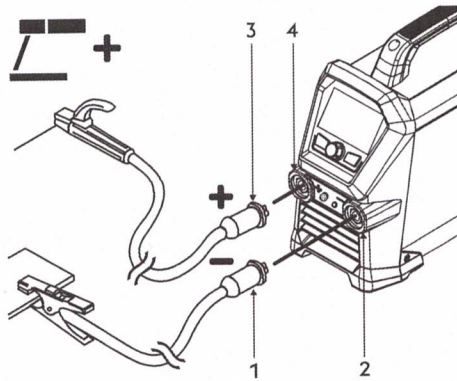


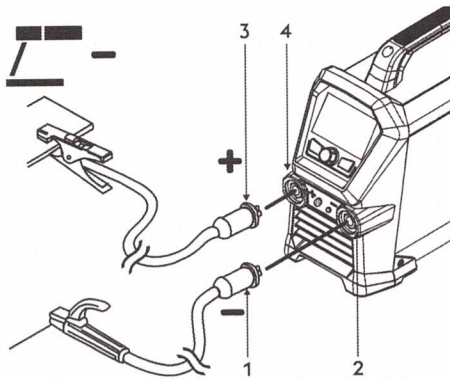
3.4 Installation

3.4.1 Connection for MMA welding



- 1 Earth clamp connector
- 2 Negative power socket (-)
- 3 Electrode holder clamp connector
- 4 Positive power socket (+)

- ▶ Connect the earth clamp to the negative socket (-) of the power source. Insert the plug and turn clockwise until all parts are secured.
- ▶ Connect the electrode holder to the positive socket (+) of the power source. Insert the plug and turn clockwise until all parts are secured.

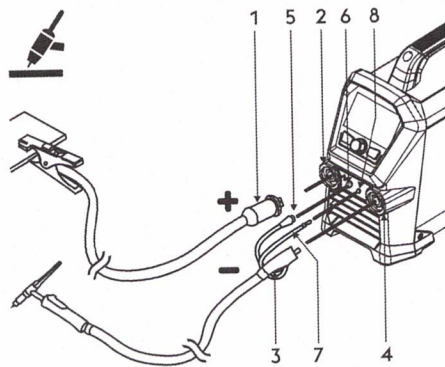


- 1 Electrode holder clamp connector
- 2 Negative power socket (-)
- 3 Earth clamp connector
- 4 Positive power socket (+)

- ▶ Connect the electrode holder cable connector to the negative (-) socket of the generator. Insert the plug and turn clockwise until all parts are secured.
- ▶ Connect the earth clamp to the positive socket (+) of the power source. Insert the plug and turn clockwise until all parts are secured.

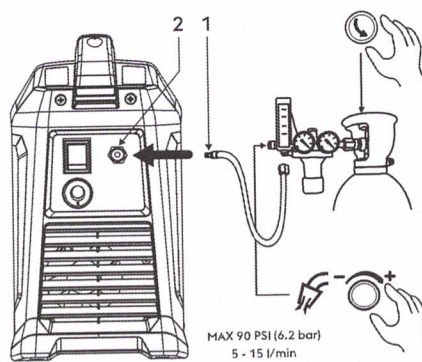
3.4.2 Connection for TIG welding

- ▶ Separately connect the torch gas hose connector to the gas main.



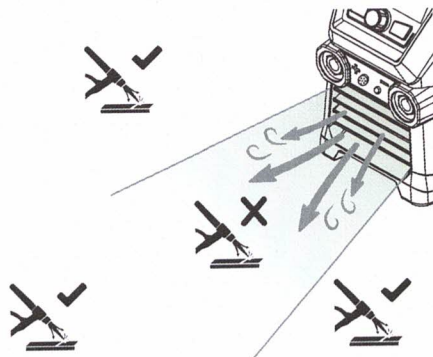
- 1 Earth clamp connector
- 2 Positive power socket (+)
- 3 TIG torch fitting
- 4 Torch socket
- 5 Torch signal cable
- 6 Connector
- 7 Torch gas tube
- 8 Connection-union

- ▶ Connect the earth clamp to the positive socket (+) of the power source. Insert the plug and turn clockwise until all parts are secured.
- ▶ Connect the TIG torch connector to the negative socket (-) of the power source. Insert the plug and turn clockwise until all parts are secured.
- ▶ Connect the signal cable of the torch to the appropriate connector.
- ▶ Connect the gas hose of the torch to the appropriate union/connection.



