

TECNA®



*Intelligent welding
in car body repair*

CE

GENERAL CATALOGUE

Professional

Car manufacturers advising using TECNA products



TECNA: Intelligent welding in car body repair

This wide range is composed of:

- Hand-operated welding equipment for steel and aluminium studs (and pins) with capacitor discharge generators.
- Spotter with built-in transformer, 0.8kVA at 50%.
- Cable Spotter, 2,5÷5 kVA at 50%.
- Single-phase cable spot welders on trolley, 8 kVA at 50% (which can be equipped with either manual or pneumatic guns, with either single or double program welding control unit).
- Single-phase cable spot welders on trolley, 10kVA at 50% (which can be equipped with water cooling, pneumatic guns, double program digital control unit).
- Last generation inverter technology (low energy consumption) cable spot welders, 25 kVA at 50%: equipped with built-in transformer guns (12 kVA at 50%) and touch-screen welding control unit. Also, they can be equipped with either "X" or "C" pneumatic guns, exchangeable arms, water-cooled single-sided gun.

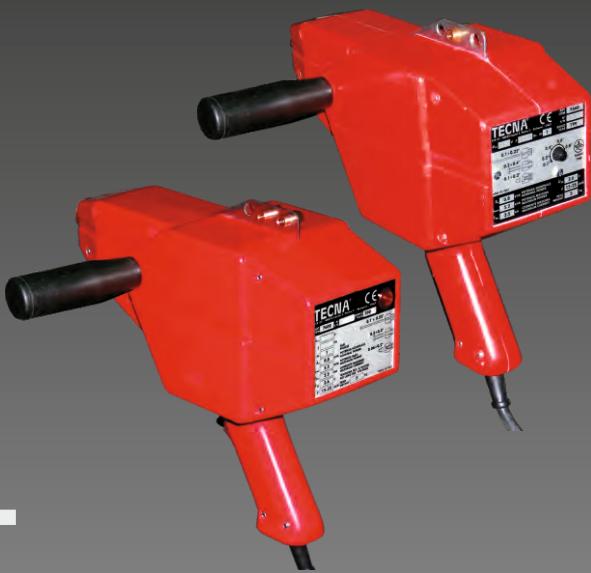
TECNA spot welders are approved and homologated by the major Car Manufacturers for being used in authorised car body shops.

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Spotter 7600-7660



SPOTTER 7600 and SPOTTER 7660 Cut the cost on body repairs, no need to remove interior trims and fitments, double skin areas easily repaired, fit trim studs in seconds.



7630CA - 7690CA Spotter with accessories in cardboard carrying case.

7630PL - 7690PL Spotter with accessories in plastic carrying case.

7630K - 7690K Spotter with accessories in stiff plastic carrying case.

Item 7600 - 7660

Supply voltage	230	V
Mains frequency	50 / 60	Hz
Mains protection (delayed)	16	A
Nominal power 50% ED	0,8	kVA
Maximum welding power	6	kVA
Maximum secondary current	2,25	kA
No load secondary voltage	3	V
*Weld time	*65	cycles
Protection rating	21	IP
Weight	6	kg

* Only on version item 7660

Spotter 3464



Multifunction portable spotter 2250A. Extremely versatile equipment for sheet straightening in car body shops. The welding systems with built-in transformers are supplied complete with: micro-processor digital welding control unit with time adjustment in cycles (from 0,5 to 99) and welding current adjustment. The welding system is equipped with Auto-start mode which can be either enabled or disabled.

Supplied with a multifunction gun with 2000 mm cable and a 2000 mm long earth cable. The mains cable is 4 m long.

Standard equipment: Percussion extractor, kit of accessories and consumable material for straightening works in car-body shop. It is possible to perform shrinking with the carbon electrode. A quick straightening of panels is carried out thanks to the 3-point star on the percussion extractor. Improved versatility to allow the use of different accessories for sheet straightening.

Item 3464

Supply voltage	230	V
Mains frequency	50 / 60	Hz
Mains protection (delayed)	16	A
Nominal power 50% ED	2,5	kVA
Maximum welding power	18	kVA
Maximum secondary current	2,25	kA
No load secondary voltage	9	V
Weld time	0,5 ÷ 99	cycles
Protection rating	21	IP
Weight	19	kg

Spotter 3460N



Multifunction portable spotter 4500A. Extremely versatile equipment for the repairs in car body shops.

Supplied with a multifunction gun with 1600 mm cable and a ground clamp with 1400 mm cable. The mains cable is 4 m long.

Standard equipment: percussion extractor, kit of accessories and consumable material for repairs in car-body shops. It allows to single-spot weld rivets, screws, self-threading rivets, washers and pins. It is possible to perform shrinking with the carbon electrode. A quick straightening of panels is carried out thanks to the 3-point star on the percussion extractor. Improved versatility to allow the use of different accessories for sheets straightening.

Item 3460N

Supply voltage	*400	V
Mains frequency	*50 / 60	Hz
Mains protection (delayed)	16	A
Nominal power 50% ED	5	kVA
Maximum welding power	20	kVA
Maximum secondary current	4,5	kA
Thermal current 100%	0,63	kA
No load secondary voltage	5,6	V
Weld time	1 ÷ 99	cycles
Protection rating	21	IP
Weight	28	kg

* Different voltages and frequencies on demand

T-Spot 110 3540



The T-Spot 110 welder is a multifunction portable spotter, particularly convenient for repairing steel car bodies, sheet straightening, rivets welding and localised sheets heating with carbon electrode.

The "AUTOSTART" function facilitates the use of the portable spotter, as it allows to have the welding process automatically started when the tool gets in touch with the sheet. A push-button set on the multifunction spotter allows the program's quick remote selection and the fine adjustment.

A built-in EasyOne Sx1 microprocessor control unit, thanks to its LCD graphic display, allows an easy and quick welder's adjustment. Besides the manual regulation modalities, the machine is provided with several welding programs, which have been optimised for the most common works. Moreover, the welding machine offers the possibility of a fine adjustment with synergic curve. The half-periods regulation allows a more accurate work.

