

MIDIsport VISION AV

Fully automatic multifunction spot welding machine

**No more adjustments,
just weld!**



MIDIsport VISION AV
(with C-AV transformer gun)

For mobile & flexible use in the industrial sector

Small-batch production models, prototype constructions, pilot plants...

It covers all resistance spot weldings of e.g. car bodys, particularly components made of high-strength steels as well as multiple sheet panel connections, coated and laminated steel panels - with quality statement regarding the welding process (welding result). No determination of parameters required. The unique control technology „Virtual Machine“ enables also the welding of new materials without the requirement of further adjustments.

All requirements performed by a single device:

- Current / time control (conventional constant current regulation), *Adjustments: single-parameter*
- Energy control ELMA-QS: Bypass and partial isolation compensation, quality assurance system, *Adjustments: total sheet thickness, type of material*
- VISION automatic: furthermore to energy control automatic detection of material type and total sheet thickness
Adjustments: NONE - Just activate the start-trigger!
- Spotting* / dent-repair* / pulling of steel plates* / welding-on of pins and t-pins*

Characteristics MIDIsport VISION AV

- Individual customer solutions due to the modular system
- Compatible with all 10 kHz ELMA-Tech transformer guns
- Light weight spot welding guns (e. g. C-AV gun 10,5 kg)
- Quick coupling connection for pluggable cable hose packet (6 or 10* meter)
- High welding currents even with low fuse protection
- High output currents up to 13 kA
- Digital control „Virtual Machine“ with quality assurance system and display
- Precise process regulation and energy control
- Bypass detection, reproducible welding quality
- Update-ability via USB-device
- Printout of the welding parameters via SpotQS Viewer Software*
* optional



Fully automatic spot welding with
process control *Virtual Machine* (VM3)

PLUG & WELD

10 kHz transformer spot welding guns in C- / X- and innovative V version

Spot welding
"easily" like
never before!

The light weight 10 kHz transformer spot welding guns with integrated cooling system and automatic electrode distance measurement easily fulfil all requirements given during the industrial operation. The light cable hose package contains all necessary supply lines for current, water and compressed air.

Spot Welding Guns ELMA VISION CM & VM

CM = C-Version for Manual production
VM = V-Version for Manual production



Individual electrode arms available upon customer request.

- 10 kHz medium frequency transformer, weight 6 kg
- Output current up to 15 kA
- Servo proportional valve directly integrated in the gun
- Gun weight :
CM 34 kg (without arms, cable hoses)
VM 35 kg (without arms, cable hoses)

Spot Welding Guns ELMA VISION C & X



Individual electrode arms available upon customer request.

- 10 kHz medium frequency transformer, weight 4 kg
- Output current up to 13 kA
- Gun weight:
10,5 kg (C-gun, without arms)
14,5 kg (X-gun, without arms)

MIDISpot VISION AV Technical data

Connection data

Max. voltage	3 x 400 V 50 Hz**
Max. power	130 kVA
Fusing (delayed-action)	32 A
Protection class	IP 21
Insulation class	F
Compressed air supply	min. 6 bar

Power unit for Transformer gun (10 kHz)

Output current	0 - 230 A
Output voltage	560 V

Cooling

Cooling power (internal)	1200 W
Tank capacity	10 l
Flow rate	6 l/min

Construction

Dimensions (H x W x D) approx.	1220 x 680 x 800 mm
Weight approx.	95 kg

Welding data documentation SpotQS Viewer

With the welding data documentation SpotQS Viewer* welding parameters for spot-weld joints are displayed and evaluated according to the specific vehicle.

For example the selected program, the material thickness, electrode force, welding result etc.

After a welding job the parameters as well as the welding result are written onto the USB-device. The welding result is reflected in the image of the quality management indicator light.

*optional
**special voltage : 200 - 500 V / 50 - 60 Hz upon request

Technical changes reserved.