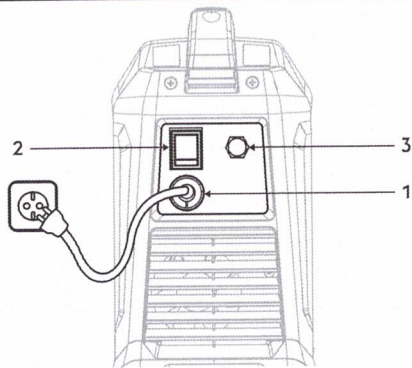
- 1 Gas tube
- 2 Rear gas connection

- ▶ Connect the gas hose from the cylinder to the rear gas connection. Adjust the gas flow from 5 to 15 l/min.



- ▶ The machine's front airflow may interfere with the TIG torch gas flow.

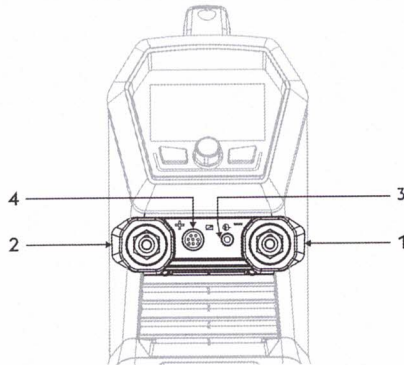
4. SYSTEM PRESENTATION



- 1 **Power supply cable**
Connects the system to the mains.
- 2 **Off/On switch**
Turns on electric power.
It has two positions, "O" off, and "I" on.
- 3 **Gas fitting**

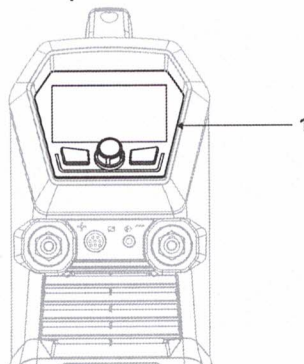
EN

4.1 Sockets panel



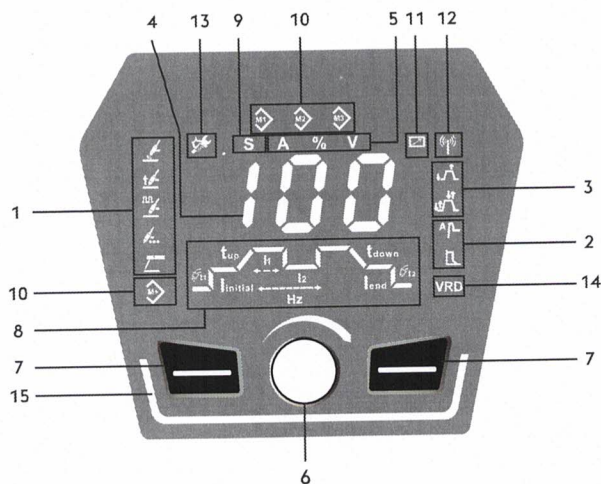
- 1 **Negative power socket (-)**
Process MMA: Connection earth cable
Process TIG: Torch connection
- 2 **Positive power socket (+)**
Process MMA: Connection electrode torch
Process TIG: Connection earth cable
- 3 **Gas fitting**
- 4 **Torch button connection**

4.2 Front control panel



- 1 **Front control panel**

EN



- 1 Selector of the welding process**
 Allows the selection of the welding procedure.

 - TIG welding process
 - TIG LIFT welding process
 - Pulsed TIG welding process
 - TIG Spot welding process
 - MMA welding process

- 2 Functions**
 Let you select the various system functions:

 - Hot start
 - Arc force

- 3 Welding methods**
 Allows selection of the desired welding mode.

 - 2 Step
 - 4 Step

- 4 7-segment display**
 Allows the general welding machine parameters to be displayed during start-up, settings, current and voltage readings, while welding, and encoding of the alarms.

- 5 Measurements selector**
 Allows to view the actual welding current or voltage on the display.

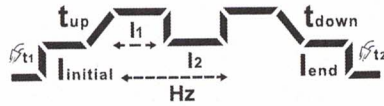
 - Amperes
 - Percentage value
 - Volts

- 6 Main adjustment handle.**
 Allows the welding current to be continuously adjusted.

- 7 Function keys**
 Let you select the various system functions:

8 **Welding parameters**

The graph on the panel allows the selection and adjustment of the welding parameters.



9 **Seconds selector**

Parameter setting: seconds (s).

S

10  **Program storage**

Allows the storage and management of 3 jobs which can be personalised by the operator.

11  **External devices (RC)**

12  **External devices (wireless)**

13  **Maintenance warning**

14 **VRD** VRD (Voltage Reduction Device)

Voltage Reduction Device

Allows output voltage to be reduced within the limits set by regulations for use in harsh environments.

Active function (Green)

Default: OFF (icon light off)

Contact the Service Dpt. to request activation instructions (eq-service@voestalpine.com).