It is provided with its multifunction gun, a 2 metre length earth cable, a percussion extractor and a box with accessories and consumable materials.

Item 3540

Supply voltage	400	V
Mains frequency	50	Hz
Mains protection (delayed)	16	A
Nominal power at 50%	2,5	kVA
Maximum short circuit current		
Multifunction gun	2,25	kA
Secondary no-load voltage		
Multifunction gun	8,8	V

T-Spot 120 3541



The **T-Spot 120** welder is a double function combined welder for repairing steel car bodies. Its generator combines both:

- The spot gun's functions (sheet straightening, rivets welding and localised sheets heating with carbon electrode)
- The two-side spot welding of non-structural sheets (with optional gun)

The "AUTOSTART" function facilitates the use of the spotter as it allows to have the welding process automatically started when the tool gets in touch with the sheet. A push-button allows the program's quick remote selection and the fine adjustment.

A built-in EasyOne Sx2 microprocessor control unit, thanks to its LCD graphic display, allows an easy and quick welder's adjustment. Besides the manual regulation modalities, the machine is provided with several welding programs, which are optimised for the most common works and it offers also the possibility of a fine adjustment with synergic curve. The half-periods regulation allows a more accurate work.

It is provided with its multifunction gun with 2.5 m cable, a 2 m earth cable, a percusion extractor and a box with accessories and consumable materials.

Item 3541

Supply voltage	400	V
Mains frequency	50	Hz
Mains protection (delayed)	16	A
Nominal power at 50%	5	kVA
Maximum short circuit current		
C type gun	4.5	kA
Multifunction gun	2.6	kA
Secondary no-load voltage		
C type gun	5.6	V
Multifunction gun	8.3	V

TSW 1500 CAR



The **TSW 1500 CAR** welding system runs with an extremely quick discharge (2-3 ms) of a capacitors bank that welds pins from Ø 2-8 mm.

This technology allows welding threaded pins onto aluminium for fixing dents on car bodies by means of suitable tools.

Also, it allows welding threaded studs, unthreaded pins, nails, washers, fastons, etc. onto clean non-oxidized surfaces made out of mild steel, galvanized steel, stainless steel, aluminium or brass.

The process quickness does not alter the surfaces on the side opposite the weld and in many cases it may be used with painted, pre-painted, plasticized and galvanized sheets.

Item TSW 1500 CAR

Supply voltage	230	V
Mains frequency	50/60	Hz
Mains protection (delayed)	10	A
Nominal power	1000	VA
Nominal current	5	A
Capacity	66	mF
Welding programs	4	
Protection rating	22	IP
Weight	14	kg

3484

Universal welding station 8 kVA, hand-operated gun, double program. Simultaneous connection of two tools with automatic recall of the relevant welding program, enabling to save time, avoid errors so to have a simple and safe working process.

Car body shop repair works: resistance spot welding of sheets, sheet straightening with spotter (nails and washers), localised sheets heating (carbon electrode), screws and rivets welding, inox sheet-metals spotting.

The welding systems with built-in transformers are supplied equipped with: Item 3473 - Extra-flexible cables L= 1800 mm, 150 mm², synchronous SCR welding control unit, time adjustment in cycles and pulses, welding current adjustment and compensation.

3450

Universal welding station 10 kVA, with pneumatic gun. Upon request: water-cooled arms, electrodes, cables with double program and simultaneous connection of two tools, with automatic recall of the relevant memorized welding program, enabling to save time, avoid errors so to have a simple and safe working process. Smart Gun, patented pneumatic gun with adjustable stroke and double action trigger.

Car body shop repair works: resistance spot welding of sheets, sheet straightening with spotter (nails and washers), localised sheets heating (carbon electrode), screws and rivets welding, inox sheet-metals spotting.

The welding stations with epoxy-coated transformers are supplied equipped with: synchronous digital welding control unit TE95, with double program, time adjustment in cycles and pulses, welding current adjustment and compensation; Welding cables: Item 3873 - Extra-flexible (welding) cables 150 mm², L = 2000 mm; Item 3453 - Water-cooled cables 150 mm², L = 2000 mm (upon demand).

Item 3484

Supply voltage	*400	V
Mains frequency	*50 / 60	Hz
Mains protection (delayed)	25	A
Nominal power 50% ED	8	kVA
Maximum welding power	35	kVA
Maximum secondary voltage	6,4	kA
Thermal current 100%	0,88	kA
No load secondary voltage	7	V
Weld time	1 ÷ 99	cycles
Protection rating	21	IP
Weight	85	kg

* Different voltages and frequencies on demand

Item 3450

Supply voltage	*400	V
Mains frequency	*50 / 60	Hz
Mains protection (delayed)	25	A
Nominal power 50% ED	10	kVA
Maximum welding power	50	kVA
Maximum secondary current	8	kA
Thermal current 100%	0,88	kA
No load secondary voltage	8	V
Weld time	1 ÷ 99	cycles
Protection rating	21	IP
Weight	105	kg

* Different voltages and frequencies on demand

3655CF20

3650CF20



Direct current welding station with inverter technology M.F. 25 kVA. (1000 Hz), Water-cooled pneumatic double program. Simultaneous connection of two tools, with automatic recall of the relevant memorized welding program, enabling to save time, avoid errors so to have a simple and safe working process. Fast Gun, patented pneumatic gun with adjustable stroke and double action trigger.

Car body shops repair works: spot welding with "C" gun, even for high strength steels both single-sided and twin spot; welding of nails and washers for sheet straightening (spotter function); localised heating with carbon electrode; sheet-metals spotting. By means of the inverter technology that allows a constant and high welding current, not influenced by the variations of the supply voltages and by the secondary circuit conditions, the quality of the spot is improved also on galvanized sheets. The high current value allows to save time resulting in a longer electrodes life. The reduced absorption balanced on the three phases reduces the connecting costs.

The welding stations equipped with water-cooled epoxy-coated welding transformer are supplied complete with: analogue welding control unit with potentiometers, with two independent programs, time adjustment in cycles, pulses, welding current and compensation.

