



**PROTON + DIGITAL**



**SPOT WELDING PERFECTED**

PRECISE SPOT WELDING OF MULTIPHASE STEELS (E.G. DUAL, TRIP, BORON STEEL, BDK), MATERIALS WITH DIFFERING THERMAL CONDUCTIVITY LEVELS, HIGH-STRENGTH MOULD HARDENED COMPONENTS AND COATED SHEETS.

**FAN 36\***  
months warranty

DESIGNED, TESTED AND PROVEN FOR THE AUTOMOTIVE INDUSTRY



INTELLIGENT PARAMETER MANAGEMENT FOR PROCESS SECURITY  
SOFTWARE UPDATES + ONLINE SERVICE CENTER FOR FUTURE SECURITY



**PROTON I+ DIGITAL 12.000 A\***

HIGH-PERFORMANCE INVERTER, DIGITAL SOFTWARE CONTROL, PERMANENT SPOT WELD MONITORING WITH AUTOMATIC PARAMETER READJUSTMENT, SECURITY OF INVESTMENT THROUGH UPDATE FUNCTION, SUPERIOR WATER-COOLING CYCLE MODULE, SIMPLE OPERATION, ERGONOMIC, WORKSHOP-FRIENDLY DESIGN.

→ \*) Actual, continuous output at the electrode tip during permanent operation. Measured and confirmed during practical and load testing.

**THE SUPREME ADVANTAGE:** maximum productivity and efficiency through especially **LONG RUNNING TIMES**. Overheating is impossible! The precise cooling of the entire device right up to the electrode tip plays a major role in the quality of the welding spot and guarantees long electrode life.

#### CONSISTENT AND SECURED WELDING IN CONTINUAL OPERATION

Consistently high welding current power is guaranteed by the high performance inverter (as used in car assembly) and prevents drops in performance! Buffer circuit compensation immediately levels out any mains current falls.

#### TIME SAVINGS AND SECURITY OF INVESTMENT

The preset parameters from the automotive manufacturer can be called up via the digital software control using the memory key. Plant time and energy frequencies for differing materials can be reprogrammed at any time by means of a simple update ([www.fan-austria.com](http://www.fan-austria.com): Service-Center).

#### INTELLIGENT ADJUSTMENT

Permanent, digital weld spot monitoring automatically identifies any resistance fluctuations and disruptive factors (e.g. paint residues, adhesive, low pressure, or electrode soiling) and reacts with automatic welding parameter adjustment. This guarantees a continuous working process and uniform quality from the first to the last spot weld.

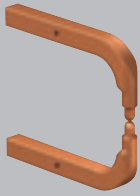


**PROTON I+ DIGITAL**

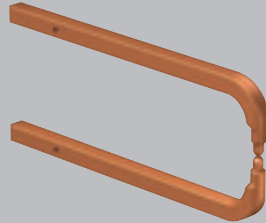
NEW AUTOMOTIVE INDUSTRY MATERIAL COMBINATIONS DETERMINE THE FUTURE OF MAINTENANCE TECHNOLOGY AND AUTOBODY REPAIR.

Among the binding criteria, "The weld spot must be of the same quality as that provided on the car production line." With its new **PROTON I+ DIGITAL** equipment generation, FAN aims to achieve precisely this target.

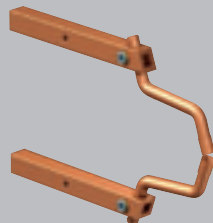
## Welding arm set:



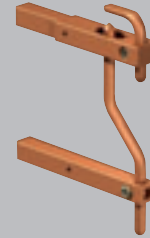
Celect **0774-100**  
L = 200 mm



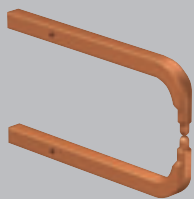
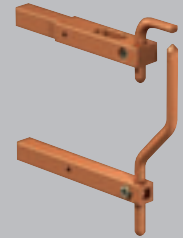
Celect **0774-102**  
L = 400 mm



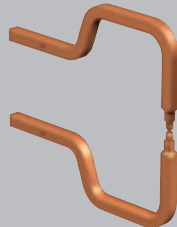
Celect **0774-105**  
L = 250 mm, with arched electrode



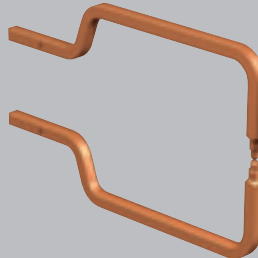
Celect **0774-106/07**  
wheel arch / roof



Celect **0774-101**  
L = 300 mm



Celect **0774-103**  
L = 350 mm



Celect **0774-104**  
L = 525 mm



Celect **0774-143**  
electrode cap

## Technical data

## PROTON i+ DIGITAL

Supply voltage	3 x 400 V (3 Ph)
Frequency inverter	Impulse frequency
Max. welding current	12,000 A DC
Max. welding output $S_{max}$	114 kVA (at max. 12 A DC)
Dimensions l/w/h (without trolley)	690 / 290 / 475
Weight (without trolley)	58 kg
Mains fuse protection	min. 32 A max. 63 A
Regulated welding current	12 kA
Open circuit voltage	16 V
Insulation class	I.C.I.F
Protection class	IP 21
Cooling	Water-cooling AF

## Spot welding tongs pneumatic / water-cooled

Celect Easy II, electrode pressure 4500 N at 6 - 8 bar	
Welding cable / length	150 mm <sup>2</sup> / 2.8 m
Operating pressure	6-10 bar
Optional pressure booster, only necessary with workshop compressed air < 6 bar	
Electrodes	12 / 14 mm

## Cable sets water-cooled

Gun cable / length	150 mm <sup>2</sup> / 2.30 m
	optional 150 mm <sup>2</sup> / 2.80 m
Earth cable / length	150 mm <sup>2</sup> / 2.30 m
	optional 150 mm <sup>2</sup> / 2.80 m

## Scope of delivery

Digital inverter spot welding machine with spotter function
Trolley
Cable holder / balancer
Spot welding tongs: pneumatic, water-cooled, Celect Easy II
Gun and earth cable 2.30 m, water-cooled
Water-cooling system FK 4,000 R
Pull hammer
Welding arm set incl. electrode caps, water-cooled, consisting of Art. No.: Art. Nr.: 0774-100, 0774-102, 0774-105, 0774-106/07

## Online Service-Center incl. [www.fan-austria.com](http://www.fan-austria.com)

## Servicebox including

Plug-in electrode, carbon-shrinking electrode, shrinking electrode, spare electrode caps, pick-up heads and washers, studs, T-pins

## Accessories

Optional pressure booster, only necessary with workshop compressed air < 6 bar

## Special accessories

Celect C-Form hand spot welding tongs

## Retrofitting set

### For existing PRON i/i+ spot welding sets

Tech. installation on the spot, scope of delivery: user panel PROTON i + DIGITAL, software package + online service center  
Celect Easy II hand spot welding tongs, pneumatic / water-cooled



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Dealer:



\* FAN 36-month guarantee on inverter, transformer, diodes and user panel