ELMATECH GMBH
electronics machines technologies

# PREMIUMspot VISION

## Fully automatic multifunction spot welding machine

**Full Package**

Body repair easier than ever before!
Quality welding without manual settings!

Automatic control of the energy yield
Automatic detection of total sheet thickness
Automatic detection of material type
Automatic parallel resistance detection
Automatic energy tracking

PREMIUMspot VISION
with transformer
C-gun
(Standard version)

2018 | 2019
INNOVATIVE
THROUGH RESEARCH
Awarded by the
Stifterverband
ELM2613MOR

### Multifunction spot welding machine in the premium class with complete software package for worry-free automotive repair!

Fully automatic welding particularly of components made of high- or maximum strength and also coated and laminated steel panels.

Aluminum welding for thin aluminum sheets up to 3 mm.

### All required welding tasks performed by a single device:

- Spot welding in automatic mode without prior adjustments
- Conventional spot welding in standard mode with setting of current and time
- Spot-welding with quality assurance and energy control: Welding programs for coated panels and panels still containing traces of paint or adhesive residues, including independent parallel resistance detection system and stabilizing control as well as vehicle-specific programs with approved parameters of vehicle manufacturers
- Spotting, dent repair, pulling of steel plates, welding-on of pins and T-pins (with optional spotter)

### Characteristics PREMIUMspot VISION

- Welding process-control software *Virtual Machine* (VM)
- High welding currents even with low fuse protection
- High output currents >13 kA
- High quality performance „spot by spot“
- Energy control
- Parallel resistance detection
- Reproducible welding quality
- Welding parameters can be updated via USB-Stick at any time
- Welding data documentation with the use of Spot QS Viewer (optional)
- Complete software package
- Equates to the exposure limit values of the EU-Directive 2004/40/EG
- Easy and quick exchanging of C- and X-gun

## Technical data

**Connection data**

| | |
|---|---|
| Voltage: | 3 x 400 V / 50 Hz |
| Max. power: | 130 kVA |
| Fuse (delayed action): | 16 A<br>Recommended 32 A |
| Protection type: | IP 21 |
| Insulation class: | F |
| Compressed air supply: | 6 bar |
| Required ground-fault circuit interrupter: | RCD Typ B+ provided on-site |

**Power unit for transformer gun (10 kHz)**

| | |
|---|---|
| Output current: | 0 - 230 A |
| Output voltage: | 560 V |

**Cooling**

| | |
|---|---|
| Cooling power: | 1000 W |
| Tank capacity: | 20 l |
| Flow rate: | 6 l/min |

**Construction**

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

## Technical data Transformer C- and X-Gun

**Connection data**

| | |
|---|---|
| Primary voltage / Frequency: | 560 V / 10 kHz |
| Primary power (100% ED): | 7 kVA |
| Protection type: | IP 21 |
| Insulation class: | F |
| Cooling type: | WF |

**Welding circuit**

| | |
|---|---|
| Welding current: | 13 kA (dep. on fitting) |
| Open-circuit voltage: | 12,5 V DC |

**Mechanical data**

| | |
|---|---|
| Electrode force: | 0-5,5 kN |
| Weight (without force) | |
| C-Gun: | 10,5 kg |
| X-Gun: | 14,5 kg |

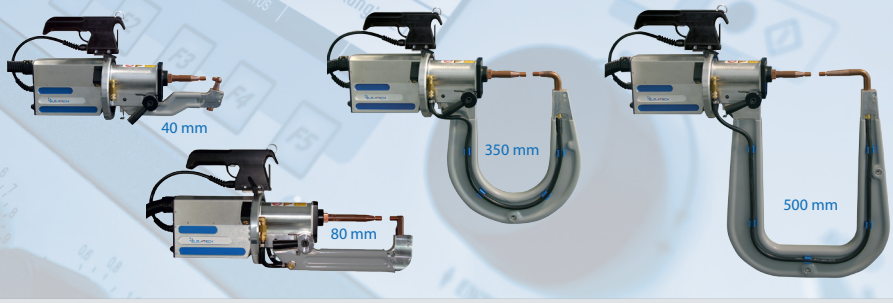
Special voltage 200-500 V / 50-60 Hz on demand.
Technical modifications reserved.

## Accessories (optional)

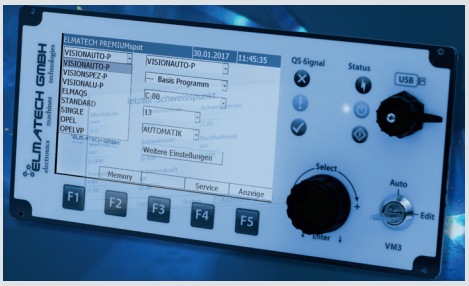
1. Multi-function push spot welding gun / spotter (cable length 2.5m) with pulling hammer for dent repairs, pulling, pushspotting and tacking
2. Accessory case for pulling
3. Special electrode cap cutting machine for quick and easy trimming of the electrode caps
4. Electrode cap cutter
5. Accessory case with electrode caps
6. Cover
7. X-Gun adapter with beak electrodes
8. X-Gun adapter with angular electrodes
9. Balancer-Kit (Boom + Balancer)
10. Active cooling (for high stress conditions)

## Standard delivery program

C-gun with 6 m cable hose packet
Arms: 40 / 80 / 350 / 500 mm outreach
10 m main connection with 32 Amp. plug, electrode case
Software:
VISION-AUTO, VISION-SPEZIAL, VISION-ALU, ELMA-QS, STANDARD, SINGLE, OPEL, OPEL-VP




## Welding control VM




Assurance of production quality by vehicle-specific default parameters programmed into the control.

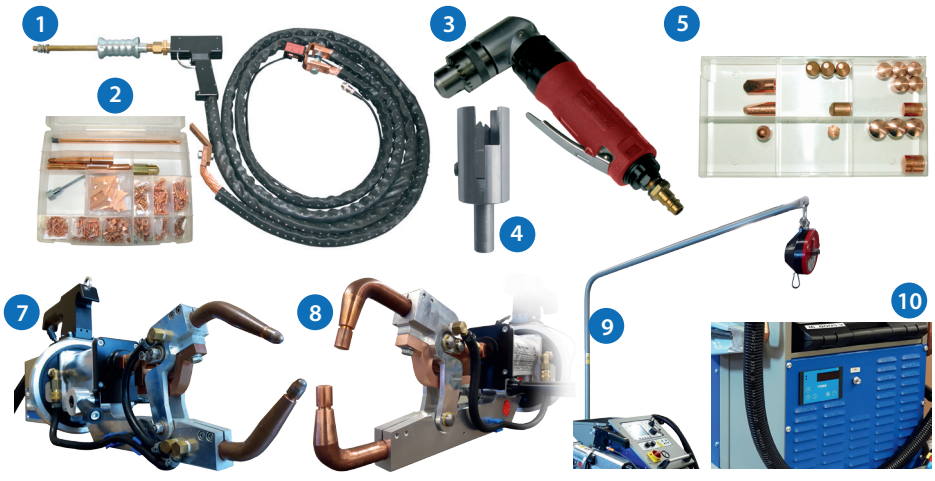
Programs can be updated via USB-stick at any time.

Secure long-term investment, thanks to flexible control-system technology and updating of the "Virtual Machine" developed by ELMA-Tech for the most different welding processes.

## SpotQS Viewer welding data documentation (optional)


With the SpotQS Viewer software welding parameters for spot-weld joints are displayed and evaluated.

After a welding job the parameters as well as the welding result can be written onto the USB-device.
The record of the welding result corresponds to the image of the quality management indicator lights in the control panel.

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