3655ECF20



NEW EVOLUTION direct current welding stations with inverter technology M.F. 25 kVA. (1000 Hz) equipped with:

- **NEW TE40i inverter WELDING CONTROL UNIT** provided with pre-settled main welding programs for high resistance materials too, time adjustment in ms, real welding current display, pulses, welding current and automatic compensation.
- **USB port** for upgrading and welding data managing on PC.
- **Automatic proportional valve** for managing the force at the electrodes.
- **Machine's NEW DESIGN. NEW TROLLEY** equipped with protected wheels providing greater stability and ergonomics.

The NEW EVOLUTION welding systems keep alive those features which made the TECNA welding systems versatile and reliable:

- Independent double program;
- Water-cooling;
- Pneumatic functioning with simultaneous connection of two tools and automatic recall of the relevant memorized welding program enabling to save time, avoid errors so to have a simple and safe working process.

The NEW EVOLUTION welding systems for car body repair are equipped with last generation's **Fast Guns**, pneumatic guns providing maximum pressures up to **450 daN**

Item	3650CF20	3655CF20
Supply voltage	*400	400
Mains frequency	*50 / 60	50 / 60
Mains protection (delayed)	35	40
Nominal power 50% ED	25	25
Maximum welding power	125	--
Maximum secondary current	9	12
Thermal current 100%	1,25	1,25
No load secondary voltage	14	15
Weld time	1 ÷ 65	1 ÷ 65
Protection rating	21	21
Weight	150	150

* Different voltages and frequencies on demand

Item	3650ECF20	3655ECF20
Supply voltage	*400	400
Mains frequency	*50 / 60	50 / 60
Mains protection (delayed)	35	40
Nominal power 50% ED	25	25
Maximum welding power	125	--
Maximum secondary current	9	12
Thermal current 100%	1,25	1,25
No load secondary voltage	14	15
Weld time	0,01 ÷ 2	0,01 ÷ 2
Protection rating	21	21
Weight	150	150

* Different voltages and frequencies on demand

3664 3664P 3664P7



Resistance spot welding system, controlled by a microprocessor, designed for car body repair shops. The welding control unit with digital touch-screen enables to display and check all the welding parameters according to the type of tool, the type and thickness of the sheets to be welded.

The welder's main features are: system that automatically acknowledges the tool connected to the machine; welding tool equipped with built-in transformer that is connected to the machine by means of an industrial plug and quick connection devices. Thus, it is possible to easily change the tool avoiding the use of keys, tools and screws; fully water-cooled welding tool, transformer, arms and electrodes, by means of a closed circuit cooling system placed on the trolley of the machine.

Item 3664 3664P 3664P7

Supply voltage	*400	V
Mains frequency	*50 / 60	Hz
Mains protection (delayed)	25-32	A
Protection rating	21	IP
Weight	130	

* Different voltages and frequencies on demand

8679T 8679TS 8679TS7



**Item 8679TS7
for SMART PLUS mode**



**Item 8679TS
for SMART PLUS mode**



Item 8679T

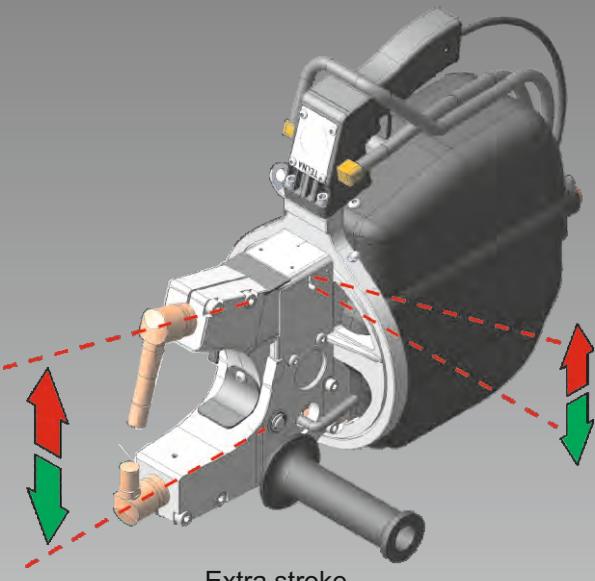
Item 8679T 8679TS 8679TS7

Nominal power 50% ED	19	19	19	kVA
Maximum welding power	60	60	60	kVA
Maximum secondary current	14	14	14	kA
Thermal current 100%	1,8	1,8	1,8	kA
No load secondary voltage	8,7	8,7	8,7	V
Max. electrode force	450	450	700	daN
Recognition sensor	--	S	S	
Protection rating	21	21	21	IP
Weight	12,5	12,5	12,5	kg

S = Smart Plus

* Different voltages and frequencies on demand

"X gun" 8678T



Item 8678T

Nominal power 50% ED	19	kVA
Maximum welding power	60	kVA
Maximum secondary current	14	kA
Thermal current 100%	1,8	kA
No load secondary voltage	6,8	V
Max. electrode force arms L 120mm	610	daN
Protection rating	21	IP
Weight	13	kg

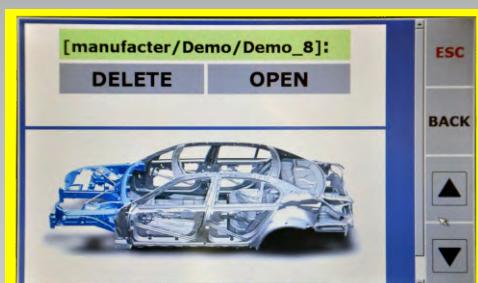
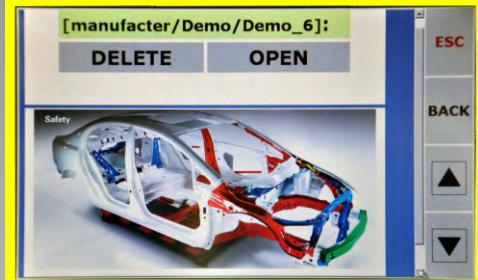
* Different voltages and frequencies on demand

Smart Plus

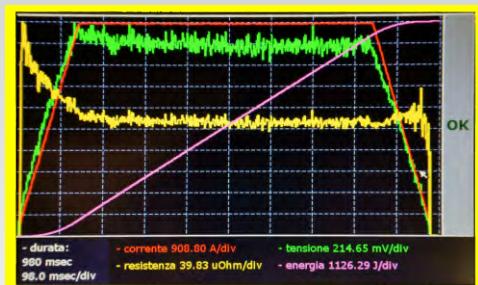
Smart Plus Mode
automatic welding system
(Patent pending)



Car Manufacturers parameters with display of the parts to be welded



Graphic display of the welding parameters



Accessories

3491



Hand-operated gun with air cooling.
Standard and large gap arms item 5001÷5085.

