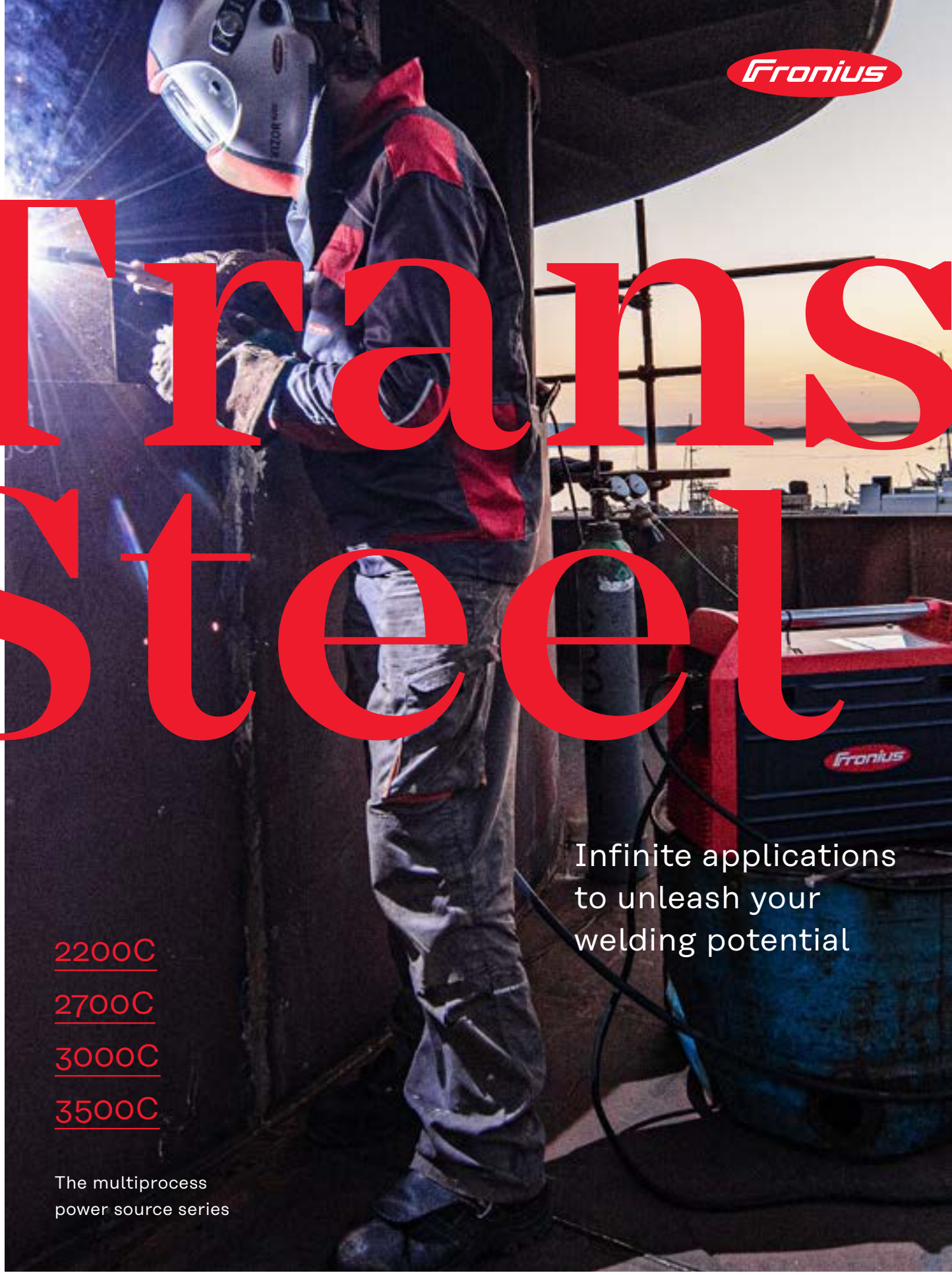


TransSteel

Infinite applications
to unleash your
welding potential

2200C

2700C

3000C

3500C

The multiprocess
power source series

Steel Transfer Technology

Multi-process

Pulse Technology

Unlimited applications

Transsteel Multi-process.

No matter what the welding task – MIG/MAG, TIG and electrode welding with just one device.

Whether a construction site or a workshop, from agricultural enterprises to metalworking companies – for assembly, repair, and maintenance work, the TransSteel Multiprocess series masters the MIG/MAG, TIG, and electrode welding processes to professional levels.

TransSteel - the advantages for you

One device – for all manual welding applications

Combining MIG/MAG, TIG, and electrode welding in one device means you no longer have to purchase any other power sources. There is absolutely no difference in the welding performance of the respective process compared with a dedicated device.

118 Characteristics

Steel, CrNi, AlMg, AlSi, Metal Cored, Rutil FCW, Basic FCW, self-shielded wires, 0.8 – 1.2 mm wire diameter, Eight different gas mixtures.

Ready to weld in three steps

The intuitive operating concept enables welders to start work straight away – no prior knowledge of the device is required. All the essential welding parameters can be viewed and adjusted on the front panel. The only parameters that have to be selected before welding begins are the gas, wire diameter and material thickness.

70% less rework, 30% faster welding

Difficult-to-control and spattering intermediate arcs are a thing of the past thanks to the pulse function and minimizing spatter reduces the need for reworking by up to 70%. Compared to the standard arc, the pulsed arc enables up to 30% faster welding speeds, primarily for aluminum and CrNi applications.

For further information, visit:
www.fronius.com/transsteel

The TransSteel series

TransSteel
2200C

TransSteel
2700C

TransSteel
3500C

Special features

Polarity reverser

The polarity reverser enables the polarity to be reversed in seconds when welding self-shielded wires.

Multivoltage

An optional extra for the TST 3000C Pulse and TST 3500C.

Keylock switch

An optional extra for the TST 3000C Pulse and TST 3500C.

Functions

Functions	TransSteel 2200C	TransSteel 2700C	TransSteel 3000C Pulse	TransSteel 3500C
Multiprocess	✓	✓	✓	✓
Pulse			✓	
SynchroPulse			✓	
Wirespool size	D 100 / D 200	D 200 / D 300	D 200 / D 300	D 200 / D 300
Wire speed	2R	4R	4R	4R
Polarity reverser	✓	✓	✓	✓
Cooling	Gas-cooled	Gas-cooled	Gas-cooled / water-cooled (optional)	Gas-cooled / water-cooled (optional)
Easy Jobs	2	5	5	5
Data documentation			✓	✓
Mains operation	1-phase	3-phase / 1-phase	3-phase	3-phase
Multivoltage	✓	✓		

TransSteel
3000C Pulse

– Faster welding speeds on thicker materials
– Less welding spatter generated
– The pulsed arc also reduces the amount of rework

The MIG/MAG

Welding functions

Pulse welding controlled and fast

The new TransSteel 3000C Pulse marks the arrival of the pulsed arc in the TransSteel series. The setting is simply selected from the main menu and facilitates controlled welding in the intermediate arc range.

Spot and stitch welding minimal material distortion

Spot mode enables you to place welding spots at regular intervals. As you have complete flexibility over the pause time between the intervals, spot welding is ideal for the tacking of workpieces. Stitch welding not only produces a rippled seam appearance, the low level of heat input reduces any possible material distortion when working with light gage sheets.

Steel transfer technology

- Steel is the universal characteristic for quick and easy welding applications.
- Steel Root is the characteristic specifically developed for root pass welding. It is characterized by particularly strong gap-bridging ability, in other words, the ability to fill wide gaps.
- Steel Dynamic is a characteristic with a particularly hard and concentrated arc, resulting in high welding speeds and deep penetration.
- PCS characteristics allow a combination of pulsed and spray arcs and avoid negative effects of the intermediate arc – the result is deep penetration with minimal spattering.

Special 4-step mode for a more stable arc

The “Special 4-step mode” is particularly suitable 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.

SynchroPulse seam rippling for aluminum alloys

The “SynchroPulse” option is recommended for the welding of aluminum alloys when a rippled seam appearance is required. This effect is achieved by modifying the welding power between two operating points.

SynchroPulse works in
Standard Synergic and Pulse Synergic Mode –
but only on the TransSteel 3000C Pulse.

The TI

Welding functions

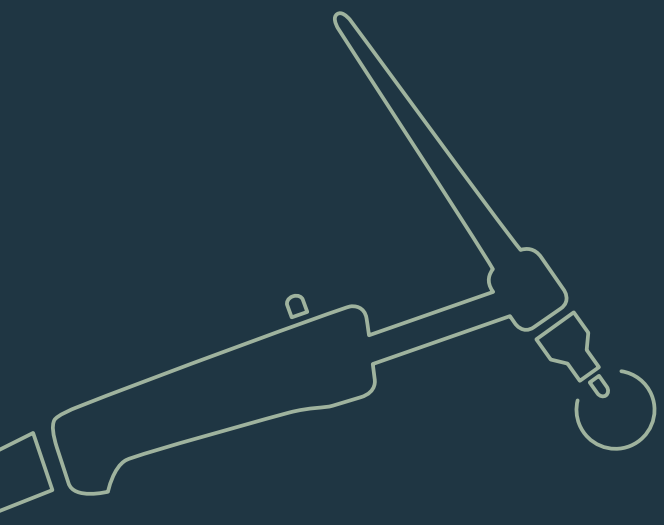
Practically the same high

Welding performance

as with a regular
TIG power source.

TIG Pulse welding

TIG Pulse welding is primarily used for out-of-position welding or when welding especially thin materials. The pulse setting range is from 1 Hz to 990 Hz.



TIG Pulse welding

TIG Pulse welding is primarily used for out-of-position welding or when welding especially thin materials. The pulse setting range is from 1 Hz to 990 Hz.

Gas pre-flow time + gas post-flow

TransSteel automatically calculates the duration of the optimal gas post-flow time according to the set welding current. This improves the gas shield of the weld seam end and tungsten electrode.

Touchdown ignition

The highly accurate touchdown ignition is on a par with high frequency ignition and contributes towards user-friendliness.

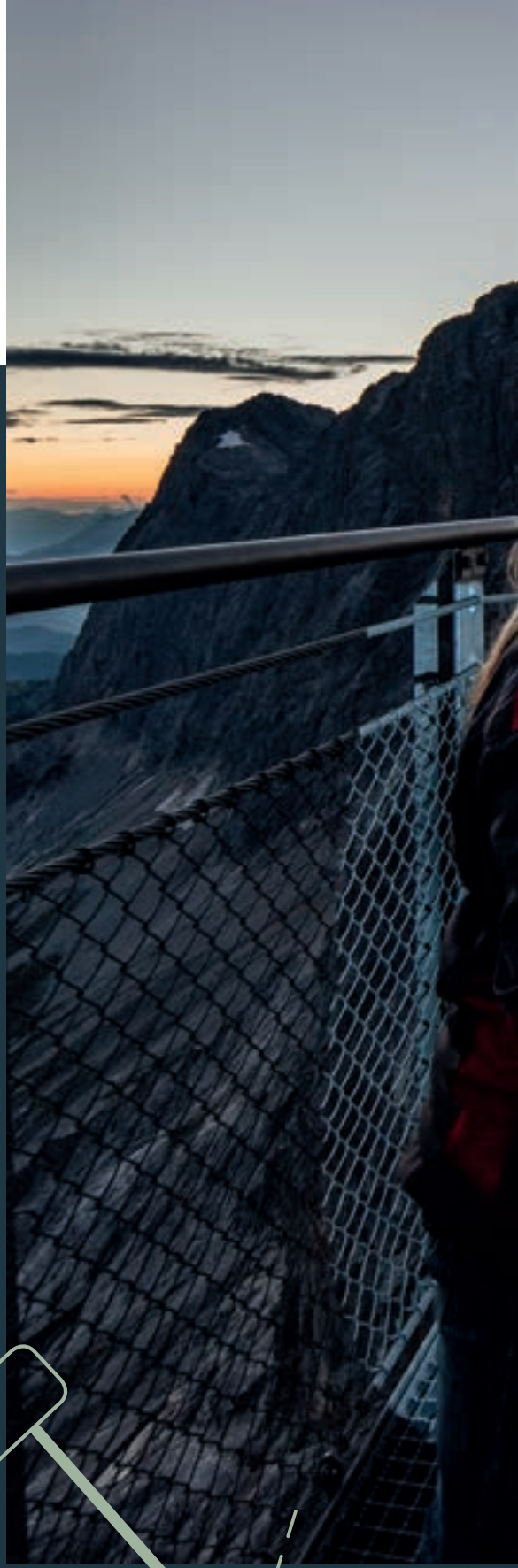
TAC tacking function

The weld pool is made to oscillate by means of pulse currents. This makes it easier to tack components together and reduces the tacking time. The pulsed arc facilitates the process with very thin materials, since the temperatures are slightly lower in the phases with less current.

- Time saving of up to 50% for the user compared to conventional tacking
- Fast tacking points without burning off the edges
- Minimal temper coloration at the tacking points
- Spot function

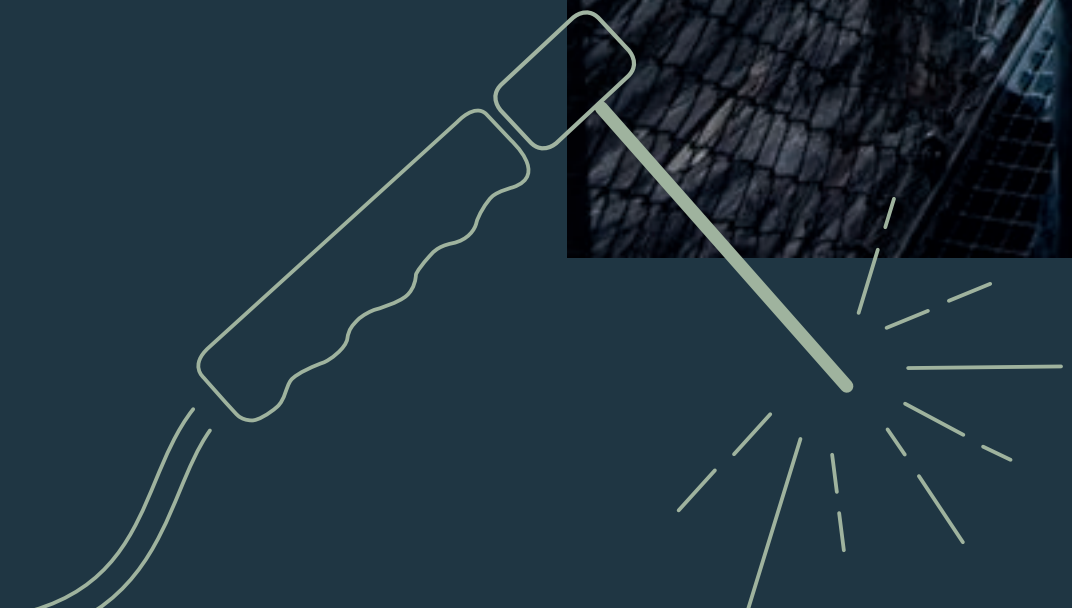
The MMA

Welding functions



Anti-Stick function prevents sticking of the electrode

If a short circuit occurs (sticking of the electrode during electrode welding), the welding process is interrupted after 1.5 seconds.This prevents electrode burn-out and/or serious weld seam faults.



Very good ignition behavior

– Reduced sticking
– Stable arc

Arc-force dynamic prevents sticking with low currents

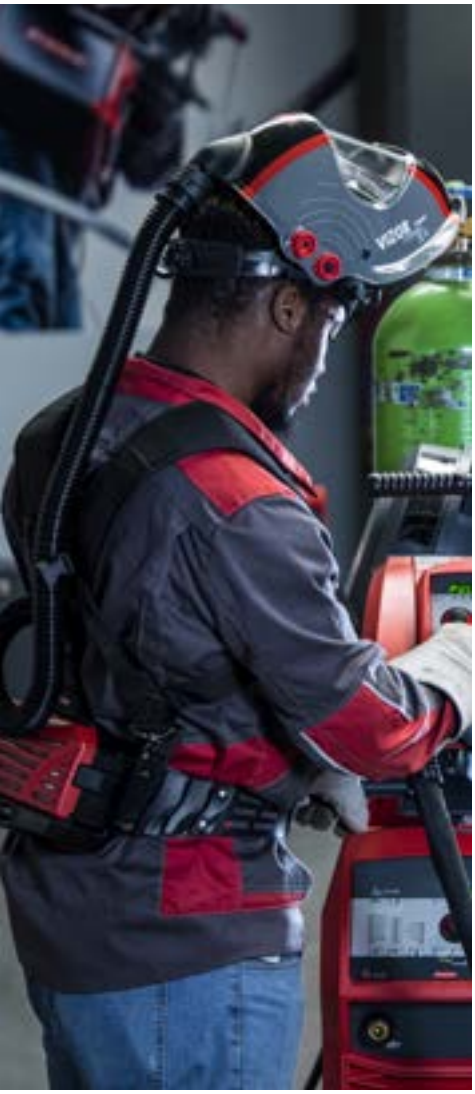
If basic electrodes are welded with coarse droplet material transfer at a low current (underloaded), there is a risk of sticking. To rule this out, more current is supplied for fractions of a second just before sticking. The electrode burns free, preventing sticking.

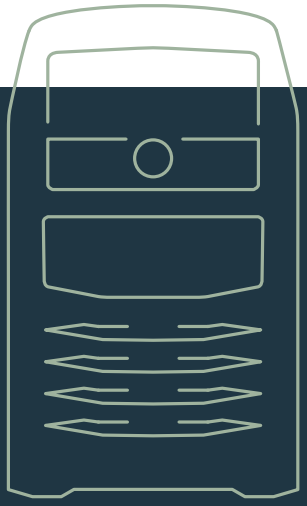
Hot Start function when igniting the arc

The current is increased for a fraction of a second during ignition to make the electrode easier to ignite and to reach the desired penetration earlier.

Functions

for ease of operation





Corrections during welding

The arc length correction and arc-force dynamic welding parameters can be used to optimize the welding result.

Arc length correction

to change the arc characteristic.

Up to **5** Easy Jobs accessible

Pulse correction

for correcting the pulse energy of pulsed arcs.

Wire threading made easy

The welding wire is fed automatically through the hosepack and welding torch at the touch of a button without having to open the feed rollers. None of the shielding gas escapes.

Easy Jobs view welding parameters quickly and easily

To set up repetitive welding tasks quickly and easily.

Gas test function

If it has not been used for a while, the hosepack can be flushed with shielding gas by pressing the gas test button. The protective gas shield will then already be in place when the arc ignites.

Control panel lock

Entering a particular button combination locks the TransSteel control panel.

Arc-force dynamic

for influencing the short-circuiting dynamic at the instant of droplet transfer.

Welding data

Documentation

Welding data documentation is essential, particularly in steel construction. Load-bearing steel structures, mass-produced products or sensitive parts often have to be traceable down to the final welding parameters. The Easy Documentation option enables TransSteel* to record welding data extremely easily.

Easy documentation recording of welding parameters

Easy Documentation records the following welding parameters:

– Power source ID
– Firmware version
– Serial number
– Process (Manual, Standard, Pulse, TIG, MMA)
– Current / voltage / wire speed in the main process phase, and much more...

TIG Multi-connector additional functions for multiprocess

The TransSteel is a genuine multiprocess power source, so also offers a connection for TIG welding torches with additional functions – the TIG Multi Connector (TMC). This enables Up/Down welding torches to be used for TIG welding as well.

* Standard and Up/Down welding torches.

Sustainable welding

One device - all manual welding applications

Combining MIG/MAG, TIG, and electrode welding in one device enables us to consistently reduce our resource usage by eliminating the need to purchase multiple power sources. Multiprocess power sources save space and weight – and not only during transport. Last but not least, fewer resources are required thanks to the long service life of our devices – as evidenced by the consumption of components and spare parts.

USB thumb drive export function

A USB thumb drive can be connected to the rear of the device (the stick is included as part of the scope of supply with the Easy Documentation option). The drive can then be used to export a CSV file containing welding data.

FSC Fronius System Connector

The Fronius System Connector (FSC) is the central connector for all media and enables a variety of different welding torches to be connected.

MultiLock the patented interface

The patented MultiLock interface allows you to configure the MIG/MAG welding torch* according to the task in hand. The wide choice of torch bodies in terms of their lengths and angles enables even difficult to access parts to be welded without any problem. In case of doubt, the best alternative is a flexible torch body.

Efficiency

The TransSteel series has an efficiency level of at least 85% across the range, which means that most of the power taken from the grid is converted without any loss into energy for the arc.

Inverter technology

The inverter technology lowers the power consumption while generating the same output power, consequently reducing energy costs.

Technical data

	TransSteel 2200C MV			TransSteel 2700C	TransSteel 2700C MV			TransSteel 3000 C Pulse	TransSteel 3500C
Mains voltage -20 / +15%	230 V	120 V	120 V	380 – 460 V	1 x 240 V	1 x 230 V	3 x 200 – 230 / 380 – 460 V	3 x 380 / 400 V. 3 x 460 V	380 – 460 V
Mains fuse protection (slow-blow)	16 A	20 A	15 A	16 A	30 A (US)	16 A (EU)	25 A / 16 A	35 A	35 A
Mains tolerance	-20/+15			-10/+15%	-10/+15%			-10/+15%	-10/+15%
Maximum primary power	5.92 kVA	3.26 kVA	2.35 kVA	8.66 kVA	6.75 kVA	5.10 kVA	8.66 kVA	11.8 kVA	12.3 kVA
Welding current range									
MIG/MAG	10 – 210 A	10 – 135 A	10 – 105 A	10 – 270 A	10 – 220 A	10 – 180 A	10 – 270 A	10 – 300 A	10 – 350 A
MMA	10 – 180 A	10 – 110 A	10 – 90 A	10 – 270 A	10 – 180 A	10 – 150 A	10 – 270 A	10 – 300 A	10 – 350 A
TIG	10 – 230 A	10 – 160 A	10 – 135 A	10 – 270 A	10 – 260 A	10 – 220 A	10 – 270 A	10 – 300 A	10 – 350 A
Welding current									
MIG/MAG									
10min/40°C (104°F) 30% ED	210 A	135 A	105 A	270 A	220 A (40%)	180 A (40%)	270 A	300 A (40%)	350 A (40%)
10min/40°C (104°F) 100% ED	150 A	105 A	80 A	170 A	170 A	145 A	170 A (@230V) 185 A (@>380V)	240 A	250 A
MMA									
10min/40°C (104°F) 35% ED	180 A	110 A	90 A	270 A (30%)	180 A (40%)	150 A (40%)	270 A (30%)	300 A (40%)	350 A (40%)
10min/40°C (104°F) 100% ED	130 A	90 A	70 A	170 A	140 A	130 A	170 A	240 A	250 A
TIG									
10min/40°C (104°F) 35% ED	230 A	160 A	135 A	270 A	260 A	220 A	270 A	300 A (40%)	350 A (40%)
10min/40°C (104°F) 100% ED	170 A	130 A	105 A	170 A	180 A	170 A	185 A (@230V) 195 A (@380V)	240 A	250 A
Open circuit voltage	90 V			85 V	85 V			59 V	60 V
Output voltage range									
MIG/MAG	14.5 – 24.5 V			14.5 – 27.5 V	14.5 – 18.8 V	14.5 – 23.0 V	14.5 – 27.5 V	14.5 – 38.5 V	14.5 – 31.5 V
MMA	20.4 – 27.2 V			20.4 – 30.8 V	20.4 – 27.2 V	20.4 – 26.0 V	20.4 – 30.8 V	20.4 – 32.0 V	20.4 – 34.0 V
TIG	10.4 – 19.2 V			10.4 – 20.8 V	10.4 – 20.4 V	10.4 – 18.8 V	10.4 – 20.8 V	10.4 – 22.0 V	10.4 – 24.0 V
Degree of protection	IP 23			IP 23	IP 23			IP 23	IP 23
Dimensions l x b x h	560 x 215 x 370 mm / 22.1 x 8.5 x 15 in			687 x 276 x 445 mm / 27.1 x 10.9 x 17.5 in	687 x 276 x 445 mm / 27.1 x 10.9 x 17.5 in			747 x 300 x 497 mm / 29.4 x 11.8 x 19.6 in	747 x 300 x 497 mm / 29.4 x 11.8 x 19.6 in
Weight	15.2 kg (33.5 lb)			30 kg (66.1 lb)	31 kg (68.3 lb)			36 kg (79.4 lb)	36 kg (79.4 lb)

Extend your warranty

Register your power source

to extend your warranty
https://www.fronius.com/pw/product-registration

3 Years Full Warranty

For more information

about TransSteel, visit
https://www.fronius.com/transsteel

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