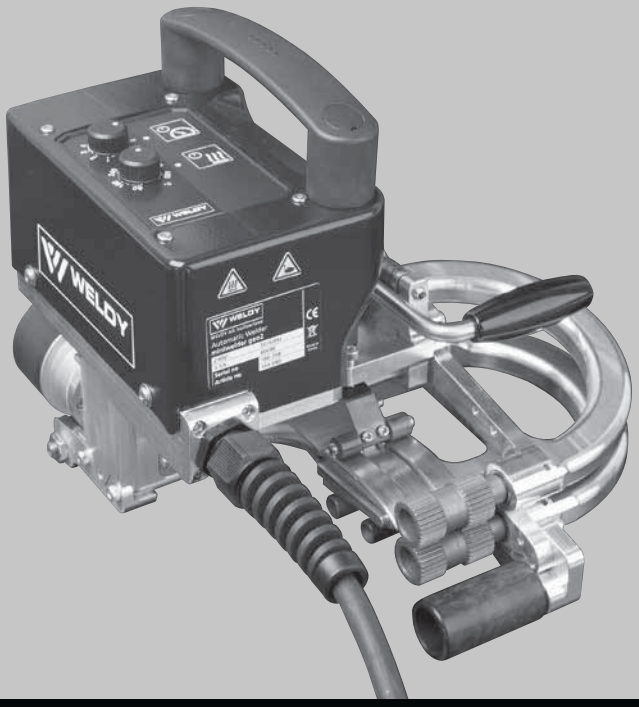
GB CN

miniwelder geo2
miniwelder tex2

Automatic Welder

Operating Manual



CE

Weldy AG
Galileo-Strasse 10
CH-6056 Kaegiswil
Switzerland

GB Operating instructions (Original operating instructions)

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

WELDY miniwelder
Automatic Welder

Warning

DANGER!
Danger when opening up the tool, as components and connections are exposed. Therefore, before opening it, unplug the tool to ensure disconnection from the mains.

Danger of fire and explosion! Incorrect use of the automatic welder (e.g. overheating of the material) can present a fire and explosion hazard, especially near combustible materials and explosive gases.

Danger – can cause burns! Do not touch bare metal parts and emerging material while hot. Allow the device to cool down.

Only connect the tool to a **receptacle with protective earth conductor.** Any disconnection of the protective earth conductor, in or outside the tool is dangerous! **Use line/mains extension cables with protective earth/ground conductor and adequate cross sectional area only!**

Moving parts may not be touched. The danger exists of inadvertently becoming caught and being pulled in.

Caution

The **voltage rating** stated on the tool must correspond to the mains voltage.
In case of a power loss, the **potentiometer drive speed (12)** and **potentiometer heating (15)** had to be set to 0.

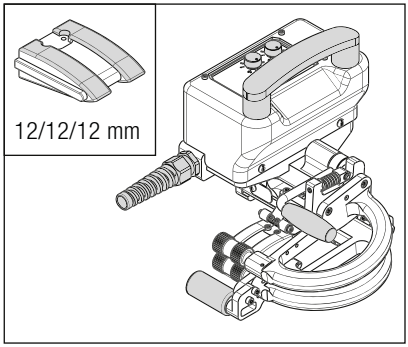
For personal protection on building sites we **strongly recommend** the tool be connected to a **RCCB** (**R**esidual **C**urrent **C**ircuit **B**reaker).

The tool must be operated **under supervision.** Heat can ignite flammable materials which are not in view. The machine may only be used by **qualified specialists** or under their supervision. Children are not authorized to use this machine.

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

While working on the open system avoid wearing garments such as shawls, scarves and ties. Long hair must be tied or protected by headgear.

Application miniwelder geo2



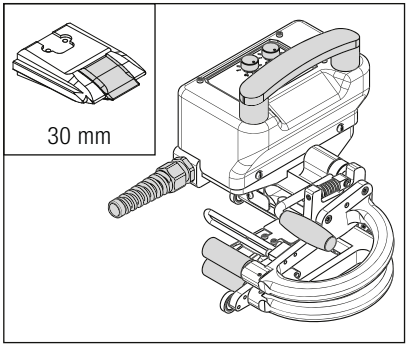
Note: For welding materials made of **PVC** a special machine with a **steel wedge** must be used.