3696



Hand-operated C type gun with air cooling.
Reduced overall dimensions. Cables length 1600 mm.

8651



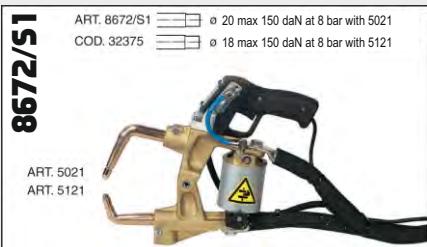
Air and water cooled twin spot gun.

8075



Multifunction gun for the welding of screws, pins, washers, rivets and single-spot. Star electrode for straightening. Percussion extractor.

8672/S1



Smart gun: pneumatic gun with air and water cooling. Standard and large gap arms item 5001÷5085 and item 5121÷5185.

8676



Smart gun: pneumatic gun with air and water cooling. Standard and large gap arms item 5001÷5085 and item 5121÷5185.

3460N

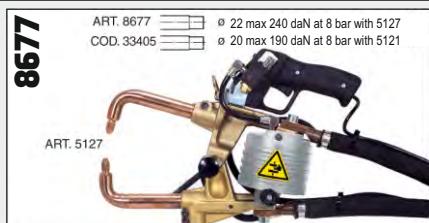
3484

3450

3650/3655

Accessories

8677



Water-cooled pneumatic gun.
Standard and large gap arms item 5127÷5137.

3575



Multifunction gun for the welding of screws, pins, washers, rivets and single-spot. Star electrode for straightening. Percussion extractor.

8659



Water-cooled pneumatic C - Type gun.

8669



Water-cooled pneumatic C - Type gun.

8675



Water-cooling group with pneumatic pump.

8675/S



Water-cooling group with electric pump.

8675/SP



Water-cooling group with electric pump.

● Standard equipment / ○ Upon request / — Not available

Accessories

7694



Buttonholed washers.

7695



Twisted buttonholed washers.

7693



Electrode for buttonholed and twisted buttonholed washers.

7696



Universal fast ground.

7684



Rings for screws.

7686



Threaded pins

7691



Aluminium hammer - 450 g

7698



Aluminium hammer - 120 g

7699



Aluminium hammer - 120 g

7697



Aluminium hammer - 80 g

7682



Universal multifunction pulling bar.

Accessories

7692



Universal multifunction pulling bar with Revolving.

7683



Pull system.

72133



Air pressure booster

41762



Cover for 3664

3461T



T-Roller.

