



Trans Steel

3500

4000 Pulse

5000

5000 Pulse

Fast production speed and
broad range of applications

Infinite applications
to unleash your
welding potential



Steel Transfer
Technology



Pulse
Technology

Unlimited applications

With nearly 170 optimized characteristics, the TransSteel series features the characteristics demanded by the heavy-duty steel construction sector.

Yet the power source remains versatile: The TransSteel versions with the Pulse function make child's play of applications involving aluminum and stainless steel. SMEs can benefit from this variety of materials, as just one device is all they need to cover a wide range of applications. The underlying philosophy – stay on top of things. The function spectrum of the TransSteel has therefore been deliberately reduced to the essentials in all areas according to the motto – as much as necessary, with the best possible overview and ease of handling.



TransSteel - the advantages for you



40% duty cycle

Four minutes of continuous welding at maximum output power, in other words, one minute more of productive output compared with the average in this power range.



168 characteristics

- Steel, CrNi, AlMg, AlSi, Metal Cored, Rutil FCW, Basic FCW, Self-shielded
- 0.8 – 1.6mm 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
3500



TransSteel
4000 Pulse



TransSteel
5000



TransSteel
5000 Pulse



Functions	TransSteel 3500	TransSteel 4000 Pulse	TransSteel 5000	TransSteel 5000 Pulse
Pulse		✓		✓
SynchroPulse		✓		✓
Data documentation	✓	✓	✓	✓
Mains operation	3-phase	3-phase	3-phase	3-phase
Cooling	Water-cooled / gas-cooled	Water-cooled / gas-cooled	Water-cooled / gas-cooled	Water-cooled / gas-cooled
Wire speed	4R	4R	4R	4R
Easy Jobs	5	5	5	5



Control panel lock

Entering a particular button combination locks the TransSteel control panel, making unintentional modifications to the welding parameters impossible. An optional keylock switch is also available for all the control panels in the TransSteel series (with the exception of TransSteel 2200C and 2700C).

Easy Jobs

To run repetitive welding tasks quickly and easily, five sets of welding parameters can be saved – these are known as EasyJobs. The required welding parameters can then be accessed at the touch of a button.



The MIG/MAG

welding functions



Pulse welding controlled and fast

The new TransSteel 4000 Pulse and TransSteel 5000 Pulse mark the arrival of the pulsed arc in the TransSteel series. Controlled welding in the intermediate arc range together with optimum weldability when working with aluminum are now part of the basic package.

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 4000 and 5000 Pulse.



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.

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.



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.



Corrections during welding

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

Pulse correction

For correcting the pulse energy of pulsed arcs

- lower droplet detachment force
- neutral droplet detachment force
- higher droplet detachment force

Arc-force dynamic

For influencing the short-circuiting dynamic at the instant of droplet transfer

- hard, stable arc
- neutral arc
- soft, low-spatter arc

Arc length correction

To change the arc characteristic

- shorter arc, reduced welding voltage
- neutral arc
- longer arc, increased welding voltage



Sustainable welding

One device - all manual MIG/MAG welding applications

Future-proof thanks to its reliability: that sums up the TransSteel Synergic both during welding and throughout its total life cycle. With almost 170 optimized characteristics, it enables countless MIG/MAG applications with different materials. It is also very long-lasting and repairable. It saves lots of resources – including in the form of components and spare parts. TransSteel Synergic: the sustainable investment without compromise.

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.



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 ...



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.



Welding torch with additional functions

Configurable



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.

*Standard and Up/Down welding torches.



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.



Technical data

	TransSteel 3500	TransSteel 3500 MV	TransSteel 4000 Pulse	TransSteel 4000 Pulse MV	TransSteel 5000/5000 Pulse	TransSteel 5000/5000 Pulse MV
Mains voltage	3 x 380 V - 460 V	3 x 200 V 400 V	3 x 380 V - 460 V	3 x 200 V 230 V 400 V 460 V	3 x 380 V	3 x 200 V 230 V 400 V 460 V
Mains fuse protection (slow-blow)	35 A	35 A	35 A	35 A	35 A	63 A 35 A
Mains tolerance	-10 / +15%	-10 / +15%	-10 / +15%	-10 / +15%	-10 / +15%	-10 / +15%
Max. apparent power	15.67 kVA	13.18 kVA 12.96 kVA	20.42 kVA	16.22 kVA 15.96 kVA	28.36 kVA	23.08 kVA 22.49 kVA
Welding current range						
MIG/MAG	10 – 350 A	10 – 350 A	10 – 400 A	10 – 400 A	10 – 500 A	10 – 500 A
Welding current						
MIG/MAG						
10min/40°C (104°F) 40% ED	350 A	350 A	400 A	400 A	500 A	500 A
10min/40°C (104°F) 100% ED	250 A	250 A	340 A	340 A	360 A	360 A
Open circuit voltage	60 V	50 V	65 V	57 V	65 V	57 V
Output voltage range						
MIG/MAG	14.5 – 31.5 V	14.5 – 31.5 V	14.5 – 34 V	14.5 – 34 V	14.3 – 39 V	14.3 – 39 V
Degree of protection	IP 23	IP 23	IP 23	IP 23	IP 23	IP 23
Dimensions l x w x h	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	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	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	29 kg (63.5 lb)	37.3 kg (82 lb)	32.5 kg (71.65 lb)	37.3 kg (82 lb)	32.5 kg (71.65 lb)	43.6 kg (96.1 lb)

Extend your warranty

Register your power source

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



For more information

about TransSteel, visit
<https://www.fronius.com/TransSteel>

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