



TransSteel 3500 / 5000

MIG/MAG welding system

Digital
Revolution®

Steel Transfer
Technology®



PERFECT WELDING

The rugged partner for structural-steel fabricators

GENERAL REMARKS

Always on the safe side

In structural-steel fabrication, reliability is the name of the game. This, in turn, necessitates sturdy, rugged tools. The same is true of steel welding. TransSteel has been created with precisely this in mind: a rugged and reliable partner that stands out for its intelligent appliance design and for being extremely easy to operate. Digitally controlled and primed with expert knowledge, the TransSteel welding system is ready, willing and able to deliver superlative steel welding, and guarantees 100 % system performance!

PROCESS

Digital Welding Technology

With its digital control of the welding process, TransSteel stands for 100 % reproducible welding results. As the market leader in digital welding power sources, Fronius is a byword for an exceptionally stable steel-welding arc.

What's more, the fact that welding parameters can be set and saved so easily and exactly ensures the very greatest precision in the welding process.

TransSteel is "future-proof" and flexible: the digital welding system has a modular design concept and is both networkable and addressable.

Built-in Fronius know-how for steel welding

Fronius takes its "Perfect Welding" claim very seriously. "Steel Transfer Technology" is the name of a knowledge package that has been specially put together for the steel market: For it, experts developed tailored welding characteristics that deliver e.g. precision ignition or perfect burn-off behaviour.

The machines come with a lot of device-related know-how too: like the hosepack connector that is integrated directly on the motor plate in the wirefeeder. The welding wire is guided in a consistent, system-optimised way, from the wirefeeder all the way through to the contacting zone. The result is highly stable wirefeed and less attrition of wearing parts.





Robust and reliable

Very easy to operate

Perfect steel welding

Built-in expert knowledge



WELDING PROPERTIES

A system that always gives you the optimum

Perfect welding properties are the product of complex interrelationships between ignition, arc and burn-off behaviour. Steel Transfer Technology means that the TransSteel comes with Fronius expert know-how, for every steel application.

Steel Root: This characteristic-setting stands for a soft and stable dip-transfer arc that delivers a viscous, readily modulatable weld-pool. Perfect, straightforward root welding with no weld-pool backing support, coupled with excellent gap bridgeability – these are arguments that will convince every welder.

Steel Dynamic: This is the name we've given to the characteristic for a concentrated and versatile arc. Deep, narrow penetration and increased welding speed are the result.

Steel: This universal characteristic is ideal for making quick and easy welding settings. It can be used to cover a large part of the welding-range for steel.

Among the other attributes of Steel Transfer Technology are the fast, clean start and exactly defined end that it gives to each weld. This improves the ignition properties for the next weld.



UTILISATION

Powerful and robust

In the structural steelwork field more than anywhere, the TransSteel has to cope with some extreme operating environments. Rugged yet functional design is what makes this “steely character” stand apart. The welding system is available in gas- and water-cooled versions in the 350 A and 500 A power classes, for both manual and robot-controlled applications.

Greater mobility with the wirefeeder

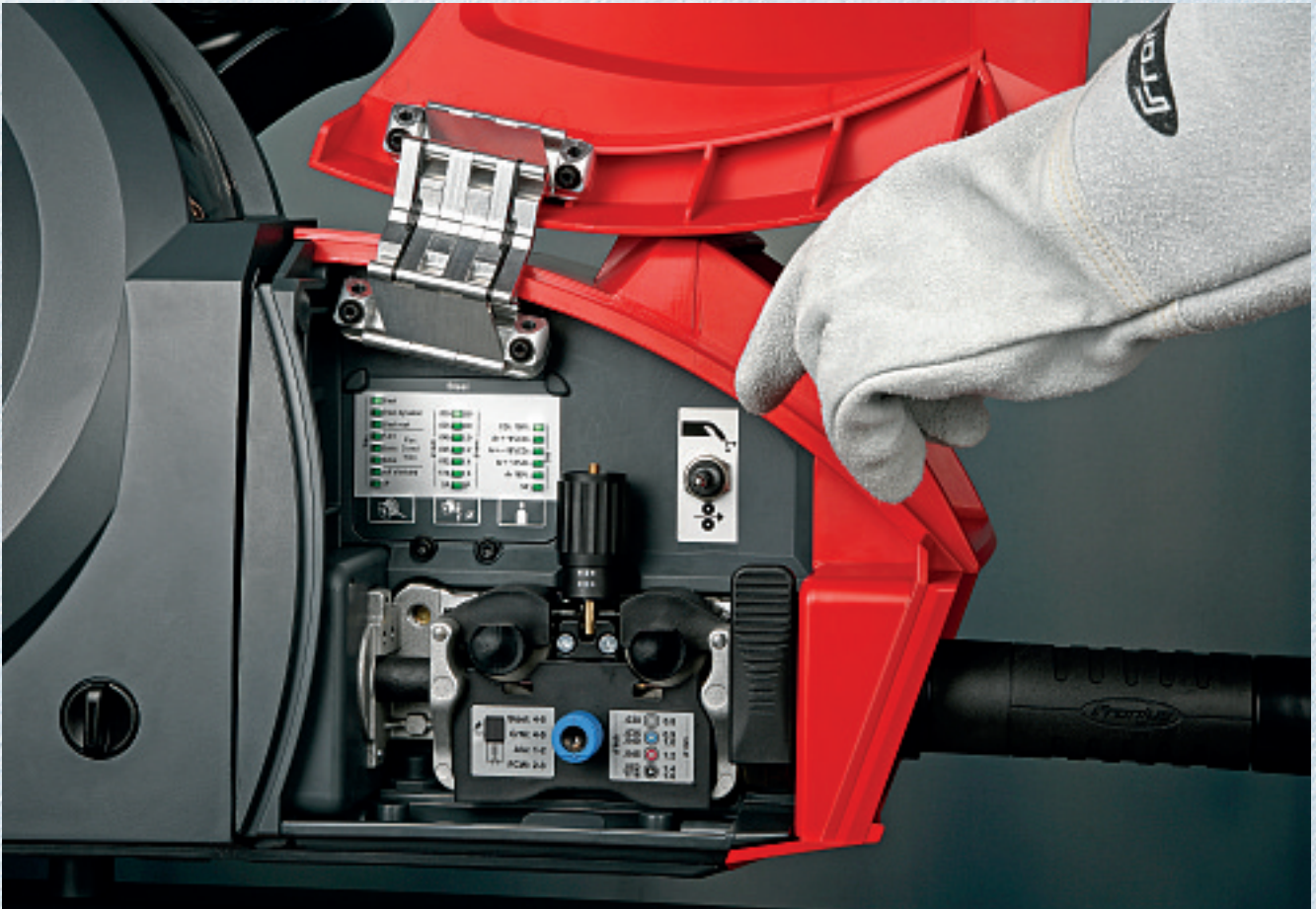
The wirefeeder is compact, light and thus portable. This makes for even greater flexibility in the field, and its design helps prevent it getting caught on weldments. The operator panel and all displays are integrated directly on the wirefeeder. This makes it possible to operate the welding system directly from the welding workplace. Being set at an angle, the slanted display is easier to read off, from all positions.

More power to shipbuilders’ elbows, with TransSteel Yard

- Integral gas-flow regulator on the wirefeeder, for controlling the gas-flow rate directly from the wirefeeder
- Welding-current outlet on the wirefeeder for MMA welding
- “Sleigh” (dragging base) on one side of the wirefeeder comes as standard, giving the unit unbeatable protection
- Special welding programs to address the requirements made in shipbuilding

System and handling

TransSteel stands for extremely easy handling – for in steel welding, easy-to-use tools with intelligent functions are what is needed. Optimally matching system components ensure 100 % system performance.



Comfort Wire means autonomous feeder-inching. All the welder need do is hold out the wire to the machine and it will be inched into the wirefeeder unaided. The time-consuming business of opening up the wirefeeder and the feed rollers is no longer necessary. This results in faultless feeder-inching.

Small, lightweight, all-in-one motor plate: The hosepack is anchored directly to the motor plate, ensuring both

stable wirefeed and thus a stable welding process. Longer service lives for the inner liner, contact tube and feed rollers are a welcome side-effect of this.

Improved handling of the feed rollers: These are colour-coded by diameter, making them quick and easy to recognise. The rollers are changed simply by opening the feedroller device.

Comfort Wire

Autonomous feeder-inching, with no need to open the wirefeeder – saves time

Individual adjustment-guides

Interchangeable adjustment-guide templates for different material thicknesses make manual operation much easier

Fronius System Connector

- central connection-point for all media
- hosepack can be locked simply and safely, with no tools, to ensure defined current transfer

Fill-level window

Makes it easy to keep an eye on the coolant level



EasyJob

For storing the power, arc-force dynamic and correction values with one push of the button

Wirefeeder viewing panel

For seeing at a glance how much wire is left

Tool-holder

Individually extendable, so that the tools you need are always on board

FastSnap

Twist and pull: that's all it takes to safely change and lock the gas nozzle

Functional industrial design

- protected control panel
- easy to read off, even from a lying position
- rugged and attractively styled



Easy, operator-friendly user interface for quick operation with no need for time-consuming introductory training.



The System Connector is the “spinal cord” of the TransSteel. All media are routed through this central connection-point. A fastening lever locks the hosepack in place quickly, accurately and without needing any tools.



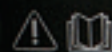
The ergonomically shaped torch rests comfortably in the welder's hand. The ball-and-socket joint provides effective strain relief, and the soft-touch grip pads on the handle-shell prevent the torch slipping out of the user's hand. The Up/Down option lets the welder regulate the amperage right from the welding workplace.

Fronius

A 24

10 · 13
7
4
1
m/min

2T
4T



ECONOMY

Long life comes built-in

- Rugged appliance concept for greater durability of all components
- Dust filter protects the inner workings of the power source from soiling
- Water filter cleans the coolant, prolonging the service life of the whole system
- The use of high-strength plastic for the housing makes the wirefeeder break-proof and gives it complete, all-round insulation
- Thermostat-controlled fan runs only when needed, which lessens dirt accumulation inside the unit

SAFETY

Designed for robust deployment

- Slanted connector plate protects the connection-points on the power source from damage
- The hosepack connections are concealed by the "sleigh" on one side of the wirefeeder
- Shielded filler neck on the cooling unit, to protect against mechanical damage
- Temperature sensor protects the welding system against overheating
- Earth leakage monitoring prevents welding current from flowing via the earthing (grounding) lead and destroying the PE conductor system
- International test certificates for worldwide deployment (S Mark, CE Mark, CSA, CCC)

TECHNICAL DATA

	TSt 3500	TSt 5000
Mains voltage +/- 10 %	380 V / 400 V / 460 V	380 V / 400 V / 460 V
Welding amperage range	10 - 350 A	10 - 500 A
Welding current at:		
10 min/40°C (104°F) 40 % d.c.	350 A	500 A
10 min/40°C (104°F) 100 % d.c.	250 A	360 A
Open-circuit voltage	60 V	65 V
Working voltage	15.5 - 31.5 V	14.5 - 39 V
Degree of protection	IP 23	IP 23
Dimensions L x W x H mm	747 x 300 x 497	747 x 300 x 497
Dimensions L x W x H inches	29.4 x 11.8 x 19.6	29.4 x 11.8 x 19.6
Weight	26.5 kg (58.4 lbs)	30.15 kg (66.5 lbs)

CE 



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