

LEISTER Uniplan S / Unifloor S Automatic hot air welding machine



Please read operating instructions carefully before use and keep it for further reference.

APPLICATION

LEISTER Uniplan S Automatic Overlap Welding Machine

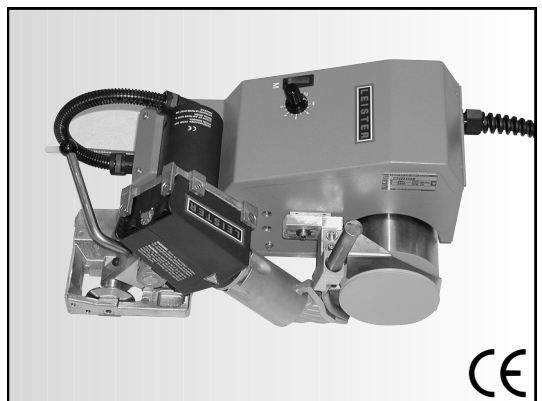
- Overlap and tape welding of coated fabrics, foils and membranes made from PVC-P, PE, ECB, CSPE, EPDM, PVDF etc. as well as PE woven materials for truck covers, tents, covers for agriculture and construction, biotopes, swimming pools, awnings, boat covers, inflatable boats, billboards, banners.

Welding seam width 20 or 30 mm



LEISTER Unifloor S Automatic Flooring Welding Machine

- Welding of PVC coverings and melt welding of linoleum floor coverings.





WARNING



Danger! Unplug the tool before opening it, as live components and connections are exposed.



Incorrect use of hot air tools can present a **fire and explosion hazard**, particularly in the proximity of flammable materials and explosive gases.



Danger of getting burned! Do not touch the heater tube and nozzle when they are hot. Let the tool cool down. Do not point the hot air flow in the direction of people or animals.



Only connect the tool to a **receptacle outlet with protective earth conductor**. Any disconnection of the protective earth conductor, in or outside the tool is dangerous!

Only use extension lead with a protective earth conductor.



CAUTION



The **rated voltage** stated on the tool must correspond with the mains voltage.



For personal protection, we strongly recommend the tool to be connected to an **RCCB** (Residual Current Circuit Breaker) before using it on construction sites.



The tool must be operated **under supervision**.

- Heat can ignite flammable materials which are not in view.
- Interference can impair the welding process when taking place in the vicinity of high-frequency installations.



Protect the tool **from damp and wet**.

Approval Marks



TECHNICAL DATA

Protection Class I



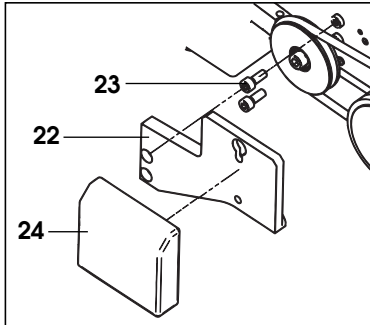
CCA certified

		230 ★	120 ★	100 ★
Voltage	V~	230 ★	120 ★	100 ★
Frequency	Hz	50 / 60	50 / 60	50 / 60
Capacity	W	2300	1800	1500
Temperature	°C	20 – 620	20 – 620	20 – 620
Air flow	l/min.	Max. 300	Max. 250	Max. 250
Drive speed	m/min.	1.0 – 7.5	1.0 – 7.5	1.0 – 7.5
Noise emission level	L _{pA} (dB)	67	65	65
Dimensions Uniplan S	mm	420×270×210	420×270×210	420×270×210
Dimensions Unifloor S	mm	420×270×215	420×270×215	420×270×215
Weight Uniplan S	kg	11.5	11.5	11.5
Weight Unifloor S	kg	14.0	14.0	14.0

★ Mains voltage cannot be switched over

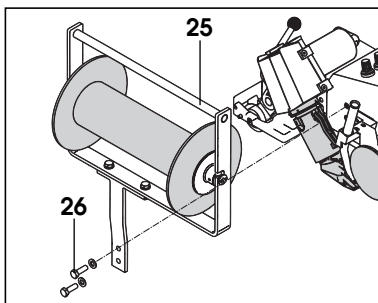
- **Assembly of additional weight**
 - Fasten the **additional weight holder (22)** to the Uniplan S machine with **cheese head screw M8×20 (23)**.
 - Attach the **additional weight (24)** to the **additional weight holder (22)**.