23221 - 23221P

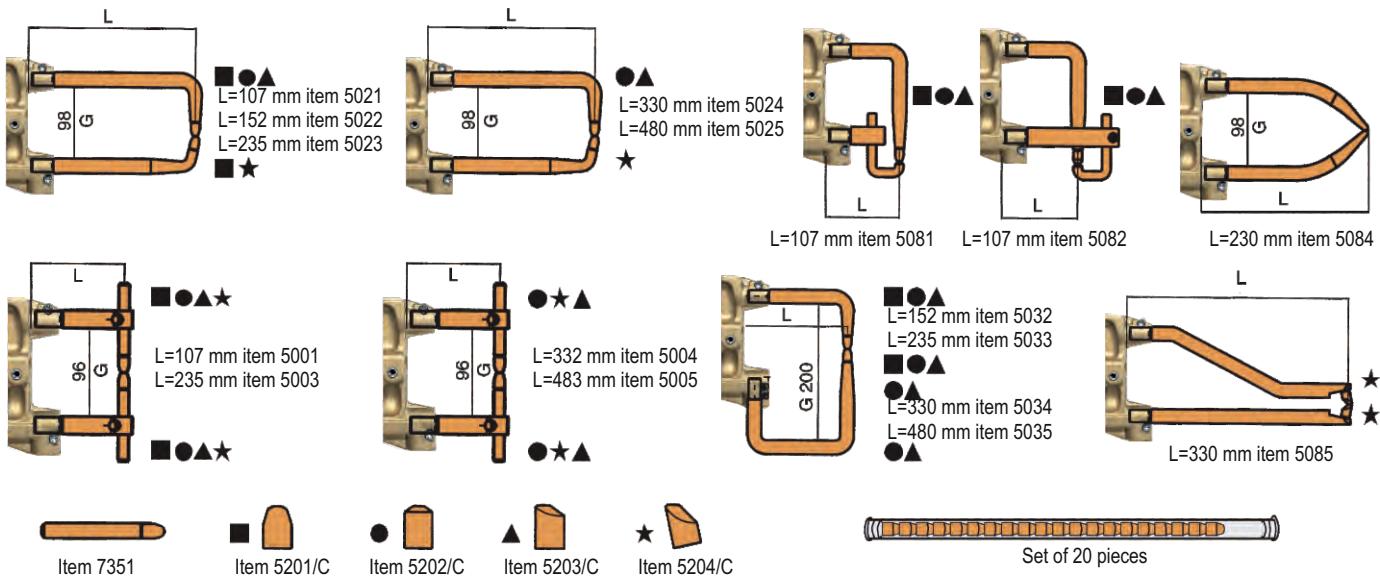


23221 Pendrive.

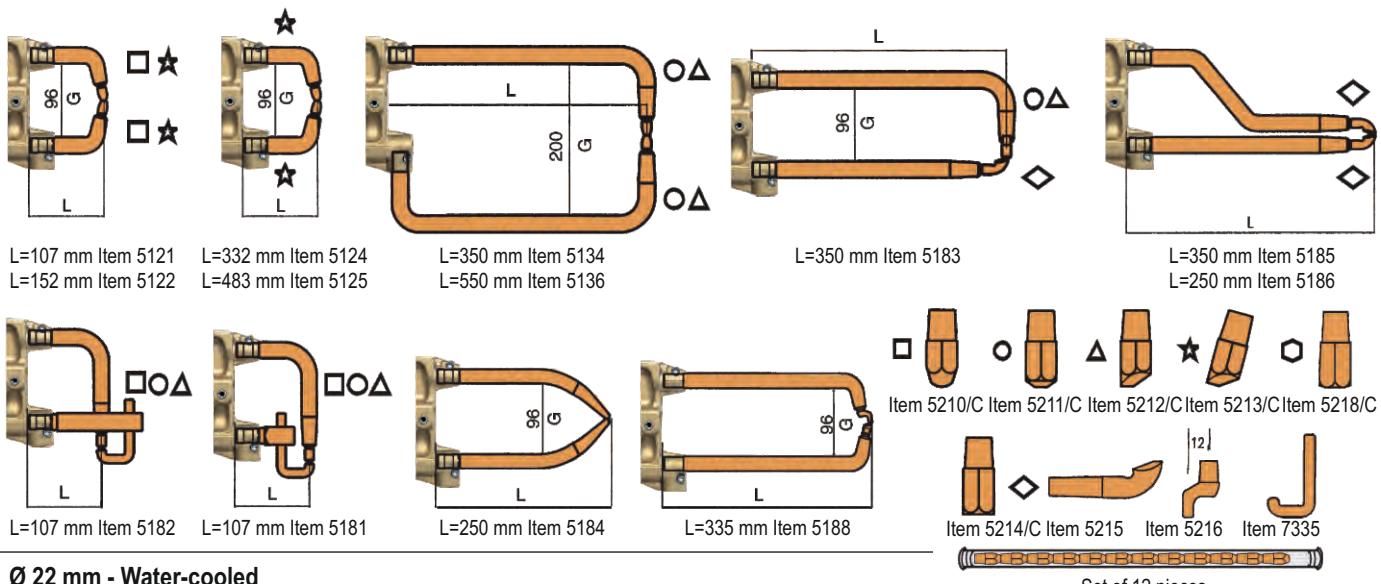
23221P Pendrive software program.

Selection of Arms, Electrodes and Accessories

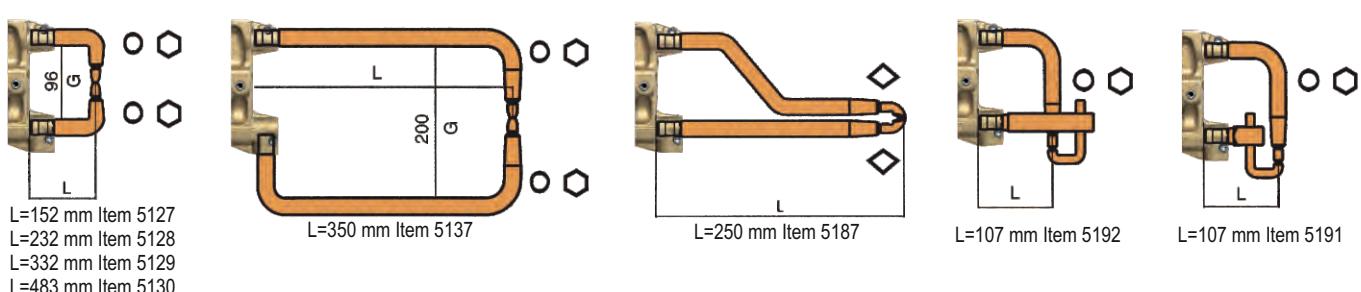
Ø 18 mm - Air-cooled



Ø 20 mm - Water-cooled



Ø 22 mm - Water-cooled



Selection of Arms, Electrodes and Accessories

Electrodes Item 8659

- | | | |
|--|-----------------|-----------------|
| | ● Item 5224-013 | ○ Item 5228-016 |
| | ● Item 5225-013 | ○ Item 5229-016 |
| | | ○ Item 5230-016 |

Accessories Item 8659

- | | | | | |
|------|--------|--------|--------|--------|
| Ø 13 | ● | ○ | ○ | ○ |
| Item | 5208/C | 5201/C | 5202/C | 5203/C |

Electrodes Item 8669

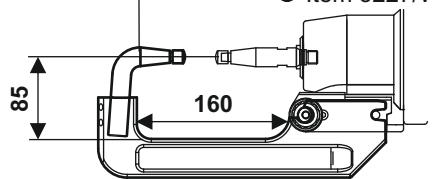
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|--|-----------------|-----------------|
| | ○ Item 5224-013 | ● Item 5228-016 |
| | ○ Item 5225-013 | ● Item 5229-016 |
| | | ○ Item 5230-016 |

Accessories Item 8669

- | | | | | |
|------|------|------|------|------|
| Ø 16 | ● | ○ | ○ | ○ |
| Item | 5233 | 5231 | 5232 | 5234 |

Item 8685 - 8685/W - 8685/W/S

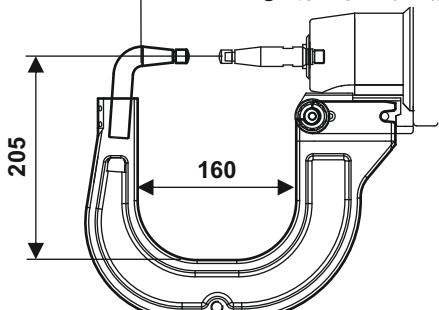
- | | |
|-----------------|-------------------|
| ● Item 5226-Ø13 | ● Item 5226/W-Ø13 |
| | ○ Item 5227/W-Ø16 |