Intended use:
The miniwelder geo2 is designed for overlap welding of thinner geo membranes made from: LDPE, HDPE, PP, PVC, EVA.
Any use other than or beyond that described above is deemed non-intended.

Areas of use:
Civil engineering, landfills, expressways, water-proofing works, reservoirs, artificial lake and pond construction, production of covers, fish farms, agriculture, biogas retaining bags, etc.

Options:
Steel pressure rollers with test channel, wedge type GEO, hold-down rollers, outdoor travel rollers, pressure spring brown.

Application miniwelder tex2



Note: For welding materials made of **PVC** a special machine with a **steel wedge** must be used.

Intended use:
The miniwelder tex2 is designed for overlap welding of materials made from; textiles and coated textiles and thinner synthetics from 100 microns up made from PE, PP, PVC, EVA.
Any use other than or beyond that described above is deemed non-intended.

Areas of use:
Production of sealing barriers and covers in agriculture, ponds, greenhouses, tarpaulins, architecture.

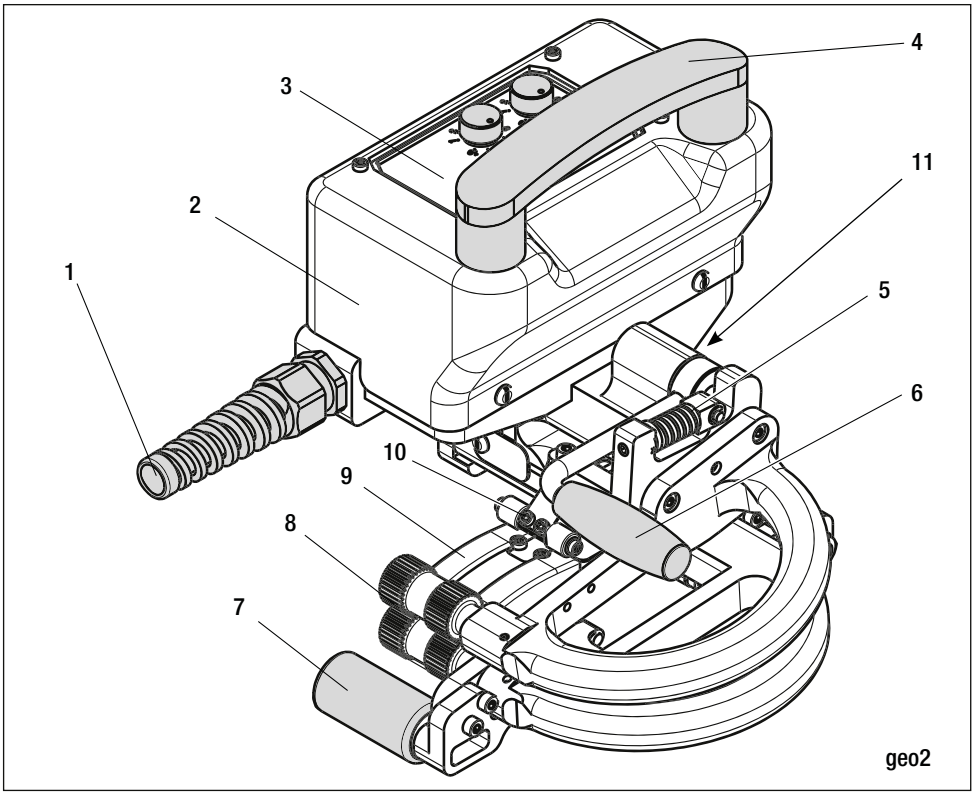
Options:
Silicon rollers without test channel, wedge type TEX, hold down bar, indoor travel rollers, pressure spring yellow.

