



TransPocket 4000 CEL / 5000 CEL

Rod electrode & TIG



PERFECT WELDING

There's no stopping the revolution now ...

GENERAL REMARKS

Digital multi-talents

The Digital Revolution is having far-reaching repercussions. Now it is being joined by two new machines that are digitised through and through, and that even have a multi-process capability: The TransPocket 4000 Cel and 5000 Cel. As their name implies, both these welding machines are completely cellulose-compatible, even in the vertical-down position. Once again, then, Fronius has reached its goal of outclassing conventional welding systems.

EFFICIENCY

Intelligence pays!

The new Fronius power sources are little economic miracles in their own right! Their digital intelligence gives them a multi-process capability, enabling them to be used with all types of electrodes and many different processes. Also, being completely digitised, they ensure superlative welding properties – meaning little or no spatter, and thus little or no post-weld machining. What's more, their inverter technology provides an unfailingly high 90 % efficiency. By delivering maximal performance from only minimal weight, these generator-compatible new machines are also ideal for use out in the field.

UTILISATION

Here, there & everywhere

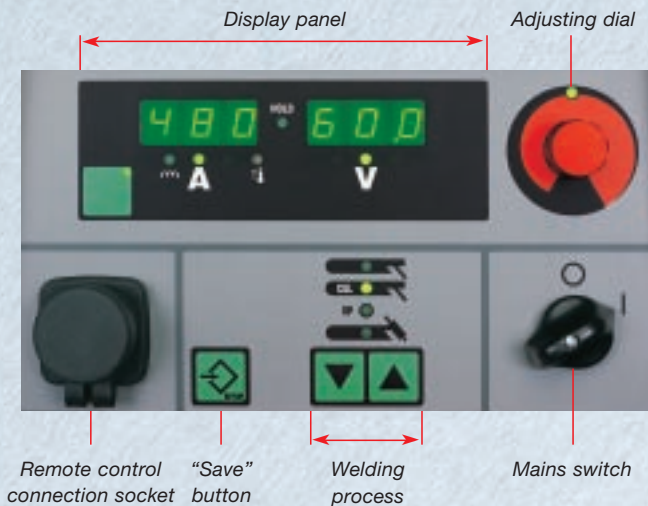
The two Cel machines are a breath of fresh air in today's welding landscape, and can be found in action just about anywhere. The reason is their convenient multiprocess capability. The TP 4000 Cel and 5000 Cel are suitable for all types of electrode: basic, rutile, cellulose; for the most common materials: steel, aluminium, CrNi; for the main processes: gouging, grooving, TIG welding. Main areas of application: construction sites, shipyards, workshops and pipeline construction.

WELDING PROPERTIES

Exemplary behaviour

Revolutionary elements have a special status in every society – they are kept under close observation, and their every movement is monitored. It's much the same with these new machines! Their “hard core” is their digital signal processor, or DSP for short. This is also the central component of the fully digitised Fronius MIG/MAG welding power sources, where it has already passed rigorous testing. The DSP controls the entire welding process via software, with the very highest precision. This leads to a unique level of weld-process reproducibility. In addition, the machines have an extremely high open-circuit voltage which makes even the most stubborn electrodes ignite without difficulty. A new aspect of the TP4000 Cel / 5000 Cel is its characteristic-curve matching: For every single electrode, an optimised process characteristic has been programmed in, complete with all the parameters; this characteristic can then simply be retrieved when needed. The result: Perfect welding.





HANDLING

An easy-going nature

Revolutionaries don't have to be difficult characters. They just have to have bright new ideas and propagate them among the masses. With the TP 4000 Cel / 5000 Cel, the bright ideas are gratifyingly simply packaged: clearly and ergonomically arranged operating panel, convenient adjusting dial for selecting the parameters, digital indication of welding current and voltage, 'hold' function for saving values shown in the display. Life is made even more comfortable for the user by a range of remote-control units that are specially tailored to these welding machines, e.g. the wireless r.c. unit TP 08.



What is more, the machines' Fronius inverter technology, with its high clock frequency, ensures a soft arc at all times, even with underloaded electrodes. There is next to no spattering, even when welding e.g. aluminium and cast metal with difficult-to-weld electrodes. Another new function is the "TIG Comfort Stop" in TIG welding: Now that TIG touchdown ignition works perfectly, without any tungsten inclusions, the next goal was to cure the arc of its annoying habit of breaking at the end of welding. This has been made possible by a really ingenious development: The crater-fill current is initiated by a defined movement of the torch, and the arc is switched off automatically. "Automatically" is also the magic word when it comes to the anti-stick device: If the electrode should ever "get stuck" on the workpiece, the welding machine cuts out straight away.