● Standard for Item 8659 ○ Standard for Item 8669

Item 8684 - 8684/W - 8684/W/S

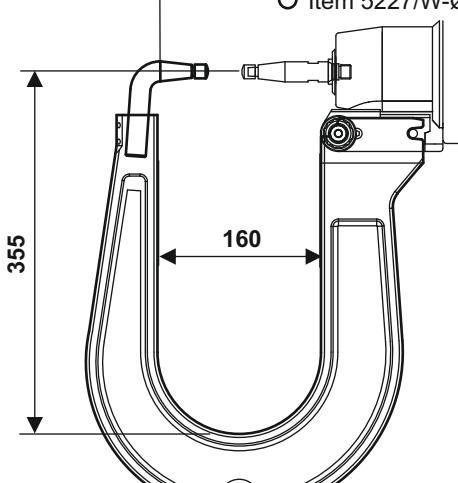
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|-----------------|-------------------|
| ● Item 5226-Ø13 | ● Item 5226/W-Ø13 |
| | ○ Item 5227/W-Ø16 |



● Standard for Item 8659 ○ Standard for Item 8669

Item 8686 - 8686/W - 8686/W/S

- | | |
|-----------------|-------------------|
| ● Item 5226-Ø13 | ● Item 5226/W-Ø13 |
| | ○ Item 5227/W-Ø16 |



● Standard for Item 8659 ○ Standard for Item 8669

Electrodes Item 8669 - 8679T - 8679TS

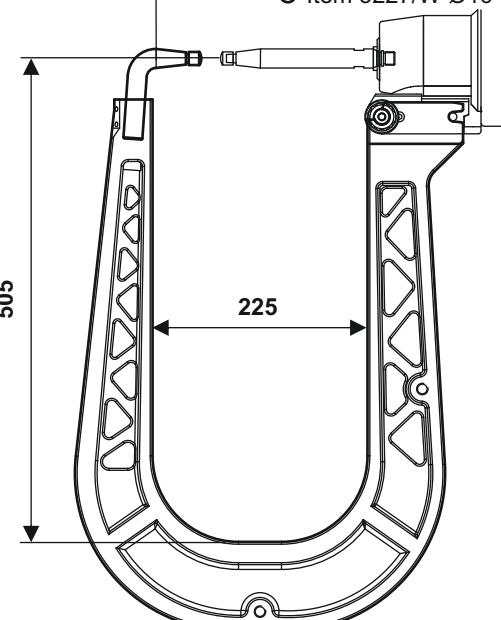
- | | | |
|--|-----------------|-----------------|
| | ○ Item 5224-013 | ● Item 5228-016 |
| | ○ Item 5225-013 | ● Item 5229-016 |
| | | ○ Item 5230-016 |

Accessories Item 8669 - 8679T - 8679TS

- | | | | | |
|------|------|------|------|------|
| Ø 16 | ● | ○ | ○ | ○ |
| Item | 5233 | 5231 | 5232 | 5234 |

Item 8688 - 8688/W - 8688/W/S

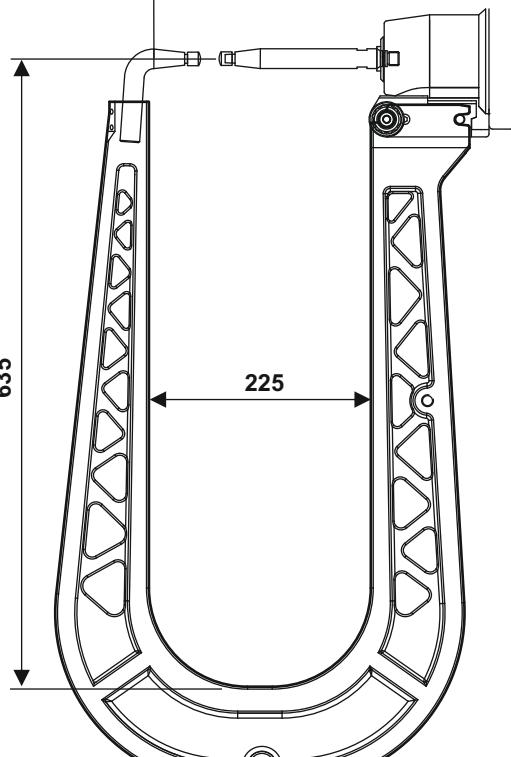
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|-----------------|-------------------|
| ● Item 5226-Ø13 | ● Item 5226/W-Ø13 |
| | ○ Item 5227/W-Ø16 |



● Standard for Item 8659 ○ Standard for Item 8669

Item 8687 - 8687/W - 8687/W/S

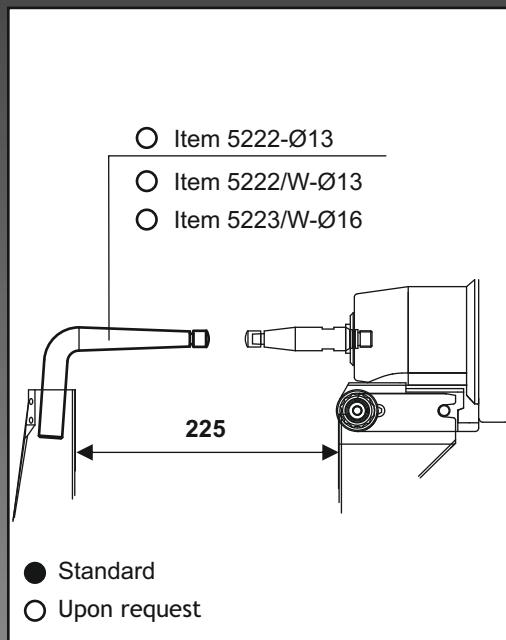
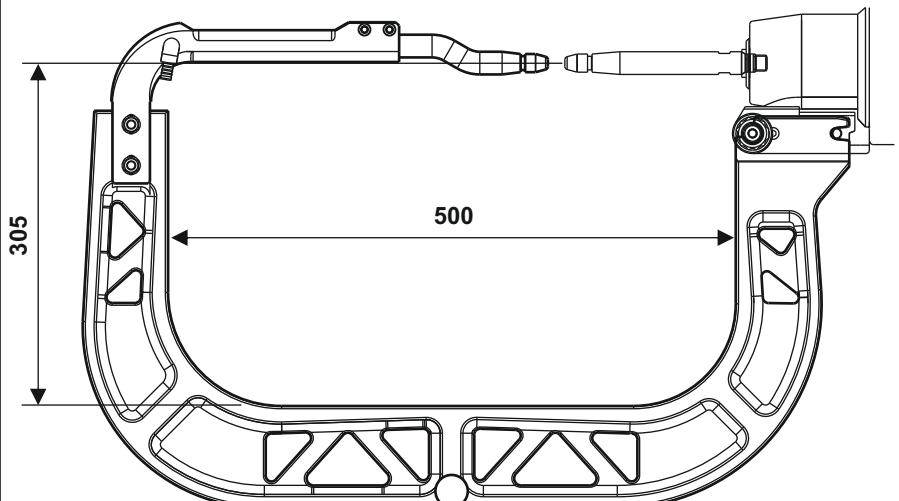
- | | |
|-----------------|-------------------|
| ● Item 5226-Ø13 | ● Item 5226/W-Ø13 |
| | ○ Item 5227/W-Ø16 |