Technical data

Voltage	**V~**	230
Power consumption	**W**	800
Frequency	**Hz**	50/60
Wedge temperature max.	**°C**	480
Emission level	**LpA (dB)**	60
Weight	**kg**	3.5 (tex2), 3.9 (geo2)
Speed	**m/min**	0.2–8.0
Material thickness	**mm**	0.1–1.5 (depending upon material type) max. 1.0 HDPE
Max. overlap	**mm**	100
Mark of conformity		CE
Protection class I		⏚

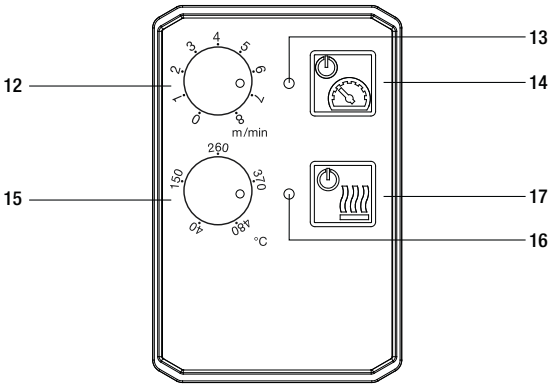
Technical data and specifications are subjected to change without prior notice.

Device description



1. Power cord
2. Housing
3. Control box
4. Carry/guide handle
5. Pressure spring
6. Tension lever
7. Travel rollers
8. Pressure rollers
9. Wedge
10. Hold down rollers
11. Drive motor

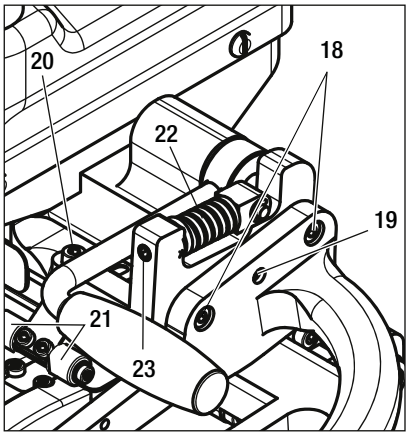
User Interface



12. Potentiometer drive speed
13. Status LED drive
14. Drive On/Off button

15. Potentiometer heating
16. Status LED
17. Heating On/Off button

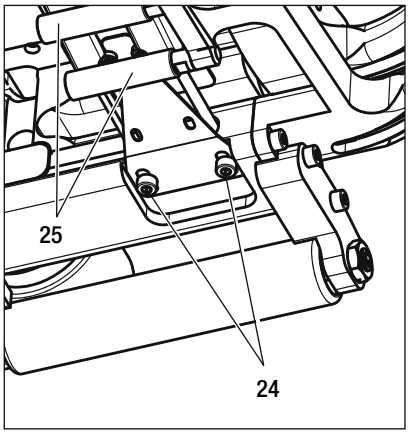
Adjustments



Before adjusting components, pull plug from power supply.

Fine adjustment Pressure
Turn **adjusting screw (23)** anticlockwise to reduce the pressure down to 30 % of the maximum welding pressure. For thinner or softer materials reduce the pressure.

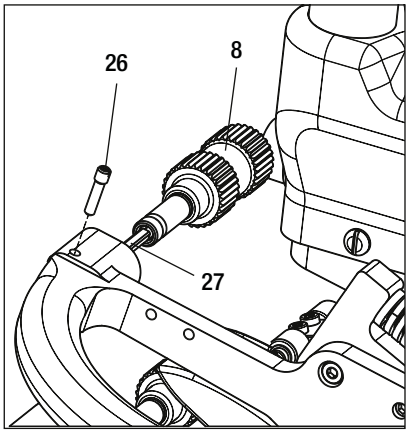
Pressure roller alignment (Drive rollers)
Loosen **screw (19).** By turning **screws (18)** you can adjust the angle of the upper pressure roller. This adjusts the position to the lower pressure roller. Carry out a test weld to check the position is correct. The weld pressure should be the same from the left side to the right side. Attention in the relaxed position the rollers are not parallel. Adjustment is necessary for HDPE > 0.5 mm. Tighten **screw (19)** to lock the position.



Wedge position adjustment
Loosen **screws (24).** Place 2 pieces of the material to be welded between the pressure rollers and close the **tension lever (6).** Move the wedge with light pressure between the material towards the pressure rollers. Wedge should be at right angle to pressure rollers. Tighten **screw (24)**.

Hold down rollers (only for geo2)
Loosen **screw (21),** place 2 pieces of the material to be welded between the pressure rollers and upper and lower hold down rollers. Close the **tension lever (6).** By turning **screw (20)** position the **upper hold down roller (21)** so that there is light pressure on the wedge from the upper and **lower hold down rollers (25).**

Attention: For optimal welding results the material should have maximum contact to the upper and lower side of the wedge during the welding process.



Replacing pressure rollers (8)
Depending on welding material choose the right **pressure rollers (8)** steel or silicone (both in combination also possible). Unscrew **locking screw-pin (26).** Replace upper and/or lower **pressure rollers (8)** and reinsert **locking screw-pin (26).**

Attention:
Square-end of **flexible wire (27)** must be inserted carefully.

Putting into operation

- The power voltage must correspond with the value given on the nameplate. Extension cords must have a conductor cross section of minimum 3 x 1.5 mm2 with capacity not less than 10A. Confirm that external lines have been well connected, check that the power switch is in the OFF position. Turn all temperature and speed controls to the 0 position, open **tension lever (6)** to disengage pressure roller, then insert the plug.
- Turn on the power and select temperature and speed, take 2 narrow pieces of material for welding trials. Temperature selection can be different for the same material at different ambient temperature and material thickness. To determine the best welding result, adjust the speed to approximately 2 m/min, and then make different trial welds while slowly adjusting the temperature from low to high. (approximately 300 – 380 °C).
- Evaluate welding parameters by carrying out tensile testing.
- After temperature and speed have been determined, insert material to be welded between the two pressure rollers, and engage the tension lever to start the welding process
- Check the welded seam (welded bead/weld path). If required, correct the speed with **potentiometer drive (12).**
- When welding is completed, disengage tension lever to prevent damage to the pressure rollers. Pressure rollers should never run against each other without material between them.

Switching off

- Push On/Off-button for heating and drive.
- Allow device to cool-down.
- Disconnect the mains voltage plug.

Test weld

Perform a test welding according to the welding instructions of the material manufacturer and the national standards or guidelines. Check the test welding.

Error messages

Error	Cause	Solving
Drive no function	Motor blocked (>3 sec)	After 5 sec. automatic motor restart
	Motor overheated (> 85 °C)	Cool down motor for 20 min then start again
	Flexible drive shaft defect	Change flexible drive shaft
No or not enough heating power	Heating cartridge defect	Change heating cartridge
	Temperature-probe defect	Change temperature probe
	Under voltage	Use Extension cable with bigger load capacity.
Contact Weldy service center		

Conformity

Weldy AG, Galileo-Strasse 10, CH-6056 Kaegiswil/Switzerland confirms that this product, in the version as brought into circulation through us, fulfils the requirements of the following EC directives

Directives:	2006/42 2004/108 (until 19.04.2016), 2014/30 (starting 20.04.2016) 2006/95 (until 19.04.2016), 2014/35 (starting 20.04.2016) 2011/65
Harmonised standards:	EN 12100, EN 55014-1, EN 55014-2, EN 6100-6-2, EN 61000-3-2, EN 61000-3-3, EN 62233, EN 60335-1, EN 60335-2-45, EN 50581

Kaegiswil, 03.02.2016

Bruno von Wyl, CTO

Andreas Kathriner, GM

Disposal

Electrical equipment, accessories and packaging should be recycled in an environmentally friendly way. **For EU countries only:** Do not dispose of electrical equipment with household refuse!

Transport and storage

To protect the device from damage, dirt, dust and moisture, always store and transport unit in the original box.

The **welding wedge (5)** must be cooled down for transport.

Do not store any flammable materials in the transport box

Maintenance, service and repairs

- The complete machine should be cleaned, greased and placed in a dry place if it is not used.
- For PVC welding, the adhesions on hot wedge should be cleaned off after each weld.
- **Attention:** for welding of material such as PVC that produces corrosive gas we recommend to use a stainless steel hot wedge (optional accessory)
- Repairs should only be carried out by Weldy partners. Restricted to use with original Weldy accessories and spare parts.

Warranty

- For this tool, the guarantee or warranty rights granted by the relevant distributor/seller shall apply. In case of guarantee or warranty claims any manufacturing or workmanship defects will either be repaired or replaced by the distributor at its discretion. Warranty or guarantee rights have to be verified by an invoice or a delivery document. Hot wedge shall be excluded from warranty or guarantee.
- Additional guarantee or warranty claims shall be excluded, subject to mandatory provisions of law.
- Warranty or guarantee shall not apply to defects caused by normal wear and tear, overload or improper handling.
- Warranty or guarantee claims will be rejected for tools that have been altered or changed by the purchaser.

CN 操作说明（原始操作说明的中文译本）

请在使用前仔细阅读说明书
并保存好以便将来参考。

WELDY 迷你焊机
自动焊机

警告

危险！
打开工具时，暴露的部件和连接会造成危险。因此，打开之前，拔掉工具电源以确保断开与电源的连接。

燃烧和爆炸的危险！不正确地使用自动焊接机（如 材料过热）可引发燃烧和爆炸的危险，特别是靠近易燃材料和易爆气体时。

危险 - 可导致烧伤！不要在炙热时接触裸露的金属部件和暴露的材料。先让设备降温。

只能将工具连接 **带接地保护的插座。**无论在室内还是室外，断开接地保护都会造成危险！
仅可使用带接地保护延长线/电源线并保证其有足够的横截面积！

不得触摸运动部件。存在因疏忽大意被卡住并卷入的危险。

小心

工具上的电压额定值 表示必须与相应的电源电压对应。

在断电的情况下，**必须将电位器驱动速度 （12）**和 **电位器加热（15）**设置为 0。

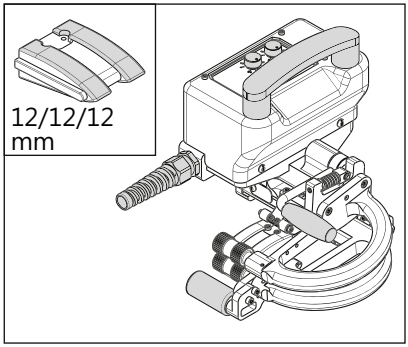
对于在建筑工地上的人员保护， **我们强烈建议**将工具连接到 **RCCB**（**剩**余**电**流 **回**路 **断路**器）。

该工具必须**在监督下使用 。** 过热会造成看不见的易燃材料被点燃。此机器仅可在 **符合资格的专业人员** 或其监督下使用。儿童无权使用这台机器。

保护工具防 **潮** 和 **防湿**。

在开放系统上工作时避免穿例如披肩、 围巾和领带类似的服饰。长发必须盘起或用头罩保护起来。

迷你焊机 geo2 应用



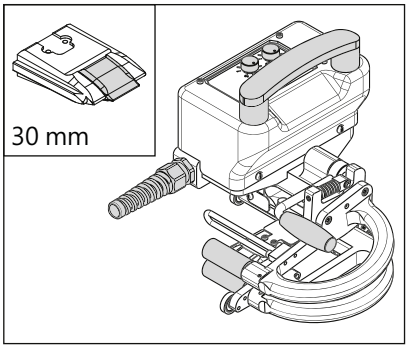
注意：对于由 **PVC** 制作的焊接材料来说，必须使用**带有钢楔**的特殊机器。

用途：
迷你焊机 geo2 专为交叠焊接下列材质的薄膜而设计：LDPE、HDPE、PP、PVC、EVA。
任何其他应用均视为违反设计用途。

应用领域：
土木工程、垃圾填埋场、高速公路、防水工程、水库、人工湖和池塘建设、罩盖生产、鱼类养殖场、农业、沼气袋等。

选项：
配备测试通道的钢制压辊，楔体类型 GEO，压紧辊、户外辊轮、棕色压力弹簧。

迷你焊机 tex2 应用



注意：对于由 **PVC** 制作的焊接材料来说，必须使用**带有钢楔**的特殊机器。

用途：
迷你焊机 tex2 专为交叠焊接下列材质而设计：纺织品和涂层纺织品，100 微米以上的 PE、PP、PVC、EVA 等超薄合成制品。
任何其他应用均视为违反设计用途。

应用领域：
生产密封电池和罩盖，用于农业、池塘、温室、防水油布、建筑篷布。

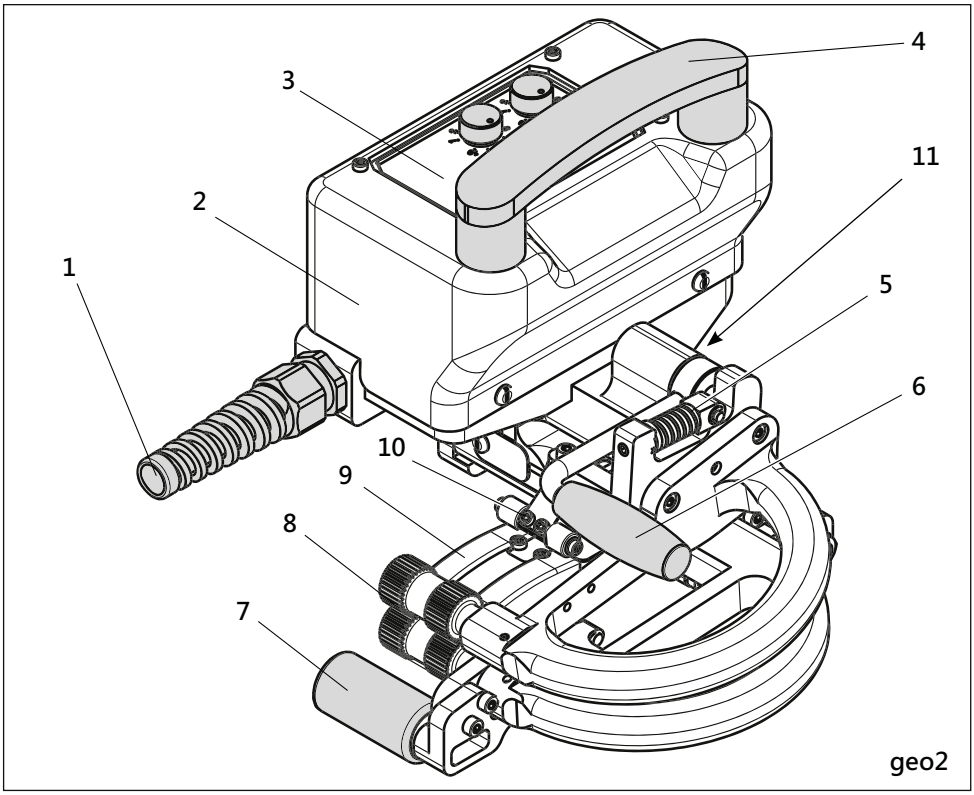
选项：
配备测试通道的硅胶辊，楔体类型 TEX，压紧辊、户内辊轮、黄色压力弹簧。

技术数据

电压	**V~**	230
耗能	**W**	800
频率	**Hz**	50 / 60
最高楔体温度	**°C**	480
噪音	**LpA (dB)**	60
重量	**kg**	3.5（tex2）· 3.9（geo2）
速度	**m/分**	0.2–8.0
材料厚度	**mm**	0.1–1.5（取决于材料类型） 最大 1.0 HDPE
最大交叠	**mm**	100
合格标志		CE
保护级 I		1

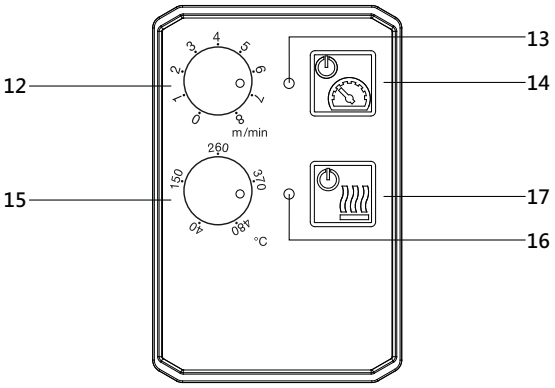
更改技术数据和规格恕不另行通知。

设备说明



1. 电源线
2. 外壳
3. 控制箱
4. 进位/引导手柄
5. 压力弹簧
6. 夹紧杆
7. 辊轮
8. 压紧辊
9. 楔体
10. 压紧轮
11. 驱动电机

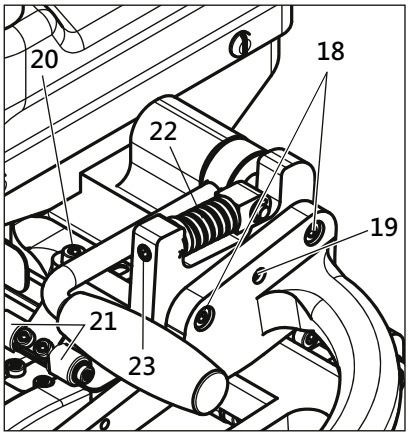
用户界面



12. 电位器驱动速度
13. 驱动状态 LED
14. 驱动开/关按钮

15. 电位器加热
16. 状态 LED
17. 加热开/关按钮

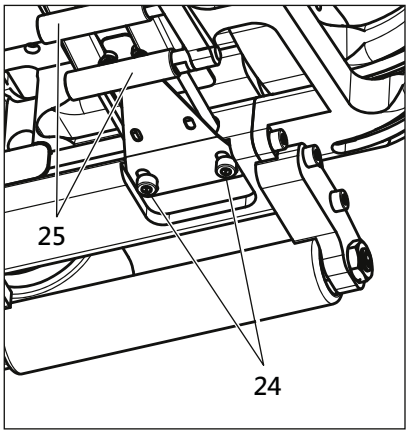
调试



调试部件之前应拔下电源插头。

微调压力
逆时针转动**调节螺栓（23）**，将压力降低到最大焊接压力的 30%。对于较薄或较软的材料应减小压力。

对齐压紧辊（驱动辊）
拧松**螺栓（19）**。通过转动**螺栓（18）**可以调整上部压紧辊的角度。这样调整下部压紧辊的位置。进行试焊以检查位置是否正确。焊接压力从左到右应该相同。注意在放松情况下辊轮不平行。对于 HDPE > 0.5 mm 需要进行调整。拧紧**螺栓（19）**至锁定位置。

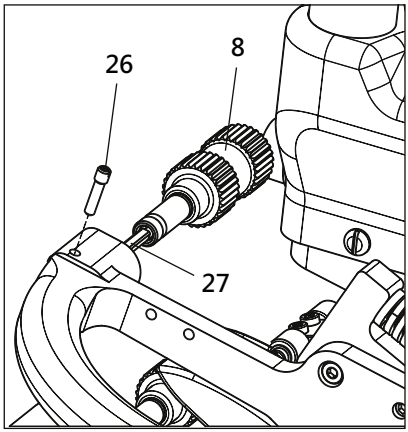


调整楔体位置
拧松**螺栓（24）**。将 2 块材料放到压紧辊中进行焊接，合上**夹紧杆（6）**。稍微施加压力朝加紧滚移动材料间的楔体。楔体应与压紧辊垂直。拧紧**螺栓（24）**。

按住辊轮（仅适用于 geo2）
松开**螺栓（21）**，将 2 块材料放到压紧辊、上下压力辊之间进行焊接。合上**夹紧杆（6）**。通过

转动**螺栓（20）**来调整**上部 压力辊（21）**的位置，使上部和**下部压力辊（25）稍微对楔体施加压力**。

注意：在焊接过程中接触到楔体上下侧的最大面积，可实现最佳的材料焊接效果。



更换压紧辊（8）
根据焊接材料选择适当的钢制或硅胶**压紧辊（8）**（也可两者组合）。松开**锁紧螺销（26）**。更换上部和/或下部**压紧辊（8）**，并重新插入**锁定螺销（26）**。