15 **LED bars**



System in standby (White)

System switched on and arc ignited (Green)

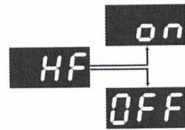
System in error alarm (Red)

System in warning alarm (Orange) (=25% duty cycle remaining)

System in wireless configuration (Blue)

5. EQUIPMENT USE

5.1 Starting Screen

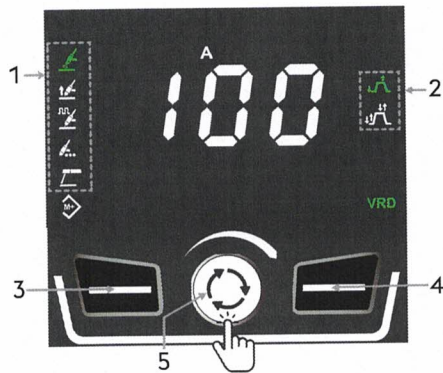


Starting Screen


When switched on, the generator informs you whether the high frequency discharge is active.

HF=on/HF=off

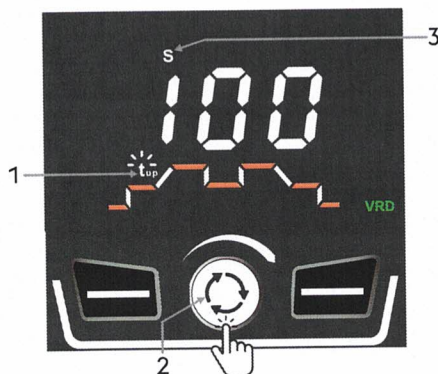
5.2 Main Screen



Main Screen

1. Welding process symbol
 - Process selected (Green).
 - Process available (White).
2. Function symbol
 - Function enabled (White).
 - Active function (Green).
3. Selector of the welding process.
4. Welding function selector.
 - When JOB recall mode  is active, press and hold the button for 3 seconds to scroll through the available welding functions.
5. They allow adjustment of the welding parameters (press to scroll and select the parameters to change).
 - Allows the regulation of the welding current (turn to change the value).

5.3 Main Screen



Parameter setting

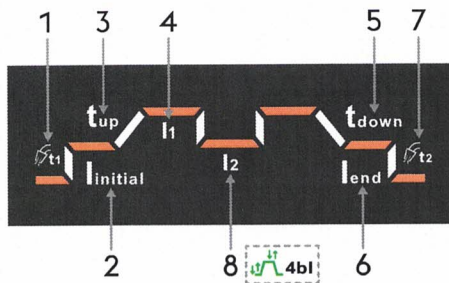
The graph on the panel allows the selection and adjustment of the welding parameters.

Press the encoder button to display the graphic.
To keep the graphic continuously visible, set the Setup parameter SEC=yes.

The graphic is not available in MMA mode.

1. One parameter is displayed at a time.
2. Select the required parameter by rotating the encoder.
 - Press the encoder button to modify the parameter (icon flashing).
 - Turn the encoder to set the new value
3. The indicator shows the parameter's unit of measurement.
 - Press the encoder button to confirm (icon steady).
 - Welding current adjustment becomes available again after 3 seconds.

5.4 HF TIG process main screen



Welding process selection

1. Select the desired process by pressing the button.
2. Process selected (Green).
3. Function symbol
 - Function enabled (White).
 - Active function (Green).
4. Allows selection of the available welding functions (press to scroll through and select the functions).
5. They allow adjustment of the welding parameters (press to scroll and select the parameters to change).
 - Allows the regulation of the welding current (turn to change the value).

Welding current

Minimum	Maximum	Default
5 A	I _{max}	100 A

Parameter setting

1. Pre-gas.

Minimum	Maximum	Default
0.0s	3.0s	0.2s

2. Start current.

Minimum	Maximum	Default
10%	200%	20%

3. Slope-up.

Minimum	Maximum	Default
0.0s	10.0s	0.5s

4. Welding current. I1

Minimum	Maximum	Default
5A	I _{max}	100A

5. Slope-down.

Minimum	Maximum	Default
0.0s	10.0s	0.5s

6. Final current.

Minimum	Maximum	Default
10%	200%	20%

7. Post-gas.

Minimum	Maximum	Default
0.5s	20.0s	0.6s

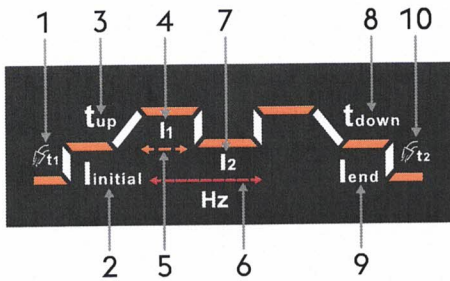
☞ Parameter I2 is active and can be selected only if the belevel function is also active and has been selected.