● Standard for Item 8659 ○ Standard for Item 8669

Selection of Arms, Electrodes and Accessories

Item 8690/W/S



- Item 5220
- Item 5220/W

Item 5225-Ø13

Item 5229-Ø16

Item 5229/7-Ø16

- Standard
- Upon request

160

Item 5239/W

Item 5230-Ø16

Item 5230/7-Ø16

- Standard
- Upon request

160

Item 5221/2

Item 5221/1

Item 5237/W

- Standard
- Upon request

160

Item 5238/W

Item 5230-Ø16

- Standard
- Upon request

160

Item 8689

● Item 5220

Item 5224-Ø13

Item 5228-Ø16

Item 5228/7-Ø16

- Standard
- Upon request

82

● Item 5220

Item 5221/2

Item 5221/1

Item 5221/7 (8679TS7)

108

OPTIONAL
for
5221/2



5210/C



5211/C



5212/C



5214/C

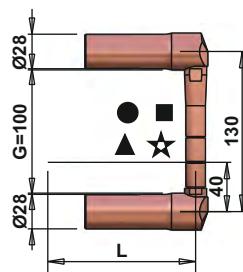


5218/C

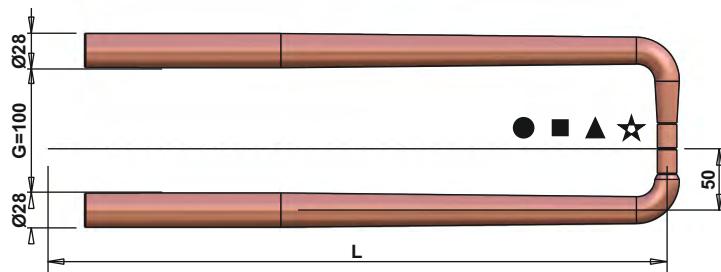
The accessories upon demand item 8689-5220-5221/1-5221/2 can be used at max 6 bar only

Selection of Arms, Electrodes and Accessories

For Item 8678T

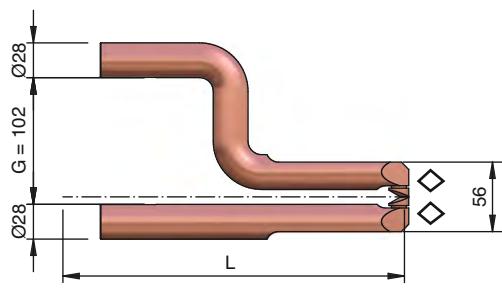


- L = 120 mm Item 5260
- L = 155 mm Item 5261
- L = 255 mm Item 5262
- L = 355 mm Item 5263
- L = 505 mm Item 5264

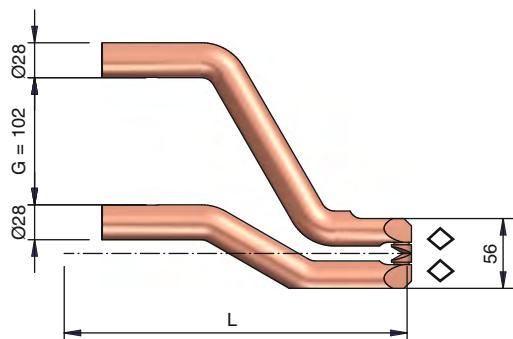


- L = 250 mm Item 5268
- L = 350 mm Item 5269
- L = 505 mm Item 5270

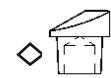
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Item 5233 Item 5231 Item 5232 Item 5234



L = 275 mm Item 5271



L = 270 mm Item 5272



Item 30033

Notes:

Notes:

By designing and building resistance welders for 40 years TECNA, synonymous with Resistance Welding, is part of a market undergoing constant evolution. It was founded in 1969 when its trademark was registered by the Patent and Trademark Office. Passion for technology and design talent allowed the company to turn into an Snc one in 1985 and into an S.p.A. in 1988.

Today, the headquarters of Via Meucci, 27 in Castel San Pietro Terme (BO) are the head and registered office while the plant in Via Grieco, 25/27 stands for a second manufacturing plant.

This experience qualifies TECNA as a supplier of major car manufacturers and large multinational companies operating in industrial fields. The TECNA welders are approved and homologated by top car manufacturers for being used by authorized car body shops. In the past years, TECNA has become a very important company by specializing in a wide range of products ranging from welding machines for industrial applications equipped with single-phase, three-phase inverter, three-phase DC and capacitor discharge technologies up to machines for car body welding and repair provided with welding controls of the last generation equipped with low power consumption inverter technology.

