic Wire

„The innovative advantage of Fronius TIG DynamicWire, when compared to a conventional continuous wirefeed end in cold-wire systems, lies in its automatic self-regulation. The power source actively adjusts the wire speed to the welding behavior, torch position, and current conditions, even compensating automatically for component tolerances of up to 30%. The result? Perfect welds every time.

Existing iWave cold-wire systems can be easily upgraded with the patented TIG DynamicWire Welding Package through software activation.“

For more information, please visit:  
[www.fronius.com/tig-dynamicwire](http://www.fronius.com/tig-dynamicwire)





# iWave DC

Welding systems with direct current



## iWave 230i DC

Mains voltage: 230 V  
Weight: 16.4 kg  
Dimensions L/W/H: 558 x 210 x 369 mm  
Degree of protection: IP 23

Welding current:  
TIG 45/100% D.C.: **230/170 A**



## iWave 300i DC

Mains voltage: 3 x 400 V  
Weight: 40 kg  
Dimensions L/W/H: 706 x 300 x 510 mm  
Degree of protection: IP 23

Welding current:  
TIG 40/100% D.C.: **300/240 A**



## iWave 400i DC

Mains voltage: 3 x 400 V  
Weight: 41 kg  
Dimensions L/W/H: 706 x 300 x 510 mm  
Degree of protection: IP 23

Welding current:  
TIG 40/100% D.C.: **400/320 A**



## iWave 500i DC

Mains voltage: 3 x 400 V  
Weight: 43 kg  
Dimensions L/W/H: 706 x 300 x 510 mm  
Degree of protection: IP 23

Welding current:  
TIG 40/100% D.C.: **500/360 A**

# iWave AC/DC

## Welding systems with alternating current



### iWave 190i AC/DC

Mains voltage: 230 V  
 Weight: 17 kg  
 Dimensions L/W/H: 558 x 210 x 369 mm  
 Degree of protection: IP 23

Welding current:  
 TIG 35/100% D.C.: **190/140 A**



### iWave 230i AC/DC

Mains voltage: 230 V  
 Weight: 17 kg  
 Dimensions L/W/H: 558 x 210 x 369 mm  
 Degree of protection: IP 23

Welding current:  
 TIG 35/100% D.C.: **230/165 A**



### iWave 300i AC/DC

Mains voltage: 3 x 400 V  
 Weight: 65.5 kg  
 Dimensions L/W/H: 706 x 300 x 740 mm  
 Degree of protection: IP 23

Welding current:  
 TIG 40/100% D.C.: **300/240 A**



### iWave 400i AC/DC

Mains voltage: 3 x 400 V  
 Weight: 67 kg  
 Dimensions L/W/H: 706 x 300 x 740 mm  
 Degree of protection: IP 23

Welding current:  
 TIG 40/100% D.C.: **400/320 A**



### iWave 500i AC/DC

Mains voltage: 3 x 400 V  
 Weight: 68.5 kg  
 Dimensions L/W/H: 706 x 300 x 740 mm  
 Degree of protection: IP 23

Welding current:  
 TIG 40/100% D.C.: **500/360 A**

# Functions and equipment features

	iWave 190i AC/DC	iWave 230i AC/DC	iWave 300i AC/DC
Pulse welding	✓	✓	✓
RPI on	✓	✓	✓
RPI auto	✓	✓	✓
SoftStart (touchdown ignition)	✓	✓	✓
HF ignition	✓	✓	✓
Touch HF ignition	✓	✓	✓
TIG Comfort Stop	✓	✓	✓
Arc break voltage	✓	✓	✓
Automatic cap-shaping	✓	✓	✓
Waveform setting (AC/DC)	✓	✓	✓
Tacking	✓	✓	✓
Automatic gas post-flow	✓	✓	✓
CEL mode	✓	✓	✓
CycleTIG	✓	✓	✓
Multiprocess (TIG, MMA)	✓	✓	✓
Multiprocess PRO			✓
Arc air gouging			
Generator-compatible	✓	✓	✓
Multivoltage 120/230 V	✓	✓	
Multivoltage 200-600 V			✓
Cooling type	Gas	Gas/Water	Gas/Water
Connectivity			
Ethernet	optional	optional	✓
TIG Dynamic Wire			✓

## CycleTig

The CycleTig function is based on the stitch welding principle. Additional adjustment options and new parameter combinations make TIG welding significantly easier.

## Multiprocess PRO

Be it TIG, MIG/MAG, or MMA, if you opt for an iWave 300i, 400i, or 500i, you can also select the Multiprocess PRO option: the high-end professional solution to combining all welding processes in just one device.

## RPI auto

With our new, intelligent ignition mode, you can enjoy an ignition process that is not only faster but also fully reproducible, regardless of the material characteristics involved.

## Tacking

With the Tacking function, a pulsed arc is generated at the start of welding for a defined period, causing the weld pool to briefly oscillate at the beginning.



# Options and accessories

The perfect accessories for the iWave series



## TU Car 4 Pro

You also have the option of upgrading the trolley to include a storage tray, torch holder, and even an attachment for transporting by crane.



## Vizor Air 3X

Reliable fan filter unit that filters out up to 99.8% of hazardous particles from the ambient air breathed in by the welder.



## "CrNi WPS" package

Qualification of welding procedure specifications by adopting standard welding procedures according to EN ISO 15612.



## RC Pedal TIG

Wired foot remote control, which is also available as a wireless variant; this can be connected to the welding system quickly and safely. Starting current, UpSlope, and

maximum current can be set in a dedicated operating mode.



## HighEnd TIG gloves

Made from soft sheepskin nappa leather, 0.8 mm thick, pulse protection and Kevlar seam; long split leather cuff, 35 cm in length. Category II as per EN 388, EN 12477.



## Calibration

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Fronius recommends a one-year calibration interval and undertakes calibration in accordance with the latest provisions for arc welding systems.

### Benefits of regular calibration

- Compliance with all standards: EN 1090, EN ISO 3834-2, ISO-9000 series.
- WPS compliance: calibrated devices meet the values required by the WPS.
- Safety: in the event of a fault, proof of calibration may exclude claims.
- Reproducibility: a calibrated welding system is the basis for consistent quality.





# TIG welding torches

# TIG welding torches

## The right welding torch for every application – with just one hosepack.

This is possible because the new TIG welding torches can be customized to suit the welder's personal preferences as well as the application at hand.

Large and small handle sizes 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? Not a problem with our TIG welding torches!



### 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.



### Cost-saving and sustainable

Replace the modules, nothing more: the welding torch does not have to be disposed of if requirements change or damage occurs.