注意：
必须小心地插入**柔性线（27）**的端头。

投入运营

- 电源必须与铭牌上给定的值相对应。延长线的导体截面最小为 3 x 1.5 mm2，最小容量为 10A。请确认外部线路已经接好，检查电源开关处于关闭位置。将所有温度和速度控制置于 0 位，打开**夹紧杆（6）**使其离开压紧辊，然后插入插头。
- 打开电源并选择温度和速度，用 2 块较窄的材料进行焊接试验。相同材料，在不同环境温度和材料厚度的情况下，可以进行温度选择。为了确定最佳焊接效果，调整速度至大约 2 米/分钟，然后进行不同试焊，同时将温度缓慢地从低调高。（约为 300 – 380 °C）。
- 通过拉伸试验评估焊接参数。
- 确定温度和速度之后，将材料插入两根压紧辊之间进行焊接，并合上夹紧杆开始焊接过程
- 检查焊缝（焊线/焊接路径）。若有需要，则请校正用电位器驱动**（12）校正速度**。
- 焊接结束后，脱开夹紧杆，防止损坏压紧辊。绝对不要再没有中间没有放材料的情况下操作压紧辊。

关断

- 按下加热和驱动的开/关按钮。
- 应使设备冷却。
- 断开电源电压插头。

测试焊接

根据材料生产商的焊接说明以及国家标准或指引，进行试焊接。检查测试焊接。

错误信息

错误	原因	解决方法
驱动失灵	电机卡住 (>3 秒)	5 秒后自动重新启动电机
	电机过热 (> 85 °C)	冷却电机 20 分钟，然后再次启动
	柔性驱动轴损坏	更换柔性驱动轴
无加热功率或不足	加热筒损坏	更换加热筒
	温度探针损坏	更换温度探针
	欠压	使用具有更大负载能力的延长线。
联系 Weldy 服务中心		

合格声明

Weldy AG, Galileo-Strasse 10, CH-6056 Kaegiswil/Switzerland 确认本产品，针对我们经手的版本，满足以下欧盟指令的要求

指令：	2006 / 42 2004/108（至 2016.04.19），2014/30（始于 2016.04.20） 2006/95（至 2016.04.19），2014/35（始于 2016.04.20） 2011/65
协调标准：	EN 12100, EN 55014-1, EN 55014-2, EN 6100-6-2, EN 61000-3-2, EN 61000-3-3, EN 62233, EN 60335-1, EN 60335-2-45, EN 50581

Kaegiswil, 2016.02.03 Bruno von Wyl Kathriner G.

Bruno von Wyl，首席技术官 Andreas Kathriner，总经理

处置

电动设备、配件和包装应进行环保回收。**以下规定仅针对欧盟国家：**切勿将电动设备作为生活垃圾处置！

运输和仓储

为保护设备不会损坏、脏污、积尘和潮湿，运输和仓储时始终应将其放在原始包装中。

运输前须先冷却**焊楔 (5)**。

输送箱内切勿存放任何易燃材料

维护、服务和修理

- 整个机器都应清洁干净，如果不使用，应润滑后并放置在干燥的地方。
- 针对 PVC 焊接，每次焊接后请清除高温楔体上的粘附物。
- **注意：**焊接诸如 PVC 等会产生腐蚀性气体的材料时，建议使用不锈钢热楔（可选配件）
- 修理工作只能由 Weldy 的合作伙伴进行。仅限于使用 Weldy 的原厂附件及配件。

保修

- 此工具适用相关的分销商/卖方所授予的担保或保证的权利。发生保证或保修索赔时，制造或工艺方面的任何缺陷是否需要修复或更换，将由经销商自行酌情决定。保修或保证的权利必须通过发票或交付的文档进行核实。热楔不在保修或保证范围之内。
- 法律强制性规定额外的保证或担保索赔的情况应被排除。
- 保修或保证不适用于正常磨损和撕裂，过载或处理不当引起的缺陷。
- 由买方更改或改变的工具将丧失保修或保证的权利要求。

www.weldy.com

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