Set up $4t = 4bl$

8. Welding current. I2

Minimum	Maximum	Default
10%	95%	20%

5.5 Pulsed TIG HF process main screen



Welding process selection

1. Select the desired process by pressing the button.
2. Process selected (Green).
3. Function symbol
 - Function enabled (White).
 - Active function (Green).
4. Allows selection of the available welding functions (press to scroll through and select the functions).
5. They allow adjustment of the welding parameters (press to scroll and select the parameters to change).
 - Allows the regulation of the welding current (turn to change the value).

Welding current

Minimum	Maximum	Default
5 A	I _{max}	100 A

Parameter setting

1. Pre-gas.

Minimum	Maximum	Default
0.0s	3.0s	0.2s

2. Start current.

Minimum	Maximum	Default
10%	200%	20%

3. Slope-up.

Minimum	Maximum	Default
0.0s	10.0s	0.5s

4. Peak welding current. I₁

Minimum	Maximum	Default
5A	I _{max}	100A

5. Duty cycle.

Minimum	Maximum	Default
10%	90%	50%

6. Pulse frequency.

Minimum	Maximum	Default
0.2Hz	300Hz	1.0Hz

7. Base welding current. I₂

Minimum	Maximum	Default
10%	95%	20%

8. Slope-down.

Minimum	Maximum	Default
0.0s	10.0s	0.5s

9. Final current.

Minimum	Maximum	Default
10%	200%	20%

10. Post-gas.

Minimum	Maximum	Default
0.5s	20.0s	0.6s

5.6 TIG HF spot welding process main screen



Welding process selection

1. Select the desired process by pressing the button.
2. Process selected (Green).
3. Function symbol
 - Function enabled (White).
 - Active function (Green).
4. Allows selection of the available welding functions (press to scroll through and select the functions).
5. They allow adjustment of the welding parameters (press to scroll and select the parameters to change).
 - Allows the regulation of the welding current (turn to change the value).

Welding current

Minimum	Maximum	Default
5 A	Imax	100 A

Parameter setting

Welding parameters

1. Pre-gas.

Minimum	Maximum	Default
0.0s	3.0s	0.2s

2. Start current.

Minimum	Maximum	Default
10%	200%	20%

3. Welding current. I1

Minimum	Maximum	Default
5A	Imax	100A

4. Welding time.

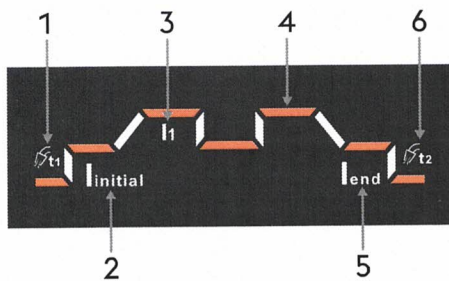
Minimum	Maximum	Default
0.0s	20.0s	0.5s

5. Final current.

Minimum	Maximum	Default
10%	200%	20%

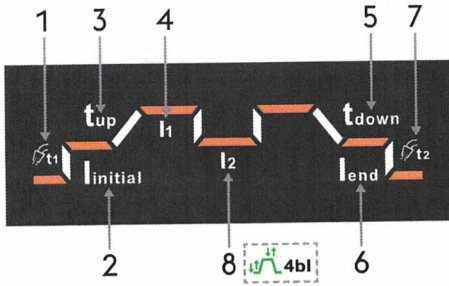
6. Post-gas.

Minimum	Maximum	Default
0.5s	20.0s	0.6s



EN

5.7 TIG Liftprocess main screen



Welding process selection

1. Select the desired process by pressing the button.
2. Process selected (Green).
3. Function symbol
 - Function enabled (White).
 - Active function (Green).
4. Allows selection of the available welding functions (press to scroll through and select the functions).
5. They allow adjustment of the welding parameters (press to scroll and select the parameters to change).
 - Allows the regulation of the welding current (turn to change the value).

Welding current

Minimum	Maximum	Default
5 A	I _{max}	100 A

Parameter setting

1. Pre-gas.

Minimum	Maximum	Default
0.0s	3.0s	0.2s

2. Start current.

Minimum	Maximum	Default
10%	200%	20%

3. Slope-up.

Minimum	Maximum	Default
0.0s	10.0s	0.5s

4. Welding current. I1

Minimum	Maximum	Default
5A	I _{max}	100A

5. Slope-down.

Minimum	Maximum	Default
0.0s	10.0s	0.5s

6. Final current.

Minimum	Maximum	Default
10%	200%	20%

7. Post-gas.

Minimum	Maximum	Default
0.5s	20.0s	0.6s

Parameter I2 is active and can be selected only if the bevel function is also active and has been selected.

Set up $4t = 4bl$

8. Welding current. I2

Minimum	Maximum	Default
10%	95%	20%