### Ergonomic and non-slip

Protection against fatigue and a secure, non-slip grip are all guaranteed by the ergonomically designed handles of the new TIG welding torches. The ball joint and extremely flexible hosepack also make handling easier, especially when the welding locations are difficult to access.



### Longer lasting wearing parts

Perfect cooling right to the head of the torch body not only ensures reliable heat dissipation, but also significantly increases the service life of the torch's wearing parts.





### Keep an eye on the most important details:

With JobMaster welding torches, the welder can use the remote control with color display integrated into the handle to monitor and change important welding parameters such as welding power and previously stored jobs.

For more information, please visit:  
[www.fronius.com/tig-torches](http://www.fronius.com/tig-torches)



# THP

## Gas-cooled TIG welding torches



### THP 160i G ML

Welding current:  
TIG **DC** 60/100% D.C.: **120/90 A**  
TIG **AC** 60/100% D.C.: **90/70 A**  
Hosepack length: 4/8 m

Control variants:  
– Up/Down  
– JobMaster



### THP 220i G ML

Welding current:  
TIG **DC** 60/100% D.C.: **170/130 A**  
TIG **AC** 60/100% D.C.: **130/100 A**  
Hosepack length: 4/8 m

Control variants:  
– Up/Down  
– JobMaster



### THP 260i G ML

Welding current:  
TIG **DC** 60/100% D.C.: **200/150 A**  
TIG **AC** 60/100% D.C.: **160/120 A**  
Hosepack length: 4/8 m

Control variants:  
– Up/Down  
– JobMaster



### THP 120i G SH ML

Welding current:  
TIG **DC** 60/100% D.C.: **100/80 A**  
TIG **AC** 60/100% D.C.: **70/50 A**  
Hosepack length: 4/8 m

Control variants:  
– Standard  
– Up/Down  
– Potentiometer  
– Long trigger  
– No trigger



### THP 180i G SH ML

Welding current:  
TIG **DC** 60/100% D.C.: **130/100 A**  
TIG **AC** 60/100% D.C.: **90/70 A**  
Hosepack length: 4/8 m

Control variants:  
– Standard  
– Up/Down  
– Potentiometer  
– Long trigger  
– No trigger



### THP 150i G SH ML/FS

Welding current:  
TIG **DC** 60/100% D.C.: **100/80 A**  
TIG **AC** 60/100% D.C.: **70/50 A**  
Hosepack length: 4/8 m

Control variants:  
– Up/Down

# TTB torch bodies

Gas-cooled torch bodies – available in different lengths



## TTB 80P G ML

Welding current:  
TIG **DC** 60/100% D.C.: **42/35 A**  
TIG **AC** 35% D.C.: **21 A**  
Electrode diameter: 1.0-3.2 mm



## TTB 220 G ML flex\*

Welding current:  
TIG **DC** 60/100% D.C.: **170/130 A**  
TIG **AC** 60/100% D.C.: **130/100 A**  
Electrode diameter: 1.0-4.0 mm



## TTB 160 G ML\*

Welding current:  
TIG **DC** 60/100% D.C.: **120/90 A**  
TIG **AC** 60/100% D.C.: **90/70 A**  
Electrode diameter: 1.0-3.2 mm



## TTB 260A G ML

Welding current:  
TIG **DC** 60/100% D.C.: **160/120 A**  
TIG **AC** 60/100% D.C.: **200/150 A**  
Electrode diameter: 1.6-6.4 mm



## TTB 160 G ML flex\*

Welding current:  
TIG **DC** 60/100% D.C.: **120/90 A**  
TIG **AC** 60/100% D.C.: **90/70 A**  
Electrode diameter: 1.0-3.2 mm



## TTB 220 G ML\*

Welding current:  
TIG **DC** 60/100% D.C.: **170/130 A**  
TIG **AC** 60/100% D.C.: **130/100 A**  
Electrode diameter: 1.0-4.0 mm

\* available with screw-on or push-on gas nozzles

# THP

## Water-cooled TIG welding torches



### THP 300i W ML

Welding current:  
TIG **DC** 60/100% D.C.: **300/230 A**  
TIG **AC** 60/100% D.C.: **250/190 A**  
Hosepack length: 4/8 m

Control variants:  
– Up/Down  
– JobMaster



### THP 400i W ML

Welding current:  
TIG **DC** 60/100% D.C.: **400/300 A**  
TIG **AC** 60/100% D.C.: **320/250 A**  
Hosepack length: 4/8 m

Control variants:  
– Up/Down  
– JobMaster



### THP 500i W ML

Welding current:  
TIG **DC** 60/100% D.C.: **500/400 A**  
TIG **AC** 60/100% D.C.: **400/300 A**  
Hosepack length: 4/8 m

Control variants:  
– Up/Down  
– JobMaster



### THP 300i W SH ML

Welding current:  
TIG **DC** 60/100% D.C.: **300/230 A**  
TIG **AC** 60/100% D.C.: **250/190 A**  
Hosepack length: 4/8 m

Control variants:  
– Standard  
– Up/Down  
– Potentiometer  
– Long trigger  
– No trigger

## TTB torch bodies

Water-cooled torch bodies – available in different lengths



### TTB 180P W ML

Welding current:  
TIG **DC** 60/100% D.C.: **140/110 A**  
TIG **AC** 35/100% D.C.: **180/140 A**  
Electrode diameter: 1.0-3.2 mm



### TTB 400 W ML flex\*

Welding current:  
TIG **DC** 60/100% D.C.: **400/300 A**  
TIG **AC** 60/100% D.C.: **320/250 A**  
Electrode diameter: 1.0-4.8 mm



### TTB 300 W ML\*

Welding current:  
TIG **DC** 60/100% D.C.: **300/230 A**  
TIG **AC** 60/100% D.C.: **250/190 A**  
Electrode diameter: 1.0-3.2 mm



### TTB 500 W ML\*

Welding current:  
TIG **DC** 60/100% D.C.: **500/400 A**  
TIG **AC** 60/100% D.C.: **400/300 A**  
Electrode diameter: 1.6-6.4 mm



### TTB 300 W ML flex\*

Welding current:  
TIG **DC** 60/100% D.C.: **300/230 A**  
TIG **AC** 60/100% D.C.: **250/190 A**  
Electrode diameter: 1.0-3.2 mm



### TTB 400 W ML\*

Welding current:  
TIG **DC** 60/100% D.C.: **400/300 A**  
TIG **AC** 60/100% D.C.: **320/250 A**  
Electrode diameter: 1.0-4.8 mm

\* available with screw-on or push-on gas nozzles

# Options and accessories

The perfect accessories for the TIG welding torches



## Extension hosepack

Standard hosepacks can be extended by 10 meters with this option.

The connection point is protected in a compact and robust pouch to prevent contamination and snagging.



## Setting gage for electrode distance

Enables precise calibration of the electrode distance.



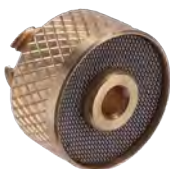
## Wearing-part box

Ideal for the storage and transport of small parts such as the torch's wearing parts, device fuses, small tools, etc.



## TFC - Tungsten Fast Clamp

The patented TFC electrode clamping system releases and clamps the tungsten electrode at the touch of a button, allowing it to be changed in a matter of seconds.



## Gas lens

Ensures a turbulence-free gas flow and thereby improves the gas shield.



## Repair service

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All Fronius products can be repaired to a great extent – including directly on site by expert technicians.

### Benefits of repair

- Minimal downtimes
- Fast support from experts
- Original spare and wearing parts from Fronius



# Ignis



# Ignis series

Consistent seam quality in confined spaces and adverse conditions – all thanks to the compact Ignis series. The almost indestructible housing can handle external influences such as dust and moisture without a problem. Inside, you will find cutting-edge technology as well as numerous functions such as HotStart, SoftStart, and anti-stick that simplify work for the user at the start of and during welding.



### Excellent ignition properties and high arc quality

- No electrode adhesion
- Manual metal arc pulse welding



### Robust design and low weight

- depending on the model 6.3-8.8 kg



### Consistently high weld quality

- even with unstable mains voltage with PFC (Power Factor Correction)



### Expanded range of functions

- available in multiple versions: Multivoltage, TIG





### New generation, greater flexibility:

Ignis with integrated PFC (Power Factor Correction) technology supports the use of extremely long grid leads of up to 100 m in length. Also new and improved are the intuitive operating concept, a 7-segment display that makes it possible to quickly read off the parameters that have been configured, and the positioning itself – the display is now slightly set back and therefore well protected against damage.

For further information, visit:  
[www.fronius.com/ignis](http://www.fronius.com/ignis)



# Ignis

Compact welding systems for maximum flexibility



## Ignis 150

Mains voltage: -20/+15%: 230 V  
Weight: 6.3 kg  
Dimensions L/W/H: 365 x 130 x 285 mm  
Degree of protection: IP 23

Welding current:  
MMA 35/60/100% D.C.: **150/110/90 A**  
TIG 35/60/100% D.C.: **150/110/90 A**



## Ignis 150 TIG

Mains voltage: -20/+15%: 230 V  
Weight: 6.3 kg  
Dimensions L/W/H: 365 x 130 x 285 mm  
Degree of protection: IP 23

Welding current:  
MMA 35/60/100% D.C.: **150/110/90 A**  
TIG 35/60/100% D.C.: **150/110/90 A**



## Ignis 180

Mains voltage: -20/+15%: 230 V  
Weight: 8.8 kg  
Dimensions L/W/H: 435 x 160 x 310 mm  
Degree of protection: IP 23

Welding current:  
MMA 40/60/100% D.C.: **180/150/120 A**  
TIG 40/60/100% D.C.: **220/150/120 A**



## Ignis 180 TIG

Mains voltage: -20/+15%: 230 V  
Weight: 8.8 kg  
Dimensions L/W/H: 435 x 160 x 310 mm  
Degree of protection: IP 23

Welding current:  
MMA 40/60/100% D.C.: **180/150/120 A**  
TIG 40/60/100% D.C.: **220/150/120 A**

## Functions and equipment features

	Ignis 150	Ignis 150 TIG	Ignis 180	Ignis 180 TIG
Anti-stick	✓	✓	✓	✓
SoftStart	✓	✓	✓	✓
HotStart	✓	✓	✓	✓
TIG Comfort Stop		✓		✓
TAC tacking function (TIG)		✓		✓
Multivoltage			✓	✓
TIG welding torch operation		✓		✓

### Anti-stick

Prevents electrode burn-out. If a short circuit occurs that causes the electrode to stick during MMA welding, the power source is switched off immediately.

### SoftStart

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

### HotStart

Specially developed for welding with rutile and cellulose electrodes. To make the electrode easier to ignite, the current is increased on the power source for a fraction of a second during ignition.

### TAC (TIG)

With TAC, one spot to tack is all it takes! The pulsed arc sets the two weld pools in motion, making them "jump together" in next to no time, forming one single weld pool. The TAC function is also very useful when welding light-gage sheets without filler metal.

### TIG Comfort Stop

At the end of the welding process, automatic shutdown of the welding current follows a specific change of the arc length. The outcome is an improved welding result near the end-crater because the gas shield is also maintained (for TIG variant only).

# Options and accessories

The perfect accessories for the Ignis series



## Fazor 1000 Plus welding helmet

Reliable protection for day-to-day welding tasks with an outstanding price/performance ratio.



## Light bomber jacket

Made for everyday welding tasks, featuring a stand-up collar and press studs, concealed zip, 2 breast pockets with flap, 2 pockets with flap, and reflectors in the form of strips and triangles.



## MMA welding station equipment

For electrode welding – consisting of an “EASY” hand shield, chipping hammer, and electrode and grounding cables.



## Tool Case

The Tool Case 60 is supplied with a foam insert suitable for the TP150. The trolley function is available as of Tool Case 85 – suitable for the TP180.



## Multi Magnets

For easy and secure fixing of components at the desired work angle; in most cases, there is no longer any need for a second person to provide support during welding.



## Extended warranty

Fronius offers a free warranty extension for selected products\* upon product registration.

### Benefits of the extended warranty

- Full warranty protection from the manufacturer for three years
- Repairs are carried out free of charge.
- Materials, spare parts, and labor are included.
- A complete peace-of-mind package

\* for the Ignis series / Artis 170, 210 / AccuPocket series / TransSteel-series / iWave 190i, 230i / TPS 270i C

# Accu- Pocket





# AccuPocket series

With the AccuPocket, access to mains electricity is no longer necessary. Welding tasks involving up to eight 3.25 mm or up to eighteen 2.5 mm electrodes can be carried out autonomously. A small, compact 2 kVA generator is sufficient for welding applications on a larger scale. And all without any compromises on welding power or the quality of the arc. A modern yet functional design, with dimensions reduced to a minimum, a low weight, and a robust construction, make AccuPocket the perfect partner on any construction site.



Three different operating modes: battery mode, generator-powered operation, charging and welding in hybrid mode



Mobile and robust: integrated battery, 11 kg overall weight, robust design



Increased arc stability thanks to AccuBoost Technology: for easy ignition and no arc break



Safe, high-power battery meets welding technology: LiFePo4, 400 Wh, low self discharge and rapid charging in 30 minutes





What will the conditions be like when welding on site? Will the grid connection there be sufficient for the power source?

With the AccuPocket and its ability to weld completely independently of the grid, these questions become a thing of the past.

For more information, please visit:  
[www.fronius.com/accupocket](http://www.fronius.com/accupocket)



# AccuPocket

Battery-powered welding systems



## AccuPocket

Battery capacity: 396 Wh  
Weight: 10.9 kg  
Dimensions L/W/H: 435 x 160 x 310 mm  
Degree of protection: IP 23

Welding current:  
MMA 18/25/100% D.C.: **140/100/40 A**

### ActiveCharger

Mains voltage: 230 V  
Weight: 2 kg  
Dimensions L/W/H: 270 x 168 x 100 mm  
Degree of protection: IP 43 S



## AccuPocket TIG

Battery capacity: 396 Wh  
Weight: 10.9 kg  
Dimensions L/W/H: 435 x 160 x 310 mm  
Degree of protection: IP 23

Welding current:  
TIG 50/25/100% D.C.: **100/150/65 A**  
MMA 18/25/100% D.C.: **140/100/40 A**

### ActiveCharger

Mains voltage: 230 V  
Weight: 2 kg  
Dimensions L/W/H: 270 x 168 x 100 mm  
Degree of protection: IP 43 S

# Functions and equipment features

	AccuPocket	AccuPocket TIG
<b>Battery type</b>	Lithium ion	Lithium ion
<b>Anti-stick</b>	✓	✓
<b>SoftStart</b>	✓	✓
<b>HotStart</b>	✓	✓
<b>TIG Comfort Stop</b>	✓	✓
<b>TAC tacking function (TIG)</b>		✓
<b>Remote control operation</b>		✓
<b>TIG welding torch operation</b>		✓

## Anti-stick

Prevents electrode burn-out. If a short circuit occurs that causes the electrode to stick during MMA welding, the power source is switched off immediately.

## SoftStart

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

## HotStart

Specially developed for welding with rutile and cellulose electrodes: to make the electrode easier to ignite, the current is increased on the power source for a fraction of a second during ignition.

## ActiveCharger

The battery charger with specially developed charging characteristic; charging in just 45 minutes; hybrid operation (battery charger directly connected to the grid) is also possible; generator-compatible – a 2 kVA generator is sufficient for continuous operation.

## Hybrid mode

For simultaneous charging and welding; the power reserve in the battery guarantees a constant arc, even in the event of mains voltage fluctuations. The full output power of 150 A is secured – even with a 120 V grid.

## Maximum flexibility

A total of either six 3.25 mm electrodes or eighteen 2.5 mm electrodes can be welded with one battery charge. The AccuPocket TIG can be used at full power (150 A) for up to 17 minutes in continuous operation.

## Options and accessories

The perfect accessories for the AccuPocket series



### Vizor 4000 Plus

The view is up to four times lighter when the helmet is in its light setting and in grinding mode: the Vizor 4000 Plus is the professional tool for all welding operations within a protection level range of 8-12.



### THP 150/TTB 160 TIG welding torch

Designed to take as much strain out of your work as possible, the Multilock welding torches feature an ergonomic design and an Up/Down function.



### MMA welding station equipment

For electrode welding – consisting of an “EASY” hand shield, chipping hammer, and electrode and grounding cables.



### Wire brush

For cleaning welds and other metal surfaces.



### HighEnd gloves

Made from heat-resistant special split leather with heat-resistant Kevlar seam; lint-free, insulated duvetyne inner lining. Category III as per EN 388, EN 407.



## Fronius Warranty

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Ideal for every device: the Fronius functional warranty

### Benefits of the Fronius Warranty

- 5 years full warranty covering the overall system.
- Free battery replacement at a residual capacity of below 70%
- Repairs are carried out free of charge.
- Materials, spare parts, and labor are included.



Fronius

MAGIC  
CLEANER



# Magic-Cleaner

# MagicCleaner series

Our innovative technology for treating TIG welds and stainless steel surfaces. The cleaning, polishing, and inscribing of stainless steel with MagicCleaner offers key advantages. In contrast to mechanical or chemical cleaning, there is no impairment to the material surface. No work-in time is needed, nor is an additional passivation process required.



Clean and passivate TIG welds and stainless steel surfaces in just a single step



Simple and resource-conserving: manual or automatic dosing of electrolyte consumption



Inverter technology lowers the power consumption while generating the same output power. The result? Energy-saving and lightweight devices



Rapid and easy commissioning: ready to use in a maximum of three steps





Alternating current and electrolyte fluid are used during the electrochemical cleaning process to remove and passivate temper colors after welding.

The post-cleaning polishing process ensures uniformly shiny stainless steel surfaces and improves the steel passivation process. As a perfect alternative to stickers or laser engraving, MagicCleaner also makes it possible to permanently label stainless steel surfaces.

For more information, please visit:  
[www.fronius.com/magiccleaner](http://www.fronius.com/magiccleaner)



# MagicCleaner

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Electrochemical cleaning, polishing, and printing



## MagicCleaner 150

Mains voltage -15%/+10%: 230 V / 50-60 Hz

Weight: 4.5 kg

Dimensions L/W/H: 365 / 130 / 285 mm

Cleaning agent capacity: 100-ml tube



## MagicCleaner 300

Mains voltage -15%/+10%: 230 V / 50-60 Hz

Weight: 14 kg

Dimensions L/W/H: 558 / 210 / 369 mm

Cleaning agent capacity: 1.8-l tank

# Functions and equipment features

	MagicCleaner 150	MagicCleaner 300
Cleaning AC	✓	✓
Polishing DC	✓	✓
Printing (AC and DC)	✓	✓
Integrated pump		✓
Power	15 A	30 A
Cleaning torch MC150	✓	✓
Cleaning torch MC300		✓
Cleaning fluid (capacity)	100-ml tube	1.8-l tank
ToolCase 60	✓	
ToolCase 120		✓
ToolBox 210		✓
Trolley available		✓

## Inverter technology

Lower power consumption with the same output power from energy-saving and lightweight devices.

## Cleaning (AC)

Alternating current (AC) and electrolyte fluid removes and passivates temper colors during the electrochemical cleaning process after welding.

## Polishing (DC)

Electrochemical polishing removes part of the parent material from the workpiece and lightens the surface. This improves the passivation process for stainless steel.

## Printing (AC and DC)

For permanent marking of stainless steel with company logos, item numbers, barcodes, etc.; alternating current (AC) is used for black printing and direct current (DC) for white printing.

## Cleaning torch MC150

Manual electrolyte dosing and mountable 100-ml tube

## Cleaning torch MC300

With patented compressed air purge system and automatic cleaning agent supply.

# Options and accessories

The perfect accessories for the MagicCleaner series



## Brushes for cleaning

A broad range of brushes for welded pipes, undercuts, scarp edges, and complex shapes



## Pads for cleaning and polishing

Special pads and electrodes for linear welds, corner welds, T-joints, or butt welds



## Electrolytes for cleaning, polishing and printing

Electrolytes for cleaning, polishing, or printing, as well as a neutralizer – for neutralizing the electrolytes and avoiding build-up on the edges



## Print set

Complete equipment for inscribing surfaces with logos, item numbers, barcodes, etc., in black or white; individual films available on request



## ToolCase 120

Spacious transport box for the flexible transport of the MagicCleaner 300



# Health Safety





and

# Risk-free welding

Welding fumes, UV light, heat, and ergonomics: these are all topics that play a role in the working lives of welders because they constitute extremely severe health risks.

That's why at Fronius we develop not only the latest welding technology, but also innovative solutions for occupational health and safety. All of our products are designed to protect welders against harmful influences without impairing their work.



## UV and glare protection

Interference from external light, welding light reflections, welding in inaccessible positions – our fully automatic helmets ensure that the eyes and face are protected from heat and UV radiation even in these challenging situations.



## Protection from welding fumes

Extraction systems and breathing apparatus are essential for protecting the long-term health of staff. That's why we offer a wide range of coordinated solutions to keep health implications due to welding fumes to a minimum.



## Thermal protection

In some cases, welding results in very high temperatures and welding spatter. That's precisely why heat- and flame-resistant work clothing is essential. From gloves and jackets to welding aprons and work shoes: we offer reliable protective equipment for every application.



## Ergonomics, working posture

Ergonomic hosepacks and particularly compact power sources enable our welding systems to be transported conveniently and for work to be carried out flexibly and safely.



For further information, visit:  
[www.fronius.com/pw/healthandsafety](http://www.fronius.com/pw/healthandsafety)



# Protective equipment

For optimal protection of the welder

## Exento extraction kit



Removes the welding fumes as soon as they are created; installed directly on the welding torch

## Vizor Air 3X Connect



No compromises in terms of occupational health & safety or comfort: the Fronius protection system for the eyes and airways

## Vizor Air/3x



Reliable fan filter unit that filters out up to 99.8% of hazardous particles from the ambient air breathed in by the welder

## HighEnd leather jacket



Made from smooth, elastic split calf leather and in accordance with the standard EN ISO 11611:2015 Class 2, A1

## TIG Basic gloves



Made from soft nappa leather, 35 cm in length; Category II as per EN 388

## Light work trousers



Cleverly designed: featuring 2 front pockets, 2 side pockets with flap, 1 rear pocket with flap, and reflectors in the form of strips and triangles

## Light bomber jacket



Made for everyday welding tasks, featuring a stand-up collar and press studs, concealed zip, 2 breast pockets with flap, 2 pockets with flap, and reflectors in the form of strips and triangles

## Exento extraction torch



They are the perfect addition to Exento HighVac systems and ensure efficient and precision extraction, all in compliance with the EN ISO 21904-1 standard: Health and safety in welding and allied processes



### Exento LowVac

Whether it's a MIG/MAG, TIG, or manual metal arc welding, the mobile low vacuum extraction system plays to its strengths during all common welding processes thanks to the flexible extraction arm with flow-optimized extraction hood.



### Exento HighVac

With a floor area of approximately 60x60 cm, the high vacuum extraction system takes up minimal storage space in the hall or workshop. Depending on the model, extraction capacity can reach up to 170 m³/h.



### Ergo double shoulder strap

The 4-point carrying system also makes the air systems more comfortable to carry.



### Fazor 1000 Plus

Reliable protection for day-to-day welding tasks with an outstanding price/performance ratio.



### Vizor 4000 Plus

The view is up to four times lighter when the helmet is in its light setting and in grinding mode: the Vizor 4000 Plus is the professional tool for all welding operations within a protection level range of 8-12.



### Heat shield

Made of a particularly heat-resistant material and can be fitted with ease by clicking into place.



### Safety boots S3

Developed to ensure optimum protection every day.



### GrindMask Air 3X

For safe working conditions: Grind-Mask Air/3X offers an unrestricted, clear view of the workplace and filtered, pure air with individually adjustable air supply.



### Leather welding apron

Bib apron: made from split calf leather 600 x 900 mm and of course compliant with EN ISO 11611:2015 Class 2, A1.



weldu



cation

# Welducation

## Welder training with Fronius

Not only is Fronius a supplier of high-quality welding systems and welding solutions, but we also support the training of the next generation of welders. The solutions range from welding simulators that support practical training through to scripts, videos, and posters that help to convey important theory. With apps such as Welducation Basic, we provide a fun approach to the subject of welding.



### Welding simulators

#### No material costs, no risk of injury

With the Virtual Welding welding simulator, beginners and trainees have the opportunity to learn about welding without any risk. Virtual training not only saves on resources such as materials, gas, electricity, and wearing parts during welder training, studies also show that the use of virtual welder training has a significant impact on the effectiveness and duration of the training.



### Training materials

#### Helpful materials for trainers and trainees

The welding profession demands not only manual dexterity, but also particularly extensive theoretical knowledge of welding processes and metals, for example. Fronius provides numerous training materials that can help impart this knowledge – from scripts and videos, right through to posters.



### Mobile apps for welders

#### Welducation Basic: welding knowledge

The free app that conveys essential welding theory. The knowledge gained can be tested with a quiz and the welding game provides an opportunity for virtual training. The results of the welding knowledge gained using the interactive app can be compared with other app users in an international ranking list and then expanded.

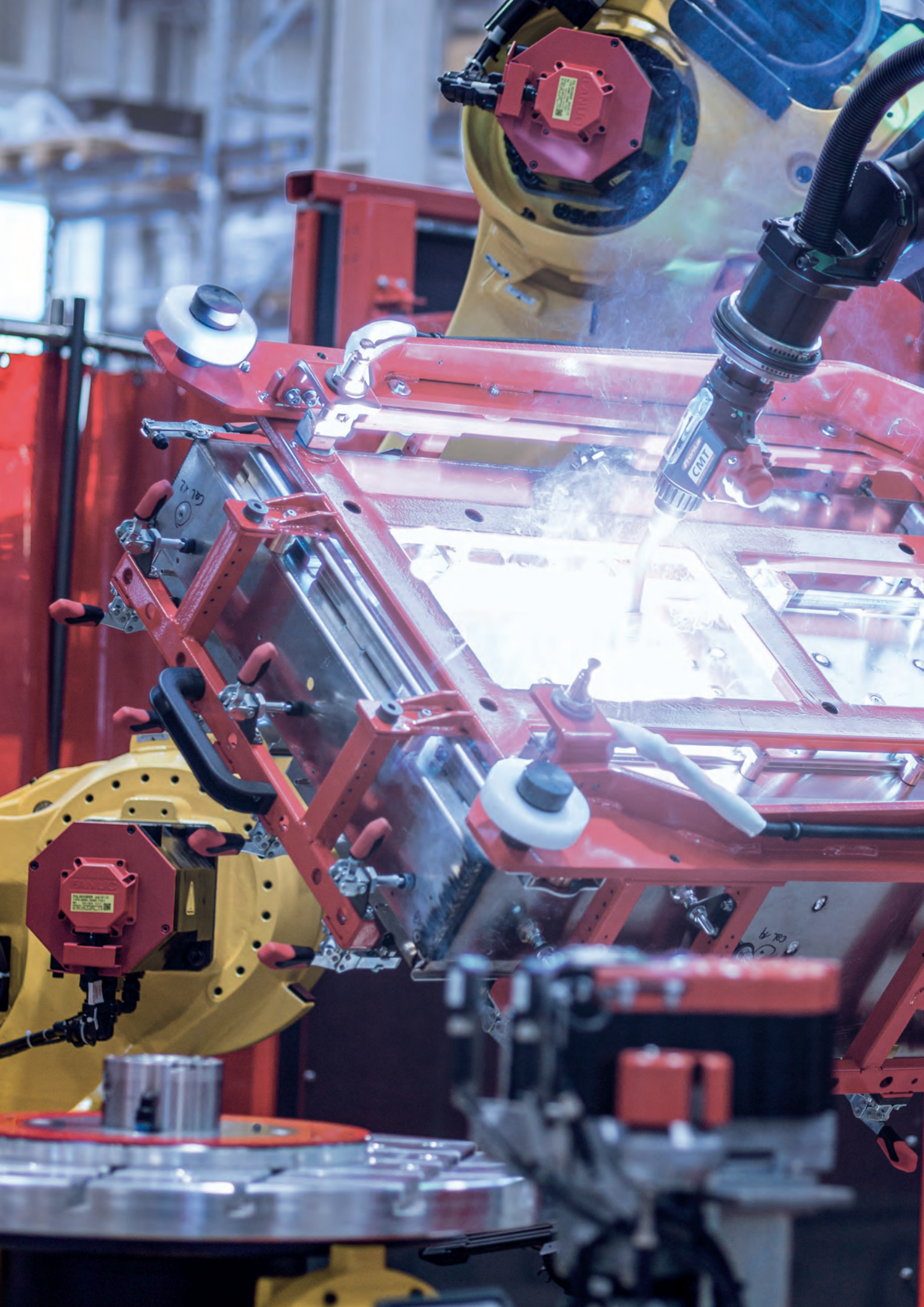


## Welducation Simulator – theory and practice:

The Fronius welding simulators can be used not only for virtual welder training, but also for conveying essential theoretical knowledge about welding processes and testing this in order to check that the learning objectives have been met.

For more information, please visit:  
[www.fronius.com/welducation](http://www.fronius.com/welducation)







# Robotic welding

# Robotic welding

Increased welding speeds, consistent quality, less rework, and faster processes: the use of robots makes it possible to establish standardized welding applications and make them significantly more efficient. This results in shorter working processes and lower production costs.

We have many years of experience in robot-assisted welding and have developed a range of solutions. From simple Push applications to PushPull, Twin processes, and LaserHybrid, right through to the most stable and cleanest welding process CMT (Cold Metal Transfer): Fronius offers the optimum solution for every requirement.



## **Adaptive / automatic welding**

For flawless welds: the use of mechanical systems is becoming increasingly efficient, with state-of-the-art assistance systems that intervene before and during welding. This means that investment costs are repaid within a very short time.

Additional automatic change stations for changing welding torches and contact tips as well as cleaning systems keep human intervention in the process to a minimum and thereby significantly increase service life.



## **CMT – Cold Metal Transfer**

CMT has revolutionized welding technology: wherever adhesive or solder was used before, CMT welding can now be used instead – thanks to its precise wire retraction movements.

The reversing wire movement at up to 170 Hertz produces an exceptionally stable arc – and all with a 33% reduction in heat input and a welding speed almost twice as fast as the conventional dip transfer arc.



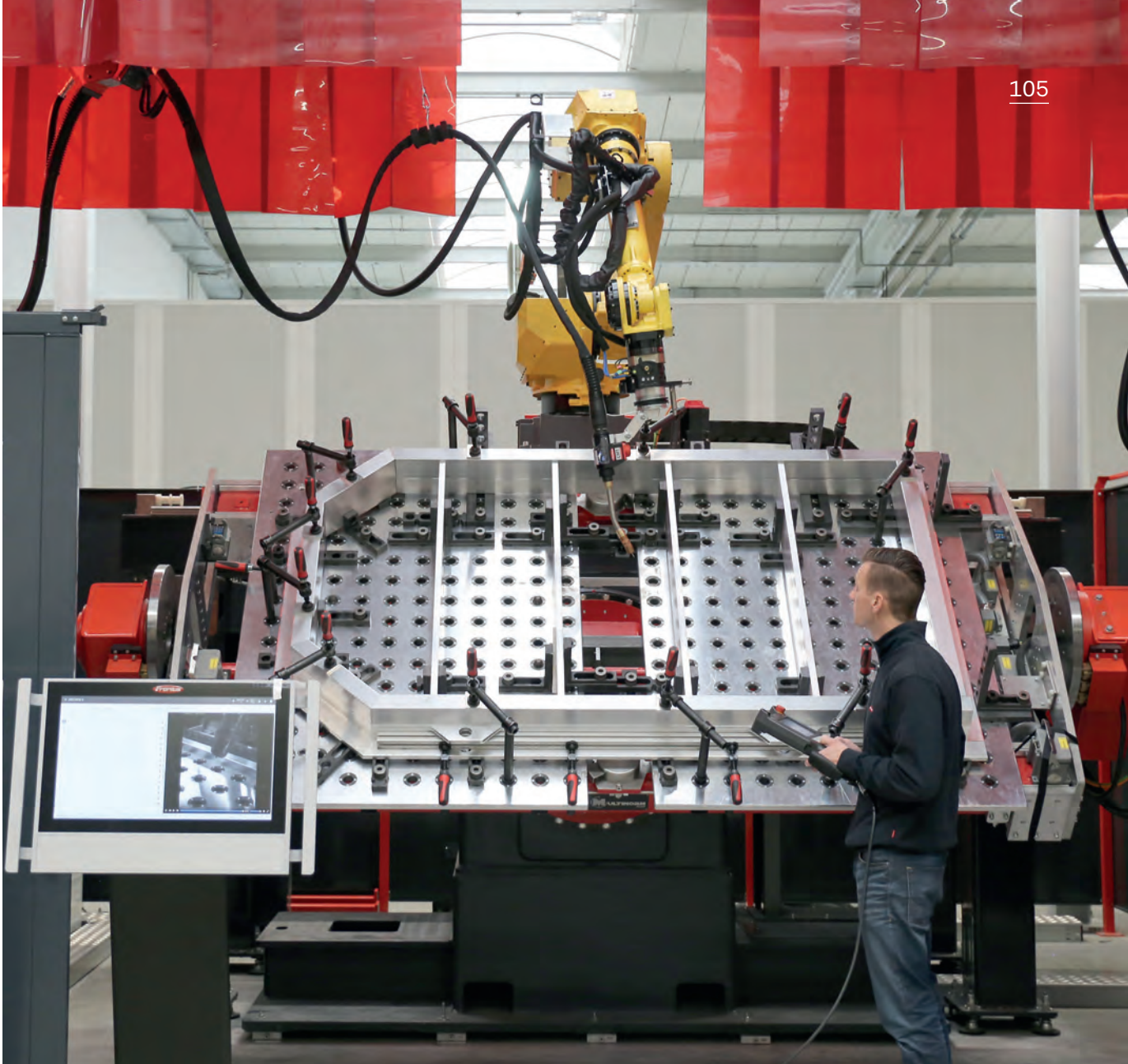
## **High flexibility with a wide range**

The TPS/i is a modular system and can therefore be integrated very easily into various robotic welding systems. The system setup supports customer-specific configurations, such as Push or PushPull solutions. System add-ons including torch cleaning devices and automated torch replacement are also available.



## **Robotic welding cells**

Large quantities in consistent quality: Fronius designs and builds customer-specific robotic welding cells based on standard modules for this very purpose.



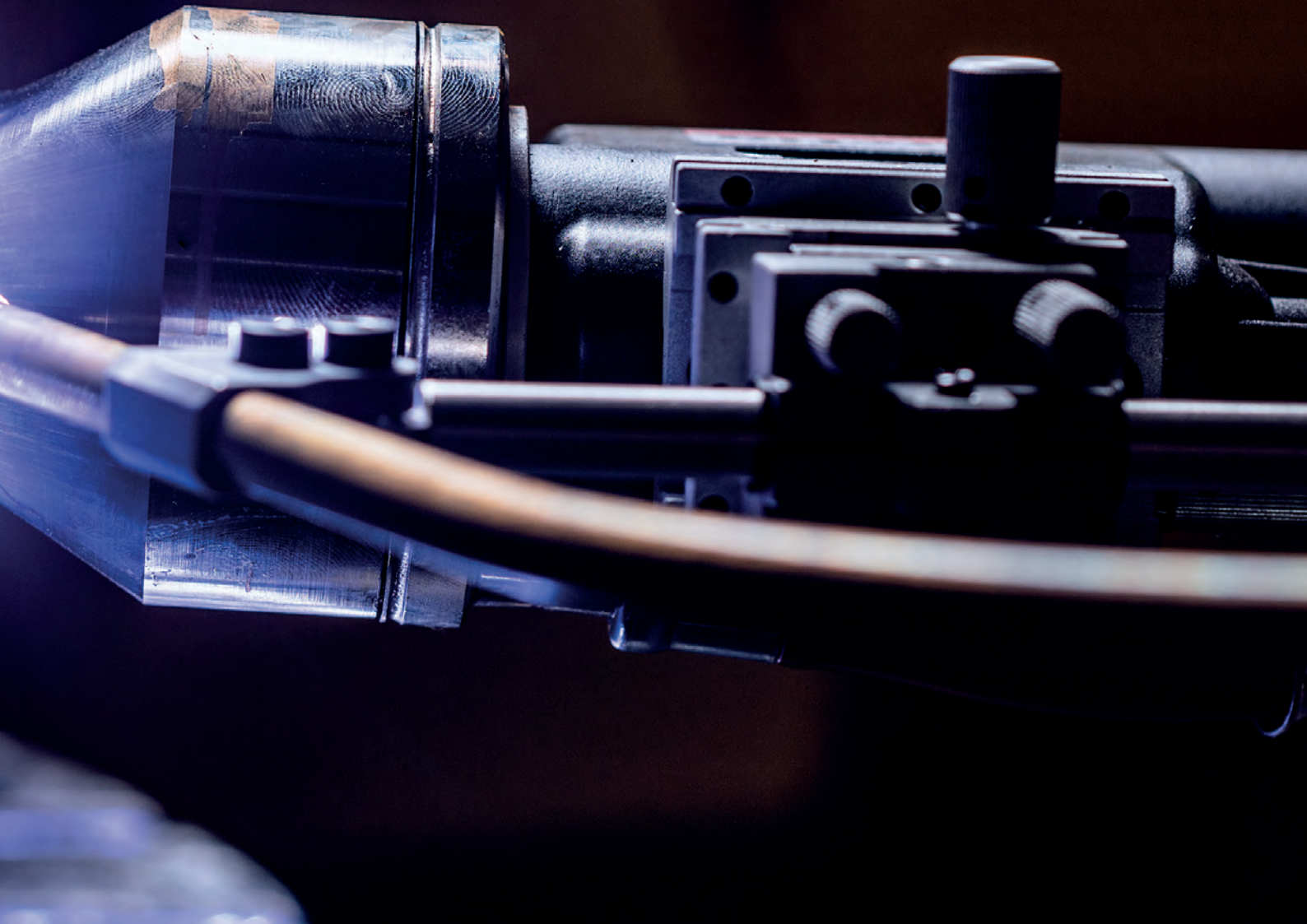
## Prototyping center – Fronius is a full-service solutions provider.

At the Wels site in Upper Austria, our welding experts work together with our customers to develop the ideal solution for their welding technology challenges. We can provide everything from feasibility studies to finished prototypes. If required, we can also produce smaller quantities for pre-series production.

# Mechanical welding

A close-up photograph of a mechanical welding process. A bright blue flame is visible on the right side, where a metal rod is being heated. The background is dark and out of focus, showing industrial machinery.

ized



# Mechanized welding

Mechanized welding systems are ideal for welding components with simple geometries and rapidly growing batch sizes. Typical applications include longitudinal and circumferential welds. The weld quality is consistent and, if necessary, position and parameter corrections can be carried out.

Our customers benefit from innovative welding technology, which we intelligently integrate into the system components. This provides perfect welding results and outstanding component quality – and makes us the ideal partner for mechanized welding.



**Standardized and customer-specific complete solutions from a single source**

One point of contact from planning all the way through to commissioning



**Full service**

Always there for you: from the feasibility study and planning stage to design, programming, and manufacturing, right through to commissioning and maintenance



**High cost effectiveness**

Optimal balance between high weld quality and minimal cycle times



**Individual customer programs**

Service, training, and support create sustainability and security.



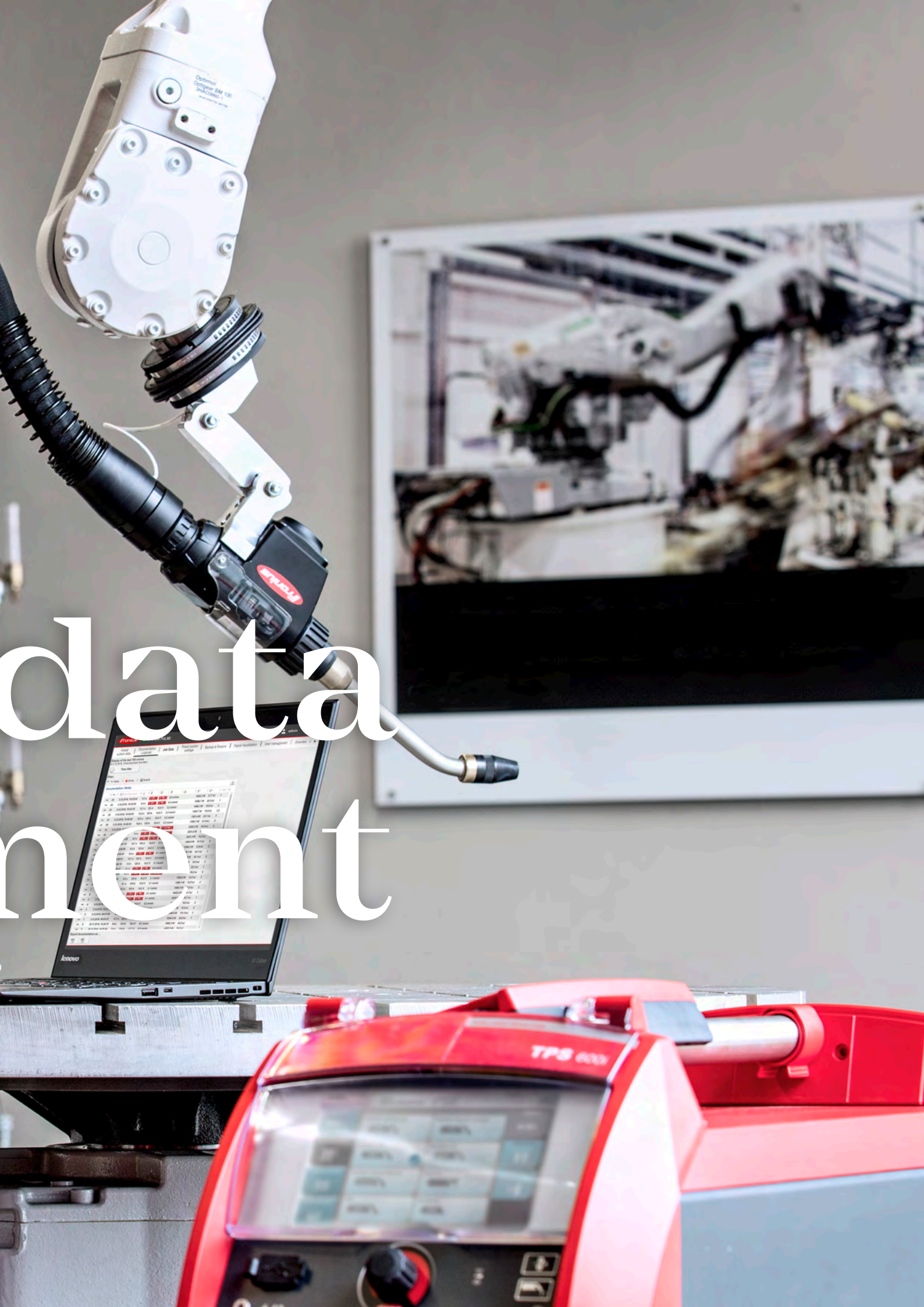
## Longitudinal seam welding system for mechanized MIG welding of wagon assemblies

- Two-station mode, motorized horizontal and vertical carriages, motorized carriage
- Welding positions PA and PB.
- Welding speed 70-80 cm/min
- Intuitive HMI system controls, high-resolution ArcView camera system for arc monitoring



# welding management

# data management



# Welding data management

## WeldCube

The web-based software solution for the ongoing planning, collection, analysis, and visualization of welding technology production data.

WeldCube is available in different versions and, depending on the requirements, offers two options for the storage and evaluation of welding and system data: either locally in the welding systems or centrally in a database.



### **Local documentation with WeldCube Basic and Light**

Data storage directly in the welding system; data viewed and processed on each welding system.



### **Centralized documentation with WeldCube Premium**

Storage of all data in a database; data collection for all networked welding systems.



### **Data interfaces for TPS/i welding systems and WeldCube Premium**

Document, analyze, or export welding data: Fronius offers various data interfaces, known as APIs, with a view to ensure that all customers can use the gathered data for their own customized data management solutions.



Central User Management – for quick and easy user management

It takes just a few clicks in a single central location to define user rights for one or more welding systems or WeldCube Premium applications. The information is automatically sent to all affected and networked systems.

For more information, please visit:  
[www.fronius.com/weldcube](http://www.fronius.com/weldcube)





# Sustainable

guides our actions



oility

# Our responsibility

**To us, sustainability means more than just protecting the environment.**

It's also about the people who work with our products, which is why we have always followed the principle of sustainability in design, sustainability in production.

We develop solutions that are characterized by their long service life, repairability, and recyclability – but also by new technologies. This is how we fulfill our ecological, economic, and social responsibilities.



## Product

- Long service life and robustness
- Repairable systems
- Important components can be individually serviced and replaced
- Easy-to-repair welding torches; recyclable in the event of damage



## Resources

- Power Factor Correction – for reducing power losses
- Performance-adapted cooling (Eco Mode)
- Low storage costs thanks to the modular design and independent configurability
- Optional gas regulator – for reducing gas consumption



## Reduction of mental stress

- Self-explanatory operating concepts for welding systems
- More than 30 different languages for display-based devices
- Easy-to-read display – even from a distance
- Active Wave – noise impact reduction during AC welding



## Reduction of physical stress

- Ergonomic welding torch shape and non-slip grip
- 360° rotatable torch body – for optimum component accessibility
- Wireless remote control – no trip hazards



### Optimal weight distribution:

The ergonomically shaped handle and the ball joint allow you to work without fatigue.





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