



TransTig 1600 / 1700

TIG/DC & Rod electrode



PERFECT WELDING



MAKES LIGHTER WORK OF TIG WELDING THAN EVER

GENERAL POINTS

8.4 KG - AN ALL-TIME RECORD

There's never been anything like it - as even the most hardened welding professional would have to agree. The 100 kHz inverter technology makes the TransTig 1600/1700 light in weight, but its integral microprocessor makes it a "heavyweight" when it comes to power. The machine can do all its predecessors could - it just makes lighter work of it.

It's as easy to use as ever - you'll be familiar with the user interface from the Power Plus series. This product family now welcomes a new member - one that is small, light and power-packed.

UTILISATION

ALWAYS OUT AND ABOUT

The TransTig 1600/1700 is so light that wherever you need to go, it can go with you. On any construction site, for site-erection work or repair jobs, it's a popular little machine that's taken very seriously indeed. Give it a 230 V mains socket and it will weld all unalloyed, low-alloy and high-alloy steels and non-ferrous metals - just like a "full-size" machine. This makes it ideal for use in the food-processing, chemical and plant construction industries.

What is more, the TransTig 1700 is also suitable for tackling challenging MMA welding assignments.



HANDLING



POWER SOURCE MANAGEMENT

As you know, communication between the user and the machine starts at the user interface. And the dialogue has to be as simple as possible here. This is why we reduced the number of separate controls to a very few task boxes, all of them systematically grouped.

This has a great many advantages for you:

The gas pre and post-flow times, for example. The microprocessor takes care of exact dispensing rates for you, while of course allowing for individual requirements.

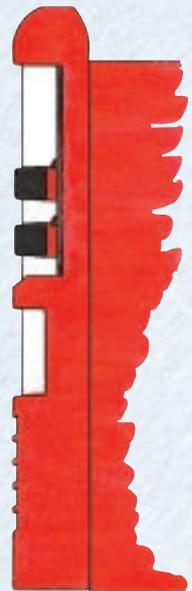
Then there is the exact replicability of welding results. The "Hold" function automatically stores the actual values at the end of welding, so that you can easily retrieve them whenever you wish. That's what we mean by "welding management". For us, much more than an empty slogan.

FUNCTIONAL DESIGN

The TransTig 1600/1700 is more than just a pretty face. It has been rigorously designed to meet certain clearly defined criteria. Its 8.5 kg weight, for instance. That surely speaks for itself.

Or the controls. The front of the housing is shaped to protect them completely. No matter how rough things get on the site - the power source is pretty well unshakeable. Its impact-proof plastic shell protects it in every situation.

Then there are the carrying straps, the integral cable holder, the rewind function - all features designed to make your life that much easier.



A GREAT ECONOMISER - EXCEPT WHEN IT COMES TO SAFETY



ECONOMY

CUTTING COSTS

The TransTig 1600's sophisticated inverter technology gives you 90% efficiency. You'll soon see what this means in practice - less electricity in, and more power out. Using only an ordinary 230 V socket outlet. The microprocessor-controlled power-source management also cuts your costs, by improving efficiency and automating gas flows so as to reduce your gas consumption.

SAFETY

SAFETY FIRST



With Fronius products, series safety is something you can take for granted. The TransTig 1600/1700 underwent some pretty stringent testing. And passed - with flying colours. All our machines bear the CE Mark, indicating that they have been tested to - and comply with - the EN 60 974-1 and EN 50 199 Standards.

Also included: IP 23 for protection against water and foreign bodies, and the S Mark. Both of them a "must" for the construction site. One final remark: in case your power source attracts admirers of the long-fingered variety, rest easy! It's protected by a personal security code. As we said - safety first.

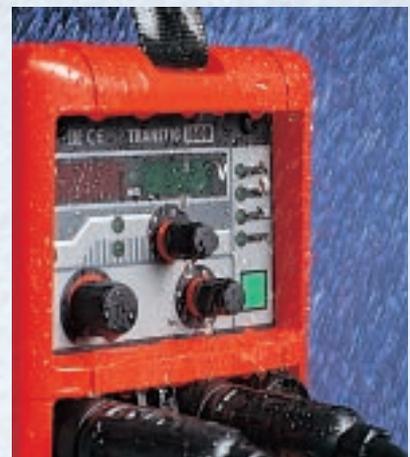
NOW STANDARD

This was a sensation even when it was just an option. Now it's standard - the remote-control connection. A standardised interface enables you to connect up with extensive programs. You can retrieve the welding current settings

directly from the welding workplace, or - optionally - perform spot welding and pulsed-arc welding. The up/down function also comes as standard. Use it to



regulate the welding current directly from your Fronius torch, and to lower it with the second torch button when you're doing manual pulsed-arc welding. (Fronius have this knack of always coming up with new surprises!)