INDUSTRIAL LINE

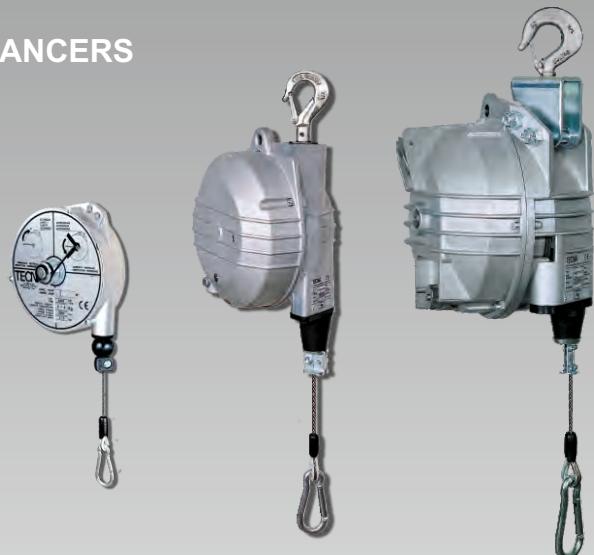


PROFESSIONAL LINE

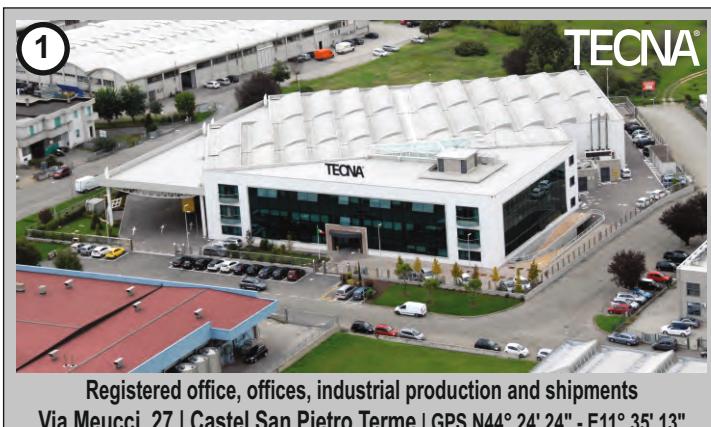
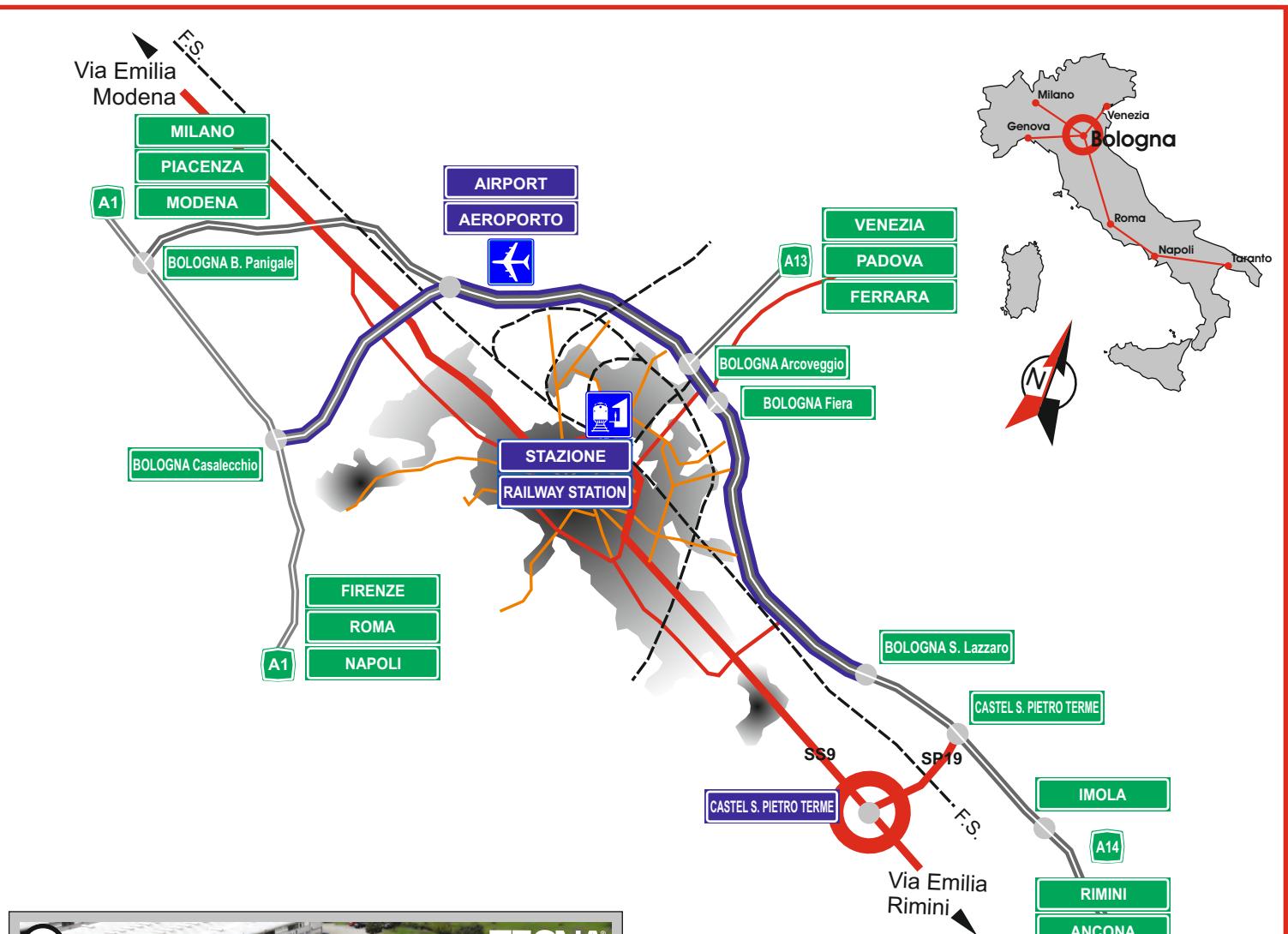


It also boasts a line of products that can be considered "accessories" of the Resistance Welding machines like Digital Welding Controls, Measurement Instruments and Balancers.

BALANCERS



TECNA has always developed its products aiming at better quality and reduced environmental impact. Each step within the company is carefully followed: from design, to production, to sales flowing through different channels depending on the final destination of the product. In recent years, it has created an extensive network of agents and distributors around the world.



Registered office, offices, industrial production and shipments
Via Meucci, 27 | Castel San Pietro Terme | GPS N44° 24' 24" - E11° 35' 13"



Industrial and professional production factory
Via Grieco, 25/27 | Castel San Pietro Terme | GPS N44° 24' 18" - E11° 34' 44"



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