Additional weight accessories

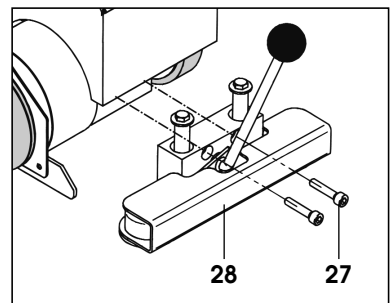


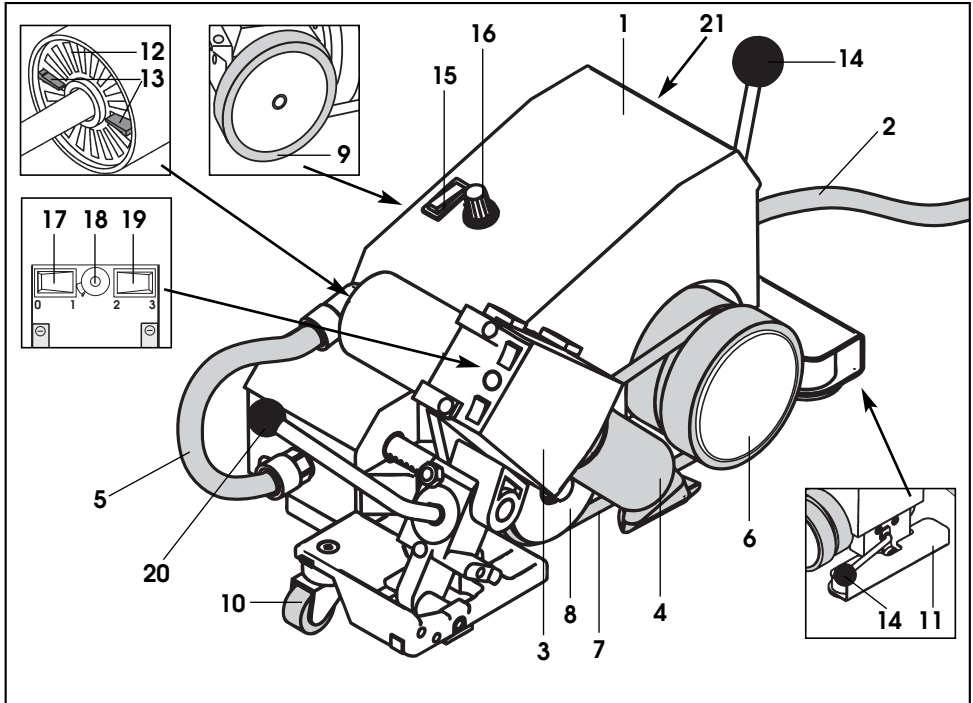
- **Operational condition: Accessories**
- If the **welding rod de-reeler (25)** and **lifting device (11)** are available:
 - Attach **welding rod de-reeler (25)** to the Unifloor S machine using **cheese head screw M8 × 20 (26)**.
 - Attach **lifting device (11)** using **socket head cap screw M6 × 30 (27)**.

Accessory Welding rod de-reeler



Accessory Lifting device





Main components

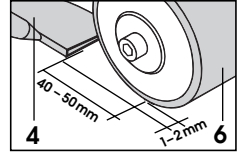
1. Housing/chassis
2. Mains cable
3. Hot air blower
4. Welding nozzle
5. Connection hose
6. Drive/pressure roller
7. Pressure belt
8. Guide roller
9. Drive roller
10. Steering roller
11. Lifting device
12. Air filter
13. Manual air valve

Operating components

14. Lifting device lever
15. Drive switch
16. Potentiometer for welding speed
17. Air blower switch
18. Potentiometer for air temperature
19. Two stage switch for airflow
20. Swivel lever
21. Fuse
T 1.0 A 230 V~
T 1.2 A 120 V~

Operating condition

- Check the nozzle's basic setting (see diagram).
- Connect the tool to the mains. The mains voltage must correspond with the voltage rating stated on the tool.



