

TRANSSTEL / 3500 / 4000 PULSE^{*} / 5000 / 5000 PULSE^{*}

FAST PRODUCTION SPEED AND BROAD RANGE OF APPLICATIONS





HIGH-POWER WELDING AND A BROAD RANGE OF APPLICATIONS.

WHETHER CONTAINER CONSTRUCTION, BRIDGE CONTRUCTION OR YELLOW GOODS: 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.



/ 2

What's your welding challenge?

CUSTOMER BENEFITS



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.

/ Steel, CrNi, AlMg, AlSi, Metal Cored, Rutil FCW, Basic FCW, Self-shielded
/ 0.8 - 1.6mm wire diameter
/ Eight different gas mixtures

/ 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.

/ The Pulse function of the TransSteel 4000 and 5000 Pulse permits faster welding speeds on thicker materials. The pulsed arc also reduces the amount of rework, as less welding spatter is generated.

/* Maximum number of characteristics (TransSteel 5000 Pulse), will vary depending on the version.



ECONOMICAL AND SUSTAINABLE

INVERTER TECHNOLOGY

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

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.

COOLING

Fronius Cooling Liquid FCL 10/20. The composition of the Fronius coolant makes it especially sustainable and increases the service life of the system. The coolant is non-flammable, non-irritating and requires no special labeling.

THE TRANSSTEEL SERIES

-An-

Fronius



FUNCTIONS	TransSteel 3500	TransSteel 4000 PULSE	TransSteel 5000	TransSteel 5000 PULSE
Pulse		\heartsuit		\odot
SynchroPulse		\bigotimes		\odot
Data documentation	\bigotimes	\bigotimes	\bigotimes	Ś
Mains operation	3-phase	3-phase	3-phase	3-phase
Cooling	Water-cooled	Water-cooled	Water-cooled	3-phase Water-cooled
Cooling	Water-cooled	Water-cooled	Water-cooled	Water-cooled

VERSATILE: FOR A BROAD RANGE OF APPLICATIONS!

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.

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 2200 & 2700 C).

THE MIG/MAG WELDING FUNCTIONS



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.

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 – out only on the TransSteel 4000 and 5000 Pulse.





SPOT AND STITCH WELDING WITH NO 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.

rd and concentrated arc, resulting in peeds and deep penetration.

CORRECTION 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

- ⊖ shorter arc, reduced welding voltage
- neutral arc
- \oplus longer arc, increased welding voltage

ARC-FORCE DYNAMI

FOR INFLUENCING THE SHORT-CIRCUITING DYNAMIC AT THE INSTANT OF DROPLET TRANSFER

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

PULSE CORRECTIO

FOR CORRECTING THE PULSE ENERGY OF PULSED ARCS

- O lower droplet detachment force
- O neutral droplet detachment force
- + higher droplet detachment force
- PCS (Pulse Controlled Spray Arc) CHARACTERISTICS facilitate a combination of intermediate and spray arcs
 the result is deep penetration with minimal spattering.

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.



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.

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 Power from instantaneous values "IP" (Instantaneous Power) - energy / time (in the main process phase) Energy from instantaneous values "IE" (Instantaneous Energy) over the entire welding operation Motor current (in the main process phase) Time stamp hh:mm:ss when current starts to flow
- Counter
- Welding duration
- Error no. when welding is terminated
- Wire speed (metric and imperial)
- Characteristic number
- Operating mode (2T, S2T, 4T, S4T, spot welding, stitch welding, SynchroPulse)
- Signature for each weld seam number
- Template for .csv file
- Easy Job number

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.

15°

3⁰°

MULTILOCK: MORE THAN 30 VERSIONS



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.

OPTIONS AND ACCESSORIES

VIZO

TU CAR 4 TROLLEY BASIC, STANDARD & PRO

Suitable for all split devices in the TransSteel series.

> AVAILABLE IN THREE VERSIONS

Franius

COOLING UNIT FK 5000

The cooling unit is filled as standard with FCL10 coolant and is equipped with a coolant filter (and a flow temperature sensor as an option).





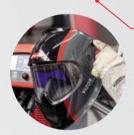


TOOL BOX HANDY TOOL BOX

Suitable for all split devices in the TransSteel series.







VIZOR CONNECT

The three Bluetooth®-enabled Fronius power sources can be used in combination with the Vizor Connect.

Integrated welding systems are designed for maximum efficiency. The final link in the system is the Bluetooth[®] helmet.



VIZOR AIR/3X

The reliable fan filter unit filters out up to 99.8% of hazardous particles from the ambient air in the vicinity of the welder.



A 4-roller wirefeeder with optional control unit for pulse or standard applications that is perfectly adapted to the system

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 I 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)



FOR MORE INFORMATION

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



REGISTER YOUR POWER SOURCE to extend your warranty

https://www.fronius.com/pw/product-registration

/ Perfect Welding / Solar Energy / Perfect Charging

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

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

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

Fronius Canada Ltd.

2875 Argentia Road, Units 4,5 & 6 Mississauga, ON L5N 8G6 Canada Telephone +1 905 288-2100 Fax +1 905 288-2101 sales.canada@fronius.com www.fronius.ca Fronius USA LLC 6797 Fronius Drive Portage, IN 46368 USA Telephone +1 877 FRONIUS sales.usa@fronius.com www.fronius-usa.com Fronius UK Limited Maidstone Road, Kingston Milton Keynes, MK10 0BD United Kingdom Telephone +44 1908 512 300 Fax +44 1908 512 329 info-uk@fronius.com www.fronius.co.uk Fronius International GmbH Froniusplatz 1 4600 Wels Austria Telephone +43 7242 241-0 Fax +43 7242 241-953940 sales@fronius.com www.fronius.com