A LIGHTWEIGHT WITH A STRONG CHARACTER

WELDING PROPERTIES

NEW ELECTRONIC HIGH FREQUENCY

We are permanently in touch with the world of practical welding - we couldn't keep on developing our products if we weren't! It's welding professionals like you who know what counts - and then tell us.

This is how we came to develop a new electronic high frequency for these power sources, specially for sensitive areas of industry that use a lot of electronics and monitoring systems.

The ignition repetition frequency (HFt) is adjustable and can be throttled from 100 impulses down to 2 impulse per second. This is a unique feature which makes these machines so flexible to use. You'll appreciate this superb ignition performance that the TransTig 1700 gives you when you're working with long hosepacks, too.



TOUCH AND NON-TOUCH IGNITION

The programmed ignition sequence makes for dependable non-touch TIG ignition (Fig. 1) that is "fine-tuned" to the electrode diameter.

(Fig.1)



(Fig.2)



If you require touch ignition (Fig. 2), the electronically controlled ignition sequence again ensures precise, dependable ignition.



ALL QUIET IN THE ARC

The arc starts at 2 A. Quite something. Then it can be boosted continuously to 160 A - burning quietly and steadily the whole time. The reason is the extremely high pulse frequency of 100 kHz, which ensures exceptionally low current ripple.

TECHNICAL DATA

		TT 1600	TT 1700
Mains voltage + 15 % / - 20 %		230 V	230 V
Mains fuse slow		16 A	16 A
Primary continuous current (100% d.c.)		14 A	15 A
Cos phi		0.99 (100 A)	0.99 (120 A)
Efficiency		90 % (50 A)	89 % (80 A)
Welding current range	TIG	2 - 160 A	2 - 170 A
	MMA	2 - 140 A	10 - 150 A
Welding current at	10 min/40°C	35 % d.c. –	170 A
	10 min/40°C	40 % d.c.	160 A –
	10 min/40°C	100 % d.c.	110 A 120 A
	10 min/25°C	100 % d.c.	130 A 150 A
Open-circuit voltage		45 V	92 V
Operating voltage	TIG	10.1 - 16.4 V	10.1 - 16.8 V
	MMA	20.1 - 25.6 V	20.1 - 25.6 V
Protection class		IP 23	IP 23
Type of cooling		AF	AF
Insulation category		B	B
Measurements LxWxH	mm	430/180/280	430/180/280
	Inch	16.94x7.09x11.03"	16.94x7.09x11.03"
Weight	kg	8.4	8.9
	lp	18.52	19.62



CHECKLIST

	TT 1600	TT 1700
Anti-stick function	●	●
Automatic gas post-flow (welding-current-dependent)	●	●
Switchover facility between touchdown and HF ignition	●	●
Energy-saving inverter technology	●	●
Modular upgrades and extensions	●	●
Remote-controllable	●	●
Automatic burn-back control	●	●
Generator-compatible	●	●
Microprocessor control	●	●
Security code	●	●
Thermostat-controlled fan	●	●
Carrying strap	●	●
Welding-current setting continuously adjustable from torch	●	●
Overtemperature protection	●	●
Adjustable parameters		
Downslope	●	●
Arc force	●	●
Crater-fill current	●	●
Gas pre-flow time	●	●
Hot Start	●	●
Welding power (continuous)	●	●
Start arc	●	●
Upslope	●	●
Display OFF		
Run-status	●	●
Operating mode	●	●
Error codes	●	●
"Hold" function	●	●
Mains voltage monitoring	●	●
Welding voltage (actual value)	●	●
Start arc / crater-fill current	●	●
Overtemperature	●	●
● standard		

ARTICLE NUMBERS

4,075,089 Power source TransTig 1600
4,075,115 Power source TransTig 1700

Recommended welding torch:

4,036,086 AL 16 gascooled/Up Down/4 m
43,0011,0009 Gas pressure regulator
43,0004,0478 Manual electrode cable 35 mm²/4 m
43,0004,0533 Earth cable 16 mm²/3 m

4,046,049 TR 50 MC Remote control pulsing unit
4,046,052 TR 51 MC Remote control spot-welding unit
4,046,050 TR 52 MC Remote control pedal unit
4,046,048 TP MC manual electrode remote control unit

43,0004,0459 Remote control cable 5 m
43,0004,0460 Remote control cable 10 m
43,0004,0509 Remote control cable 20 m



FRONIUS INTERNATIONAL GMBH
Buxbaumstrasse 2, P.O.Box 264, A 4602 Wels
Tel: +43 7242 241-0, Fax: +43 7242 241-394
E-Mail: sales@fronius.com

www.fronius.com