Tool positioning

- Swivel **hot air blower (3)** using **swivel lever (20)** up to the stop.
- Operate **lifting device (11)** by means of **lifting device lever (14)** so that **drive/pressure roller (6)** and **drive roller (9)** are at no-load.
- Position the automatic welding machine on the overlap of the material to be welded. The outside edge of **drive/pressure roller (6)** must line up with the overlap edge of the material to be welded.
- Activate **lifting device (11)** by means of **lifting device lever (14)** so that the automatic welder is ready to run.

Welding parameters

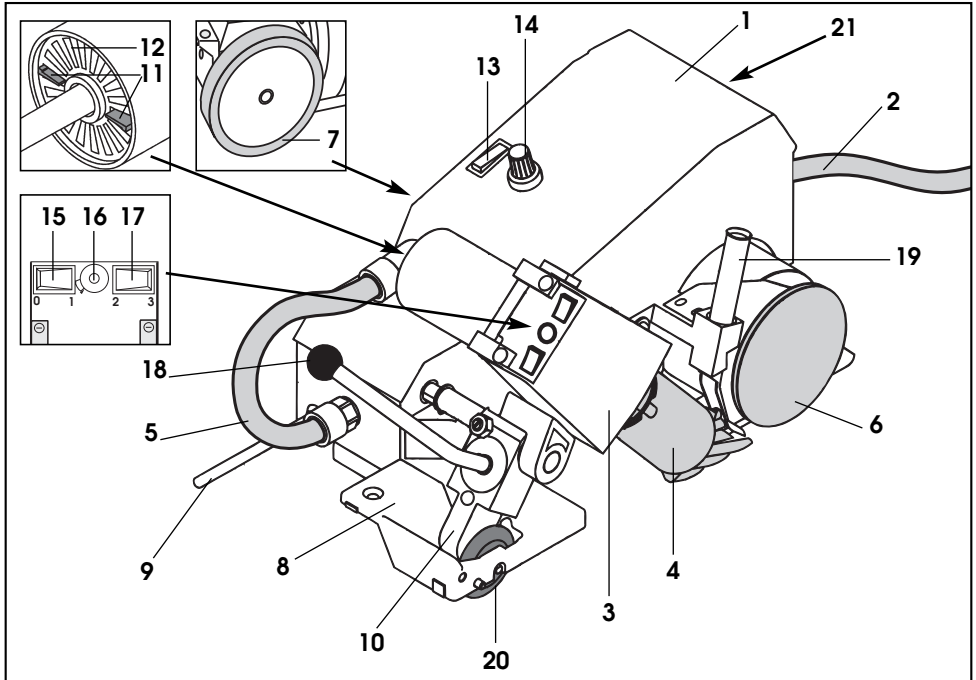
- Set **potentiometer for welding speed (16)** to the required value.
- Set **potentiometer for air flow (18)** to the required value.
- Turn on **air blower switch (17)**. Set the **two stage switch for airflow (19)** at setting 3 and heat up for about 5 minutes.
- **Important: low voltage.**

If the maximum temperature is not reached, reduce the airflow by means of the **manual air valve (13)** and **two stage switch for airflow (19)**.

- The contact pressure is effected through the weight of the automatic hot air welding machine itself. Use the additional weight accessory as required (see assembly of additional weight, page 3).

Welding procedure

- Swivel the **hot air blower (3)** up to the stop using **swivel lever (20)** and at the same time turn on the **drive switch (15)** (the welding process starts).
- Supervise the welding process. As necessary correct the welding speed with the **potentiometer (16)**. Lead the automatic welding machine by its chassis along the length of the overlap.
- When welding has finished, swing up the **hot air blower (3)** to the stop by means of the **swivel lever (20)**.
- Switch off the **drive switch (15)**.
- After completing welding work, set the **potentiometer for air temperature (18)** to zero, so that the **hot air blower (3)** cools down. Then turn off the **air blower switch (17)**.
- Disconnect the tool from the mains.



