



SHIFTING THE LIMITS

# TPS STEEL

/ MIG/MAG welding system



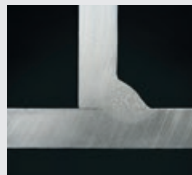
/ The TPS Steel comes with special characteristics for the steel user-segment that can be adjusted quickly and easily via the control panel. This fully digitised welding system makes for superlative welding properties, in every respect, and for results that are replicable any number of times. In either standard or pulsed-arc welding, the TPS Steel is a dependable partner in both manual and automated applications.



## BUILT-IN FRONIUS KNOW-HOW FOR STEEL APPLICATIONS

### UNIVERSAL

/ Time-saving, familiar Fronius settings for standard steel-welding applications, with a universal arc.



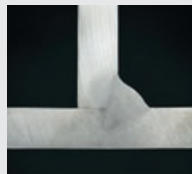
### ROOT

/ Improved short-circuiting behaviour and a powerful arc deliver a viscous, readily modulatable weld-pool, and allow perfect root passes with no need for weld-pool backing support. ROOT stands for superior gap-bridging ability.



### DYNAMIC

/ Short, concentrated arc with a dynamic current reaction in the short circuit, for deep, narrow penetration and higher welding speeds.



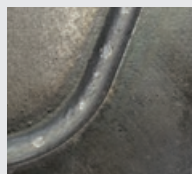
### MAGNETIC DEFLECTION

/ Characteristic with improved properties against arc-breaks and deflection caused by extraneous magnetic fields; especially for automated applications.



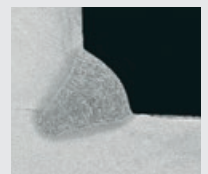
### SEAM TRACKING

/ Characteristic with modified adjustment-response in automated applications with seam-searching and seam-tracking systems. The settings are quick and easy to make, saving a great deal of time.



### PCS – PULSE-CONTROLLED SPRAY ARC

/ Direct transition from a concentrated pulsed-arc to a short spray arc – bypassing the globular arc – for deep, narrow penetration with no risk of spattering when changing over jobs and in current-downslope.





/ The control panel of the TPS Steel lets users quickly and easily choose specific welding characteristics for steel applications, in the 320, 400 and 500 A power classes.

## TECHNICAL DATA

	TPS 3200	TPS 4000	TPS 5000
Mains voltage +/- 15 %	3 x 400 V	3 x 400 V	3 x 400 V
Mains frequency	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Mains fuse protection	35 A slow-blow	35 A slow-blow	35 A slow-blow
Primary continuous current 100 % duty cycle	12.6 - 16.7 A	26 A	18 - 29.5 A
Primary continuous power	8.7 - 11.5 kVA	12.2 kVA	13.1 kVA
Cos Phi	0.99	0.99	0.99
Efficiency	91 %	88 %	90 %
Welding amperage range MIG/MAG MMA / electrode TIG	3 - 320 A 10 - 320 A 3 - 320 A	3 - 400 A 10 - 400 A 3 - 400 A	3 - 500 A 10 - 500 A 3 - 500 A
Welding current at			
10 min / 25°C (77° F)	320 A 89 % d.c.	400 A 75 % d.c.	500 A 75 % d.c.
10 min / 25°C (77° F)	304 A 100 % d.c.	365 A 100 % d.c.	450 A 100 % d.c.
Welding current at			
10 min / 40°C (104° F)	320 A 40 % d.c.	400 A 50 % d.c.	500 A 40 % d.c.
10 min / 40°C (104° F)	260 A 60 % d.c.	365 A 60 % d.c.	450 A 60 % d.c.
10 min / 40°C (104° F)	220 A 100 % d.c.	320 A 100 % d.c.	360 A 100 % d.c.
Welding voltage MIG/MAG MMA / electrode TIG	14.2 - 30.0 V 20.4 - 32.8 V 10.1 - 22.8 V	14.2 - 34.0 V 20.4 - 36.0 V 10.1 - 26.0 V	14.2 - 39.0 V 20.4 - 40.0 V 10.1 - 30.0 V
Max. welding voltage	52.1 V	48 V	49.2 V
Open-circuit voltage	65 V	70 V	70 V
Dimensions L x W x H	626 x 287 x 477 mm 24.65 x 11.30 x 18.78 in.	626 x 287 x 477 mm 24.65 x 11.30 x 18.78 in.	626 x 287 x 477 mm 24.65 x 11.30 x 18.78 in.
Weight	34.6 kg 76.3 lb	35.2 kg 77.6 lb	35.6 kg 78.5 lb



/ Perfect Welding / Solar Energy / Perfect Charging

### WE HAVE THREE DIVISIONS AND ONE PASSION: SHIFTING THE LIMITS OF POSSIBILITY.

/ Whether welding technology, photovoltaics or battery charging technology – our goal is clearly defined: to be the innovation leader. With around 3,000 employees worldwide, we shift the limits of what's possible - our record of over 1,000 granted patents is testimony to this. While others progress step by step, we innovate in leaps and bounds. Just as we've always done. The responsible use of our resources forms the basis of our corporate policy.

Further information about all Fronius products and our global sales partners and representatives can be found at [www.fronius.com](http://www.fronius.com)

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