Superb results are also achieved when welding pipelines with Cel electrodes.

The optimised properties of the arc prevent the electrode from breaking or sticking. The result – a 100% homogeneous root.



SAFETY

Superlative safety status

The machines have all the safety features you'd expect of advanced welding machinery, and more besides: S/CE safety mark, degree of protection IP23, earth leakage detection, mains voltage monitoring, overtemperature protection, service codes, thermostat-controlled fan, robustly compact design, and suitability for in-the-field use.



For easy, safe transport (also by crane), there is the optional "Everywhere" trolley.

CHECKLIST

Anti-stick function	Remote-controllable	Indication of:	Adjustable parameters:
Touchdown ignition	Generator-compatible	- operating mode	- Welding current
Digital weld process control	"Hot-Start" function	- error codes	- Arc-force
Energy-saving inverter technology	Microprocessor control	- "hold" function	- Hot-Start
Earth leakage detection	Thermostat-controlled fan	- mains voltage monitoring	
V-down-compatible welding with	TIG Comfort Stop	- welding voltage (actual/guide value)	
Cel electrodes	Overtemperature protection	- welding current (actual/guide value)	
		- Overtemperature	

TECHNICAL DATA

		TP 4000 Cel	TP 4000 Cel MV	TP 5000 Cel	TP 5000 Cel MV
Mains voltage, 50/60 Hz		3 x 400 V	3 x 200 - 240 V 3 x 380 - 460 V	3 x 400 V	3 x 200 - 240 V 3 x 380 - 460 V
Mains voltage tolerance		± 15 %	± 10 %	± 15 %	± 10 %
Mains protection (slow-blow)		35 A	3 x 200 - 240 V: 63 A 3 x 380 - 460 V: 35 A	35 A	3 x 200 - 240 V: 63 A 3 x 380 - 460 V: 35 A
Primary continuous power (100 % d.c.)		12.9 kVA	12.9 kVA	16.3 kVA	16.3 kVA
Cos phi		0.99	0.99	0.99	0.99
Efficiency		90 %	90 %	90 %	90 %
Welding current range	(rod electrode)	10 - 380 A	10 - 380 A	10 - 480 A	10 - 480 A
	TIG	10 - 380 A	10 - 380 A	10 - 480 A	10 - 480 A
Welding current at	10 min/40°C 40 % d.c.	380 A	380 A	480 A	480 A
	10 min/40°C 60 % d.c.	360 A	360 A	420 A	420 A
	10 min/40°C 100 % d.c.	320 A	320 A	360 A	360 A
Open-circuit voltage		95 V	95 V	95 V	95 V
Standardised working voltage	Rod electrode	20.4 - 35.2 V	20.4 - 35.2 V	20.4 - 39.2 V	20.4 - 39.2 V
	TIG	14.5 - 33 V	14.5 - 33 V	14.5 - 38 V	14.5 - 38 V
Maximum working voltage	Rod electrode	53 V (380 A)	53 V (380 A)	48 V (480 A)	48 V (480 A)
Degree of protection		IP 23	IP 23	IP 23	IP 23
Type of cooling		AF	AF	AF	AF
Insulation class		F	F	F	F
Dimensions	L x W x H mm	625 x 290 x 475	625 x 290 x 475	625 x 290 x 475	625 x 290 x 475
	Inches	24.63 x 11.43 x 18.72	24.63 x 11.43 x 18.72	24.63 x 11.43 x 18.72	24.63 x 11.43 x 18.72
Weight		36.1 kg 79.4 lb	40 kg 88 lb	37 kg 81.4 lb	40.5 kg 89.1 lb



ARTICLE NUMBERS

4,075,111	TransPocket 4000 Cel	4,001,046	Welding workplace kit 70 mm ²	4,046,082	Remote-control unit TR 1000
4,075,111,630	TransPocket 4000 Cel MV	4,045,868	Trolley 'Everywhere'	4,046,085	Remote-control unit TR 1100
4,075,113	TransPocket 5000 Cel	4,045,869	Crane-hoisting kit "Everywhere"	4,046,079	Remote-control unit TR 2000
4,075,113,630	TransPocket 5000 Cel MV	4,001,583	Autotransformer 3 x 500/480 V - 400 V	4,046,083	Remote-control unit TR 3000
				4,046,080	Remote-control unit TR 4000
				4,046,084	Wireless remote-control unit TP 08
				43,0004,0633	Extension cable, 10-pole, 5 m



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