Main components

- 1. Housing
- 2. Mains cable
- 3. Hot air blower
- 4. Welding nozzle with cover
- 5. Connection hose
- 6. Welding rod pressure roller
- 7. Drive roller
- 8. Chassis
- 9. Wall switch-off
- 10. Support bracket
- 11. Manual air valve
- 12. Air filter

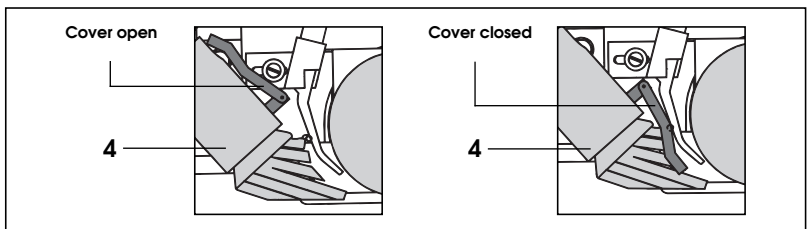
Operating components

- 13. Drive switch
- 14. Potentiometer for welding speed
- 15. Air blower switch
- 16. Potentiometer for air temperature
- 17. Two stage switch for airflow
- 18. Swivel lever

Steering equipment

- 19. Welding rod guide tube
- 20. Guide roller
- 21. Fuse T 1.0 A 230 V~
T 1.2 A 120 V~

Detail A



Operating condition

- Check the nozzle setting: the nozzle must maintain a distance from the base material and the welding rod of about 2-3 mm.
- When welding linoleum, lower the **cover** on to the **welding nozzle (4)** (see Detail A:Page 6).
- Connect the tool to the mains.

Tool positioning

- Swivel **hot air blower (3)** up to the stop using **swivel lever (19)**.
- Position the automatic welding machine over the joint to be welded.
- Insert the welding rod through the **welding rod guide tube (19)**, pull it under the **welding rod pressure roller (6)** and place it in the joint.
- The **Guide roller (20)** must run in the welding joint.

Welding parameters

- Set **potentiometer for welding speed (14)** to the required value.
- Set **potentiometer for air temperature (16)** to the required value.
- Turn on the **air blower switch (15)**, set the **two stage switch for airflow (17)** at setting 3 and heat up for about 5 minutes.
- **Important: low voltage.**
If the maximum temperature is not reached, reduce the airflow by means of the **manual air valve (11)** and the **two stage switch for air flow (17)**.
- The contact pressure is effected through the weight of the automatic hot air welding machine itself.

Welding procedure

- Swivel **hot air blower (3)** up to the stop using **swivel lever (18)** and at the same time turn on the **drive switch (13)** (The welding process starts).
- Supervise the welding process: – **Guide roller (20)** must run in the joint.
– The welding bead must be visible. If necessary adjust the welding parameters using the **potentiometer (14)**.
- **Wall switch-off (9)**
When contact is made with the wall, the drive and heater are switched off automatically.
- When welding is finished, swing up the **hot air blower (3)** to the stop by means of **swivel lever (18)**.
- Switch off the drive **switch (13)**. Cut off the welding rod. Re-position the automatic welding machine as necessary.
- After completing work, set **potentiometer for air temperature (16)** to zero so that **hot air blower (3)** cools down. Then turn off the **air blower switch (15)**.
- Disconnect the tool from the mains.

ACCESSORIES

- Only LEISTER accessories should be used.
- Additional weight with holder for Uniplan S
- Welding rod de-reeler for Unifloor S
- Lifting device for Unifloor S

TRAINING

- LEISTER Process Technologies and their authorised Service Centres offer welding courses world-wide free of charge.

MAINTENANCE

- Clean the tool's **air filter (12)** with a brush when dirty.
- Clean **welding nozzle (4)** with wire brush.
- Check **mains cable (2)** and plug for electrical and mechanical damage.

SERVICE AND REPAIR

- Have your Service Centre check the motor brushes after about 1,000 hours of operation.
- Repairs have to be carried out by authorised **LEISTER Service Centres** only. They guarantee, **within 24 hours**, a correct and reliable **repair service** using original spare parts in accordance with the circuit diagrams and spare parts lists.

GUARANTEE AND LIABILITY

- Guarantee and liability are in accordance with the guarantee certificate as well as with the currently valid general business and sales conditions.
- LEISTER Process Technologies rejects any guarantee claims for tools which are not in their original condition. The tools must never be altered or changed.

Technical data and specifications are subject to change without prior notice.

Your authorized Service Centre is: