



Witzel

Vacupress

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VACUPRESS **COOL-TEC**

620 S3 - UNILOCK

(Translation of Original-)

INSTRUCTION MANUAL

Operations and maintenance

**Before the first commissioning of the unit
please read the safety instructions on page 10!**

**This manual is an integral part of the installation and must be
handed over to a new owner in case of sale or to an operator in
case of use by a third party.**

Index

Chapter	Index	Page
1	Summary	5
1.1	Short description of the unit	5
1.2	Technical specification	6
1.3	Purpose of the VACUPRESS unit	7
1.4	Manual	8
1.5	Definitions	8
2	Safety Instructions	10
2.1	Reading of the manual	10
2.2	Connections	10
2.2.1	Check of power supply	10
2.3	Advice of hazards during operation	11
2.3.1	Working frame	11
2.3.2	Radiation heating	12
2.3.3	Foils	12
2.3.4	Working membrane	13
2.3.5	Solvents	13
3	Description of Function	14
3.1	Main switch	14
3.2	Main handle	14
3.3	The UNI LOCK system	14
3.4	Radiation heating	14
3.5	Illumination	15
3.6	Timer for the radiation heating	15
3.7	Activation grill	16
3.8	Vacuum-Valve	16
3.9	COOL-TEC Cooling-System	16
3.10	Air filter	17

Chapter	Index	Page
4	Operation instructions	18
4.1	Fixing of the working membrane	18
4.2	Insert the material to be formed	19
4.3	Moulding of foils without working membrane	20
4.4	Cooling of thermoplastics with COOL-TEC	21
4.5	Removal of the moulded materials + foils	22
4.6	Times of heating	23
5	Maintenance	24
5.1	Vacuum pump	24
5.2	Heating	24
5.3	Guiding of the working frame	24
5.4	Ball joints	24
5.5	UNI LOCK	24
5.6	Air filter – and replacement	25
6	Repair	26
6.1	Spare part list	26
6.1.1	Front	26
6.1.2	Right side	26
6.1.3	Left side	26
6.1.4	Radiator	26
6.1.5	Interior	27
6.1.6	Backside	27
6.1.7	Working frame	27
6.2	Location of parts	28
6.2.1	Front	28
6.2.2	Right side	28
6.2.3	Left side	29
6.2.4	Radiator	29
6.2.5	Interior	30
6.2.6	Backside	31
6.2.7	Working frame	32

Chapter	Index	Page
7	Vacuum pump – spare part list	33
8	Circuit diagram	34
9	Outline of control elements	35
10	Adjustment of pressure switch	36
	Declaration of Conformity	37

1 Summary

1.1 Short description of the unit

VACUPRESS Type 620 S3 automatic with the UNI LOCK system has been developed as a powerful tool to form plastic foils over complicated models.

This forming technique called deep drawing or moulding is used mainly in the orthopaedic manufacturing to copy human limbs. For the deep drawing process VACUPRESS uses a bench on which the model is fixed. The foil is laid over the model and on the foil a high flexible working membrane is pressed. The working membrane is stretched in a frame which will be lowered around the model down to the bench. A vacuum pump is used to evacuate the air beneath the membrane. The atmospheric pressure presses the membrane onto the foil with high force. The foil will be formed truly according to the model. Alternatively the foil itself can be used instead of the working membrane.

An integrated radiation heating device is used to heat up the material.

The vacuum pump can also be used for suction purposes during working in the resin casting technique.

1.2 Technical specification

Typ:	VACUPRESS 620 S3 automatic Deep drawing unit for the orthopaedic shoe technique, table unit
Manufacturer:	Witzel VACUPRESS e.K. – D-45136 Essen Phone +49/201/6462284 / Fax +49/201/6462852
Series-no.:	See name plate
Footprint:	approx. 0,34m ²
Width:	730 mm (incl. main handle)
Depth:	600 mm
Frame size:	600 x 450 mm
Vacuum shaft:	Width 110 mm Length 195 mm Depth 140 mm
Sound pressure level	57,3 db(A) (Vakuum-Pumpe)
Weight:	147 kg
Driving force:	Vacuum pump / oil-free
Connections:	1 external vacuum-outlet / connection for vacuum distributor 1 external compr.-air-inlet / for COOL-TEC System supply
Electric power:	208-220 V / 50-60 Hz / 1 Phase
Rating:	5,9 kW

1.3 Purpose of the VACUPRESS unit

The use of the VACUPRESS is restricted to the following purposes:

- .1 Moulding works with pre-heated plastics under the working membrane.
- .2 Pressing of other materials, e.g. leather or cork, cold or pre-heated under the working membrane.
- .3 Moulding of PVC or other foils on models of plaster, wood or hard foam which are thermo plastic.
- .4 Moulding of foils up to 2 mm thickness, heated up in the unit.
- .5 Moulding with sheets more than 2 mm thickness pre-heated outside the unit, e.g. in an oven.
- .6 Use of the vacuum pump for suction purposes during working in the resin casting technique.
- .7 Use of the radiation heating for activation of material up to 50 seconds.

All other applications are not allowed.

1.4 Manual

This manual

- describes the elements of the unit
- explains the procedures of the process
- gives the craft reliable instructions for the use of the unit
- draws the attention to the working risks
- and gives hints for maintenance and repair

1.5 Definition

See drawings and pictures on the last pages.

Activation grill	Adjustable grill underneath the radiator for heating (activating) glues and foils.
Air filter	Air filter upstream the vacuum pump.
UNI LOCK bolts	Bolts on the side of the tentering frame to which the hooks of the UNI LOCK system are engaged.
Working frame	Frame (d) into which the working membrane is fixed.
Tentering frame	Frame that fixes the working membrane in the working frame.
UNI LOCK	Patented system to lock two frames together to fix a membrane in between.
Vacuum-valve	Three way valve inside the unit with an outside handle (f) to control the vacuum flow to the working membrane and to release the membrane at the end of the working process.
UNI LOCK handle	Handle (c) to control the UNI LOCK.
Main handle	Handle (b) on the right side of the VACUPRESS bench. Moves the working frame and the fixing frame.

Working plate	Upper surface of the VACUPRESS bench. On this plate the model is fixed. Beneath the plate there are <ul style="list-style-type: none"> • electrical controls • vacuum pump
Main switch	Switch (a) to switch the electrical supply for vacuum pump, radiation heating and electrical controls.
Limit switch	Limit switch (e), initiated if the main handle reaches the upper position. When initiated the vacuum pump starts.
Pressure switch	Pressure switch (S3) controls the suction pressure on the suction side of the vacuum pump. Below -0.8 bar the motor stops, above -0.4 bar the motor is switched on.
Timer	The timer (k) switches the radiation heating on and stops it at the end of the programmed time.
Radiation heating	Radiator (h) for heating foils, clamped directly into the working frame or materials put onto the activation grill.
COOL-TEC	integrated cooling system for thermoplastic materials which have been molded with the VACUPRESS unit. Works with compressed air (external supply) which is reduced by an integrated pressure reducer to 1.5 bar (21,7 psi).
Star grip	The screw with star grip (i) is used to adjust the position of the activation grill and to remove or shift the grill.
Working membrane	High flexible membrane which directs the atmospheric pressure to all sides of the model. Preferable consisting of rubber. Heated foils can be used instead.

2 Safety Instructions

These safety instructions have to be followed before each installation and commissioning.

2.1 Reading of this manual

Please read this manual before connecting the VACUPRESS unit to an electrical source or before commissioning!

This manual describes e.g. risks which exist in connection with improper use.

Take care that each operator of the unit is familiar with this manual.

Pay attention that this manual will always be available close to the unit.

This manual is an integral part of the installation. It must be handed over to a new owner or operator in case of sale etc.

2.2 Connections

2.2.1 Check of power supply

The correct wiring of the power supply has to be checked by a licensed electrician. You need a power source of 208-220 V / 50-60 Hz / 1 Phase (L1+N+PE). An incorrect wiring will cause an immediate damage of the electronic devices.

A correct wiring is not guaranteed even if other installations have been running correctly on the same electrical source.

2.3 Possible hazards during operation

2.3.1 Working frame

Risk of contusion exists for extremities during lifting and lowering of the working frame as well during opening and closing of the fixing frame.



Attention – Danger of contusion !

2.3.2 Radiation heating

Danger of burns exists in the area of the protecting grill of the radiators.
During operation of the radiator the surrounding parts of the unit will reach high temperature incl. the protecting grill. Please do not reach the area of the radiator with your hands.

The radiator is made for the handicraft production of single parts of plastic. If more than two parts have to be heated up a sufficient cooling of the working frame and other hot parts of the unit have to be achieved.



Attention – Always wear protecting gloves !

2.3.3 Foils

Do not exceed the specified heating times (see point 4.5). Inflammable and poisoning gases may be produced unintentionally.
Supervise the heating process.

Supervise the heating process with other materials as well.



Attention – Danger of fire !

2.3.4 Working membrane

Bursting of the working membrane may lead to a hearing defect.
Danger of burst exists using the working membrane for tall models. This goes with a loud bang.

It is recommended to wear ear protection.

This is also recommended for other persons working close to the installation.



**Attention – High noise level possible !
Wear ear protection !**

2.3.5 Solvents

Danger of explosion exists using solvents. Do not use solvents (for example acetone, spirit, gasoline, paint dilution etc.) during moulding. Solvents can produce explosive mixtures within the unit.



Attention – Danger of explosion !

3 Description of Function

3.1 Main switch (a)

With the main switch power supply is controlled for the vacuum pump, radiation heating and the control circuit. Put the switch into the position ON. Now the machine is on stand-by. This switch can be ON during the whole day. After turning on the machine the vacuum-pump start to run and evacuates the unit. The machine controls the vacuum permanently within a range of approx. -0.8 and -0.4 bar. Thus vacuum is always available at the external connector (left side of the machine, see also page 30, "ext"). During a longer absence the switch should be set into the OFF position (uncontrolled electrical unit).

3.2 Main handle (b)

The main handle has 3 tasks:

- The main handle is used to lift and lower the working frame.
In the upper position the handle locks the frame vacuum tight to the working plate.
- It opens and closes the tenting frame on the working frame to insert a working membrane or a foil. It supports the UNI LOCK mechanism in pressing the tenting frame to the working frame.
- In the upper position it actuates the limit switch (e) to start the vacuum pump.

3.3 The UNI LOCK system

The UNI LOCK system locks with only one movement the tenting frame to the working frame, with the working membrane in between.

Via a connecting rod the UNI LOCK handle (c) moves two hooks, the UNI LOCK hooks. They are attached to the working frame. The hooks grip onto two bolts at the tenting frame. Because of the movement of the UNI LOCK handle the tenting frame is pulled against the working frame clamping the working membrane.

The design of the tenting frame allows the use of material with different thickness, e.g. plates or foils, without a correction of the clamping power.

3.4 The workplace illumination (x)

The illumination of the workplace can be turned on by the small green switch on the right hand of the front panel (main switch has to be turned ON). When the illumination is turned on, the switch is additionally illuminated. When the machine turned OFF by the main switch, the workplace illumination will be turned off as well.

3.5 Radiation heating (h)

The infrared-Quartz-radiator (h) is a very quick heating with a rating of 5.4 kW. The heating process lasts up to 150 seconds. The heating should always be supervised carefully.

The radiator produces plasticity of plastic foils up to 3 mm thickness.

Heating of thicker plates, for example Polyethylene, is not possible and is dangerous.

Thicker material should be treated in a hot air closet.

Activation of glue and plasticity of stiffing material is possible and has to be carefully supervised. For this materials it is wise to use less aggressive heating means, like infrared lamps of hot air heating.

3.6 Timer for the radiation heating (z)

For safety reasons the radiation heating is controlled only with the timer (z).

The heating sequence in seconds can be adjusted manually between 30 and 200 seconds with the "+" or "-" keys (k). The programmed time is shown on the right LED display. With the "START" key the radiator is switched on. The timer now displays the running time on the left LED display. At "000" an alarm sounds and the radiator is switched off. Now the timer displays the programmed time and is ready to start again. By pushing the "STOP" key the heating process can be interrupted at any time.

Advice: Rather try with a lower heating time and repeat if necessary. Keep the heating process under control. During heating never leave the unit. If necessary interrupt the heating process with the "STOP" and start again later on.

3.7 Activation unit (n)

The activation grill can be adjusted into different positions.

The distance to the radiator can be adjusted by the star grip (i). The fixture with the star grip is movable to the side. It can be positioned to the left or right side of the radiation heating. To avoid risk of collision do not position the grill to the side where people are working. If the grill is not used it can be turned upside down to the top of the machine. To do so pull the snap-in bolt and slue the grill 180° to the top.

To avoid an accidental sluing, always take care that the snap-in bolt has rested correctly again after the sluing process (up- or downwards) and the grill is locked!

The materials are placed on the grill to be activated. The heating process is controlled by the distance to the radiator and the duration of heating. Use rather short heating intervals and turn over the material after each heating.

3.8 COOL-TEC cooling system

The VACUPRESS 620 S3 UNILOCK is equipped with the full integrated cooling system COOL-TEC. This special system allows to cool down the molded thermoplastics much faster and thus to demold them faster as well.

The COOL-TEC system is working with compressed air which is supplied by an external inlet (t) with the compressed air line of your workshop. The pressure is internally reduced to 1.5 bar (21,7 psi) by a pressure reducer (u). This step in combination with others allows to reduce the consumption of compressed air to a minimum.

The cooling effect is reached by the use of two air-saving special nozzles (v1) which are placed on both sides behind the heat radiator facing. By use of an adjustment knob (v2) at the front side of the heat radiator facing, the air jets can be aligned individually to the models molded in the VACUPRESS unit. Turning ON and OFF the COOL-TEC system takes place by a small pneumatics switch (w) at the unit's front panel.

3.9 Vacuum-valve (f)

The vacuum-valve (f) has two tasks:

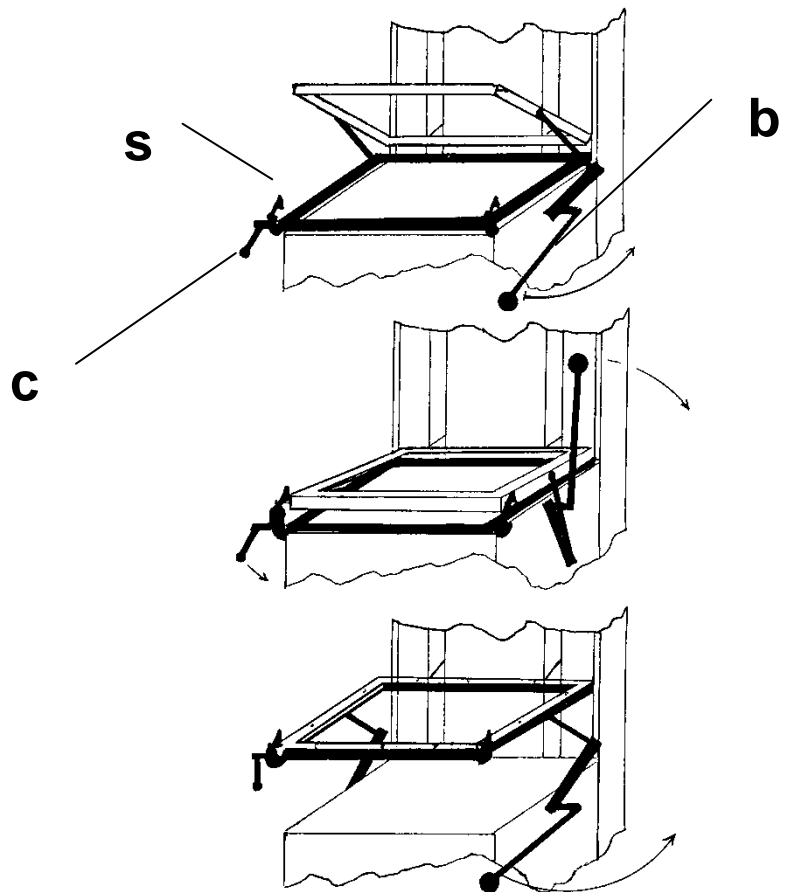
- During a moulding process it allows to control the speed of the vacuum pull. When the handle is set open (ON, right), the vacuum pulls with 100%. By a partly closing of the valve (OFF, top) the vacuum can be slowed down to a ventilation of the frame. Thus you can easily adjust and control the deep-drawing process.
- At the end of the moulding process air is led under the model to release the working membrane. The vacuum is released with the handle to the "OFF" position (top).

3.10 Air filter

The vacuum pump evacuates the air between working membrane and working plate. An air filter on the suction side avoids the entering of dust particles into the vacuum pump. Decreasing suction efficiency indicates clogging of the air filter (see point 5.6 Maintenance).

A second filter is integrated in the hose of the extern Vacuum-connection. This one cleans the air which is externally suctioned.

Drawing to
point 4.1



4. Operation instructions

These instructions describe the operation procedure in a step by step manner.

Legend:

- A figure (i.e. .1) is used to instruct an action (e.g. step 4.1.1)
- A star + is used to instruct a check. The indicated condition must be present before the start of the next action
- A hyphen – is used to indicate a consequence or a result of the ordered step.

4.1 Fixing of the working membrane

*No model on the working table

- .1 Turn main switch to OFF position
- .2 Move main handle (b) into the upper position
 - The working frame is lowered to the table
- .3 Pull UNI LOCK handle (c)
 - The UNI LOCK hooks are released
- .4 Push main handle (b) into the upper position and hold
 - The UNI LOCK hooks (s) are released from the bolts on the tentering frame.
- .5 By holding the main handle (b) turn down UNI LOCK handle (c) and hold it. - This will move the hooks (s) from the bolts.
- .6 Move main handle (b) to the lower position.
 - This opens up the tentering frame. Release UNI LOCK (c) handle.

*If an used membrane was fixed in the working frame, remove it.

- .7 Put the working membrane into the working frame and adjust it.
- .8 Move main handle (b) into the upper position.
 - The tentering frame will be closed. The membrane will be fixed. The UNI LOCK hooks (s) click to the bolts. Let go the main handle.

*Both UNI LOCK hooks (s) are engaged.

- .9 Push down the UNI LOCK handle (c).
 - The tentering frame is locked to the working frame.



Attention – Danger of contusion

4.2 Insert the material to be formed

*The working frame is in the upper position.

*A working membrane is fixed in the working frame.

- .1 Remove working membrane, see point 4.1.1 – 4.1.5
- .2 Insert the foil to be moulded into the working frame, see point 4.1.6 – 4.1.8
- .3 Move main handle into the lower position.
 - Working frame moves into the upper position.
- .4 Adjust the required heating time on the timer to warm up the foil.

Be aware of hazards, see point 2.3.3
- + Check plasticity of foil after heating process, restart heating if necessary
- .5 Move main handle upwards with care
 - The working frame is lowered, the foil is put onto the model. In the upper position of the main handle the vacuum pump starts. Now the foil surrounds the model completely.
- .6 Start the deep-drawing by moving the vacuum-valve (f) from the upper “OFF” position to the right “ON” position. Adjust the speed by moving the vacuum-valve handle slowly. Finally set the handle completely to the “ON” position. The vacuum-pump shuts down automatically at approx. -0.8 bar – the vacuum is continuously controlled.

Advice:

To achieve a plaster-cast which surrounds the model completely the model has to be positioned on a small support. So the foil can follow the contours even to the underside of the model

4.3 Moulding of foils without working membrane

- .1 Remove working membrane, see point 4.1.1 – 4.1.5
- .2 Insert the foil to be moulded into the working frame, see point 4.1.6 – 4.1.8
- .3 Move main handle into the lower position.
 - Working frame moves into the upper position.
- .4 Adjust the required heating time on the timer to warm up the foil.
Be aware of hazards, see point 2.3.3

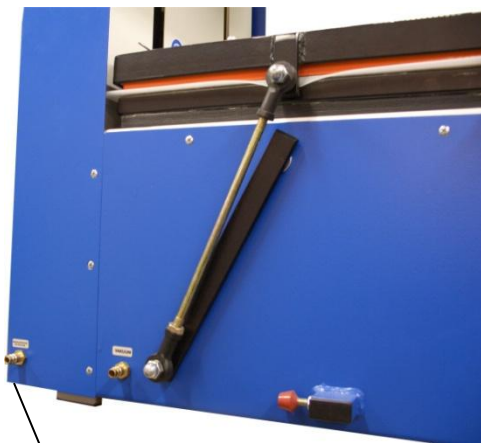
- + Check plasticity of foil after heating process, restart heating if necessary

- .5 Move main handle upwards with care
 - The working frame is lowered, the foil is put onto the model. In the upper position of the main handle the vacuum pump starts. Now the foil surrounds the model completely.
- .6 If necessary move handle of venting tap (f) slightly in the direction to position OPEN.
 - The process of moulding in its critical phase (right before reaching the final form) may be improved by slowing down the process. Addition of air is used to slow down the procedure.

4.4 Cooling of molded thermoplastics by use of the COOL-TEC system

- .1 First ensure that the external compressed air inlet (t) is connected to your workshop's compressed air line and a pressure of minimum 1.5 bar (21,7 psi) is supplied.
- .2 Activate the COOL-TEC cooling-system by turning ON the „cooling“ switch (w) at the unit's front panel.
- .3 Align the air nozzles (v1) by use of the adjustment knobs (v2) in the way that the air is „flowing“ around your model(s) in the optimal way.
- .4 After the thermoplastic material is cooled down as far as it can be demolded (depends on kind and thickness of material) you can turn OFF the COOL-TEC cooling-system again by use of the “Cooling” switch (w) at the unit's front panel.

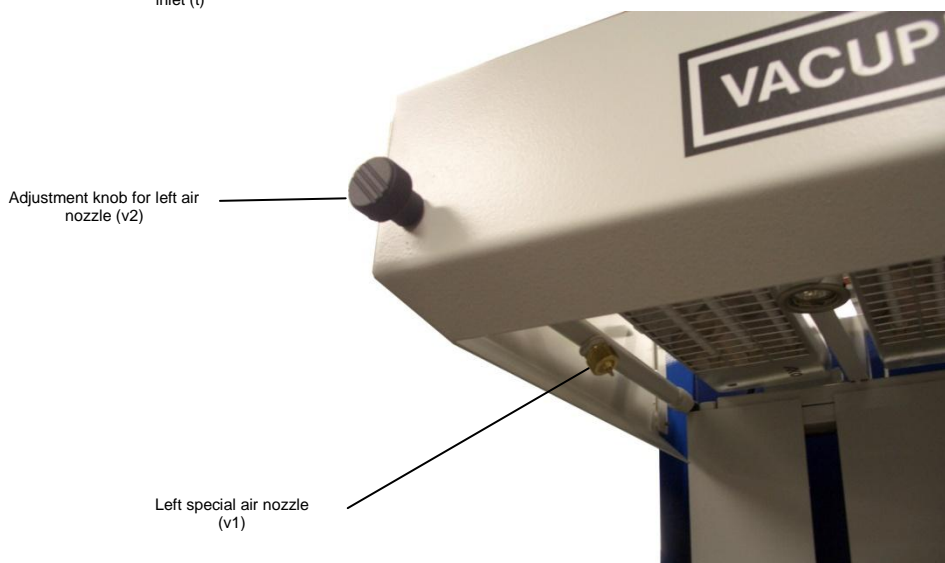
Overview COOL-TEC elements



External compressed air inlet (t)



switch „Cooling“,
ON <-> OFF
(w)



Adjustment knob for left air nozzle (v2)

Left special air nozzle (v1)

4.5 Removal of the moulded foils

4.5.1 Foils moulded with working membrane

- .1 Set handle of vacuum-valve to “OFF” (top) position
 - Air flows into the area of the moulded foil. The form is released from the model. The working membrane is released from the foil and the table.
- .2 Move main handle to the lower position.
 - The working frame is elevated to the upper position.
- .3 The moulded form can be removed.

4.5.2 For the removal of foils, which have been fixed to the working frame

- .1 Pull up UNI LOCK handle (c)
 - The UNI LOCK hooks (s) are loosened.
- .2 Push main handle (b) into the upper position
 - By pressing the tentering frame against the working frame the hooks (s) are freed from the bolts on the tentering frame
- .3 Push down and hold UNI LOCK handle (c)
 - The hooks (s) are released.
- .4 Move main handle (b) into the lower position
 - The tentering frame is opened up and releases the moulded foil.
- .5 The moulded foil is released from the model.
- .6 The moulded form can be removed.

4.6 Times of heating

The following times are recommended. Specific times will be ensued from experience.

Material:	Heating time approx.
PVC clear foils 0.4 mm	45 sec.
PVC clear foils 1.2 mm	75 sec.
Bathing slipper-material 6 mm	200 sec. In intervals of 40 sec. each With interruption of 15 sec. to heat the material thoroughly

Danger: Never use heating times longer than 200 sec. Rather repeat the heating process.
Supervise the heating process carefully to avoid danger of fire.



Attention – Danger of fire !

5 Maintenance

5.1 Vacuum pump

VACUPRESS 620 S3 - automatic is supplied with an oil free, e.g. maintenance free vacuum pump.

ATTENTION!

If you are often using wet materials or models, it is necessary to let the pump run for a few minutes after you have finished your work! Otherwise humidity may reach the pump and in the case of longer standstill (e.g. at the weekend) the pump may stuck and can be damaged!

5.2 Heating

Clean regularly the resistors of the radiator and the grill. Use compressed air or a vacuum cleaner and a soft brush.

5.3 Guidance of the working frame

The 16 ball bearings of the frame guidance are maintenance free. Oil the pivot of the main handle from time to time.

5.4 Ball joint

Maintenance free.

5.5 UNI LOCK

Oil the pivot of the UNI LOCK hooks. An adjustment of the tentering frame and its UNI LOCK bolts is necessary after 3 years of operation. The anti slip coating on the yellow frame has to be renewed all 3 years.

Attention: Never adjust the self locking nuts on the tentering frame.
The tentering function can be disturbed significantly.

5.6 Air filter

The filter is mounted inside the bench. To exchange the filter cartridge loosen the two star grip screws M 6 on the back of the unit and remove the cover on the back side.

5.6.1 Replacement of the air filter

Remove the filter cartridge by an anti-clockwise turn. Oil the rubber seal before mounting. Do not use any mechanical means – tighten the cartridge only manually.

5.6.2 Replacement of the air filter (extern connection)

This Filter you can reach also from the backside. Right underneath the (main) filter you find it (in the vacuum-hose integrated brass unit). To clean it, open the upper sealing plug. Inside you find a small wire netting filter which can be cleaned by using compressed air.

6 Repair

All parts of VACUPRESS 620 II Automatic are long life and reliable industrial articles. They are liable to a thorough quality assurance in the manufacturing process of VACUPRESS. Therefore, a regular repair is not scheduled.

In case of ordering spare parts the following list gives a clear definition of each part. The list is arranged according to the location of the resp. parts. See sketches.

6.1 Spar part list

No.	Designation	Type
6.1.1 Front		
620150	Timer	Type VASU 199
620170	Vacuum meter	63 mm
620119	Main switch	KH20-T204
620151	Three-way ball valve	½ "
620152	Heating selection switch (optional)	700986
620153	Switch for workplace illumination (green)	700304
6.1.2 Right side		
620391	Link rod	M10 260x30x30
620329	Ball joint	KBRM-10 MH
620330	Motor protection (therm.)	2A
620331	external plug connector (not for export)	ERSO-BL
6.1.3 Left side		
620391	Link rod	M10 260x30x30
620196	Stop screw	M 8 x 40
620329	Ball joint	KBRM-10 MH
6.1.4 Radiator		
620302	Radiator	AKO
620954	Heating resistor 1pc.	AKO
620955	conduit box with clamps	HP80
620956	lamp holder for 12V Halogen Spotlight	EBL-3860
620957	Halogen Spotlight 12V / 20W	HL20W

6.1.5 Interior

620176	Vacuum pump	2750 BGHI (115)
620325	Vacuum hose	13 mm inside
620080	Pressure switch	XMLB02V1S12
620042	Check valve	½" 227.32
620112	Heating relay	LC1K0910P7
620113	Heating cut out	NEOZED 32A
620114	Transformer 12V / 60VA (illumination)	570872
620389	Air Filter	MPS-050-0-P10-A
620390	Air filter for ext. conn.	60/1K

6.1.6 Rear side

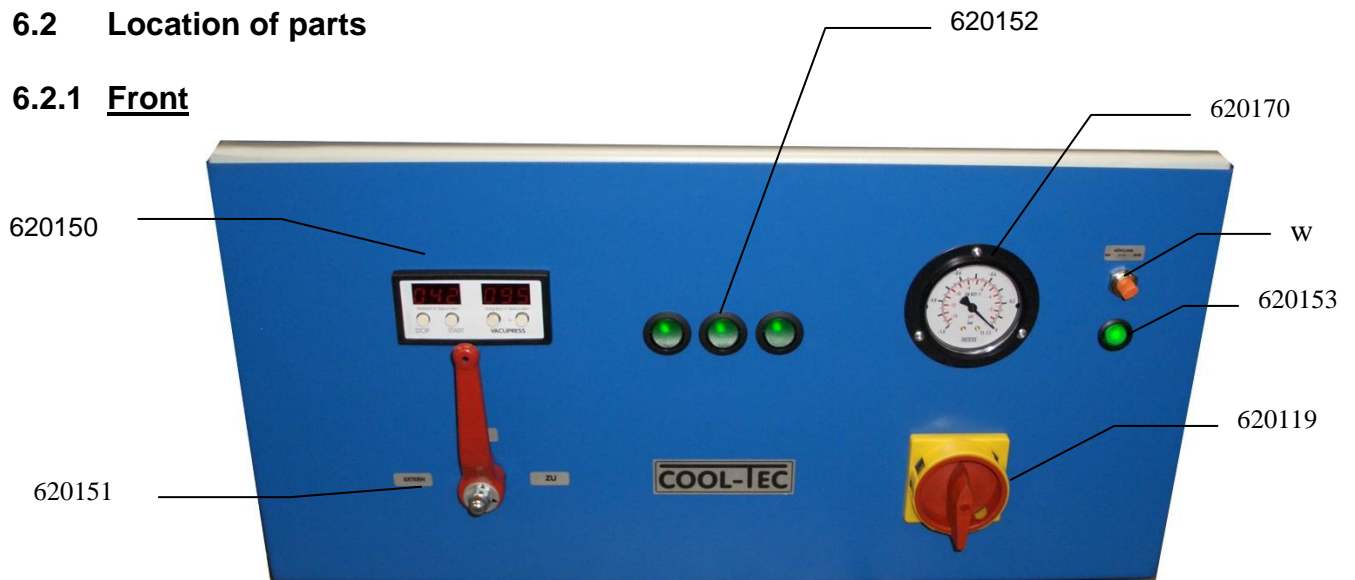
620087	Roller guidance compl.	
620090	Roller rails	100 / 890 mm
620192	Cross tie	KVR 2 D = 25/30 x 30
620343	Mini bearing	EFOM-15
620344	Sleeve	15 x 17
620327	Gas suspension	B1B1-03-450-105-230N
620335	Tension spring	Li 30x25.00x68.1

6.1.7 Working frame

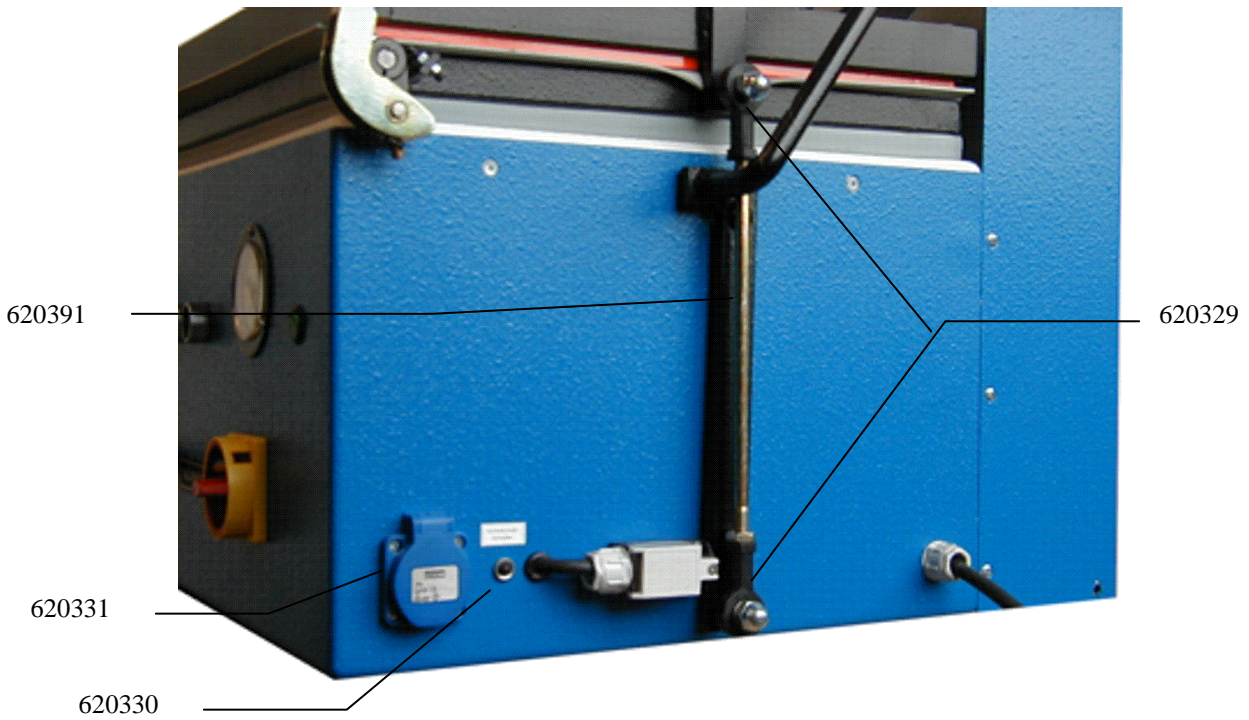
620347	Frame sealing	20 x 20 mm, 620 x 450
620099	Tentering frame sealing	20 x 5 mm, 620 x 450
620357	Anti-slip coating	620 x 450
620334	Thrust spring	280 x 11.20 x 45.9
620132	Tension spring(tentering frame)	17/1/2
620133	Tension spring (UNI LOCK)	12/3/1
620345	Sleeve	12 x 12
620409	Torsion spring	5632
620346	Bronze bushing	BP25 14 x 20 x 22 mm
620331	Handle UNI LOCK	Gn 310-10-125-D

6.2 Location of parts

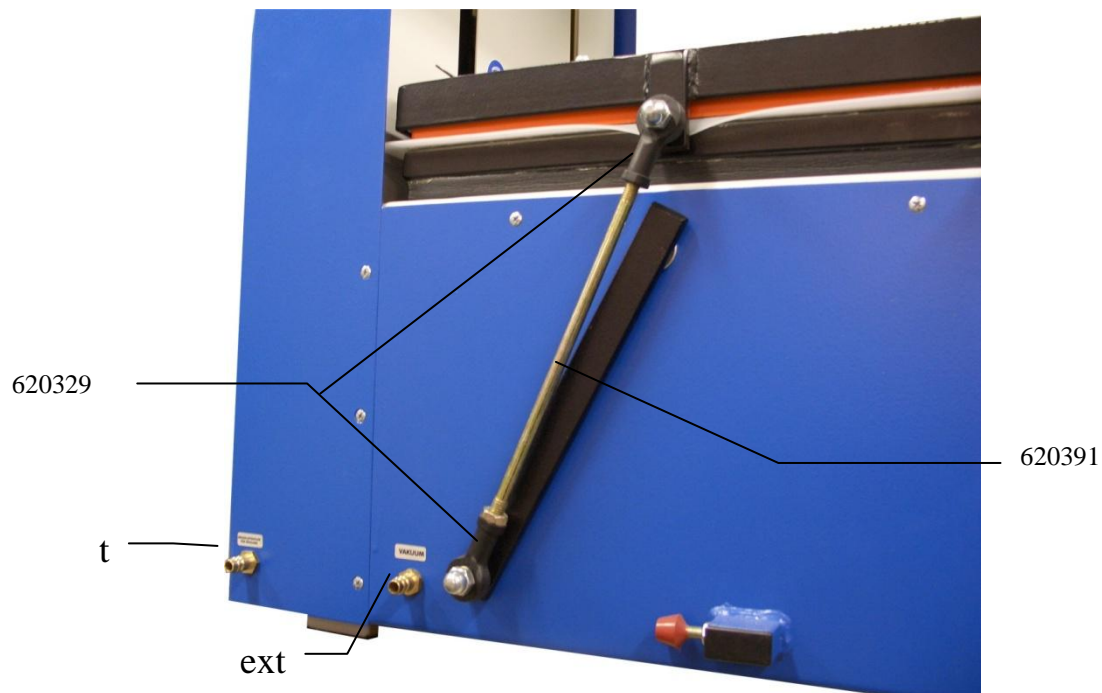
6.2.1 Front



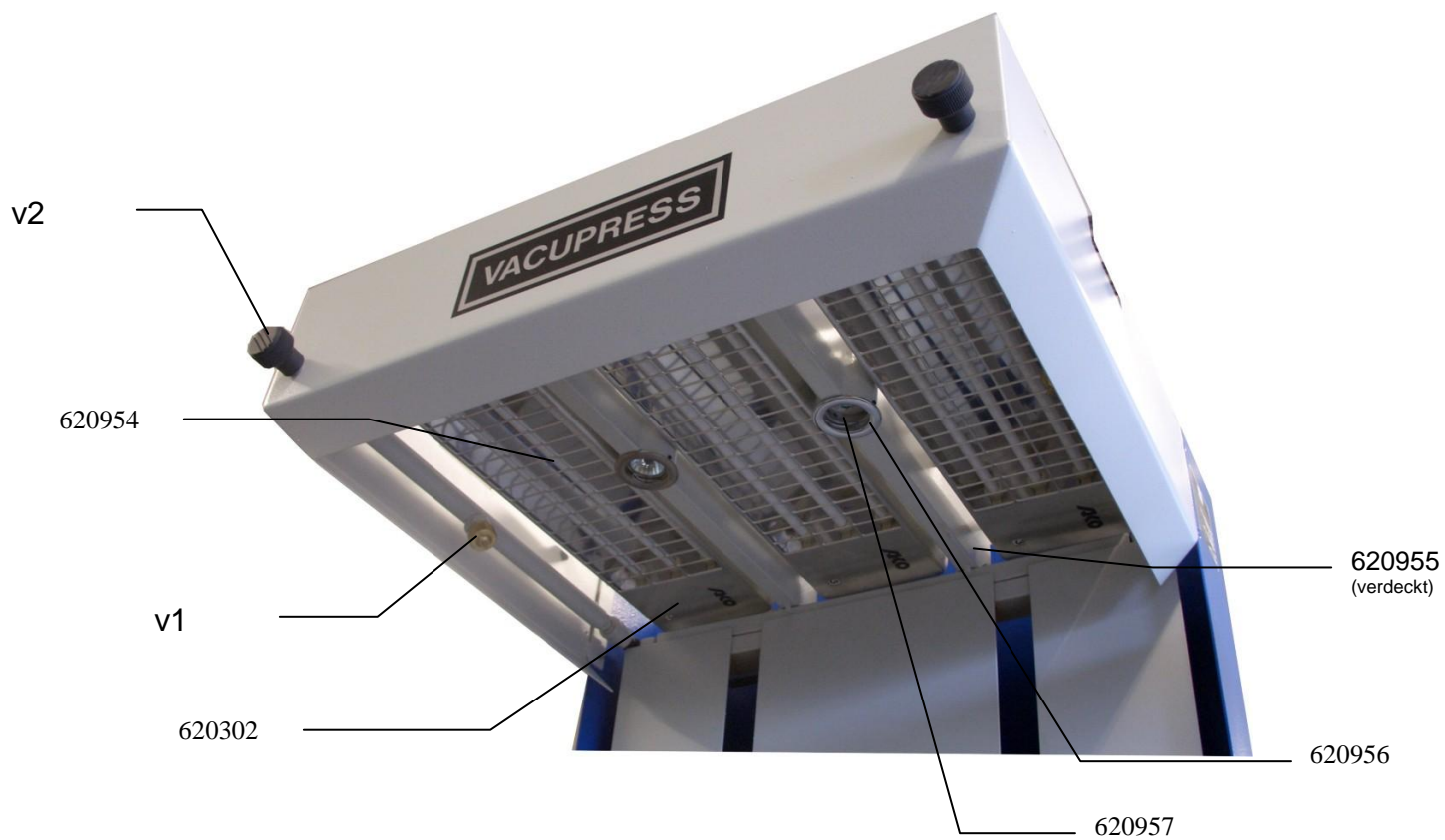
6.2.2 Right Side



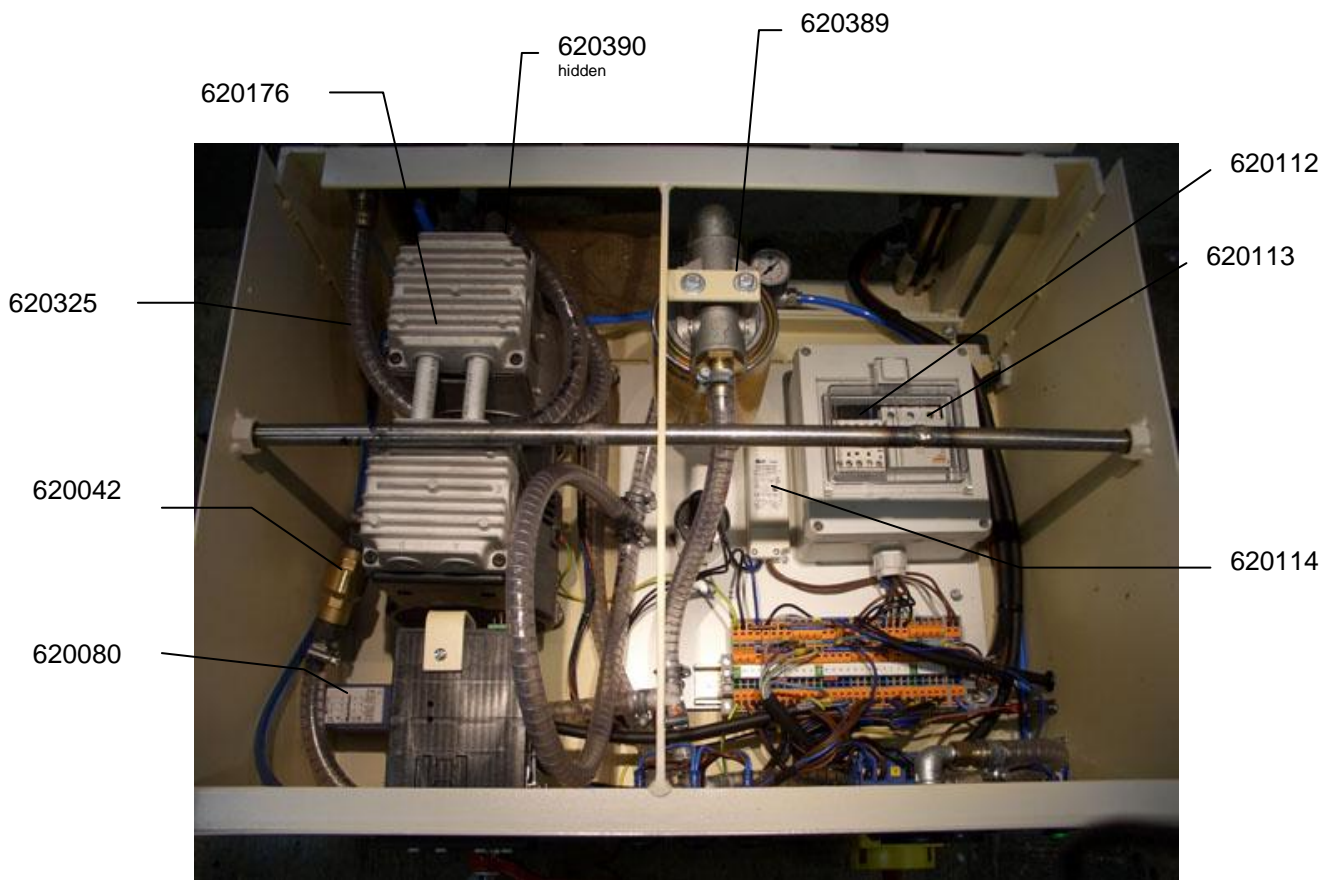
6.2.3 Left Side



6.2.4 Radiator (top)

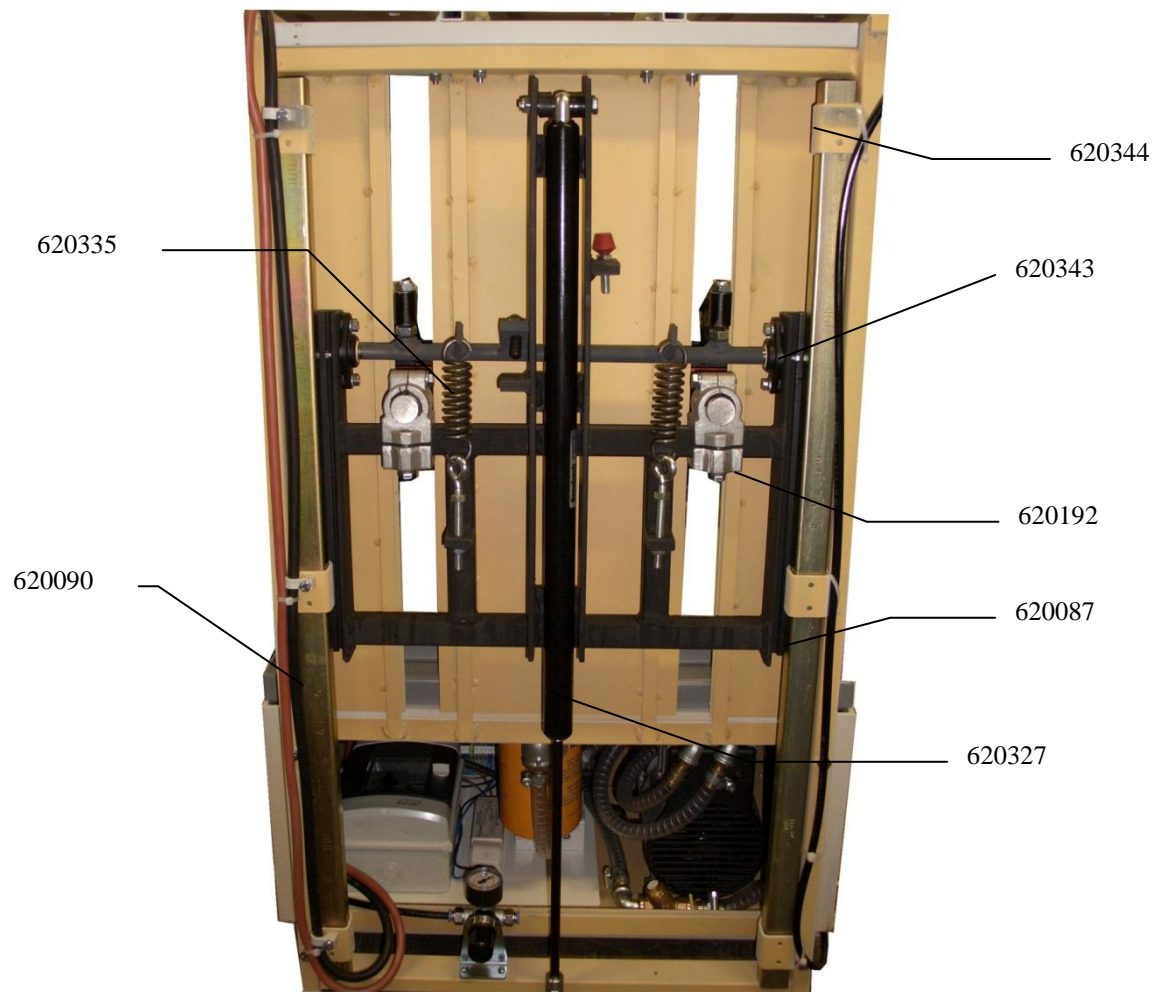


6.2.5 Interior

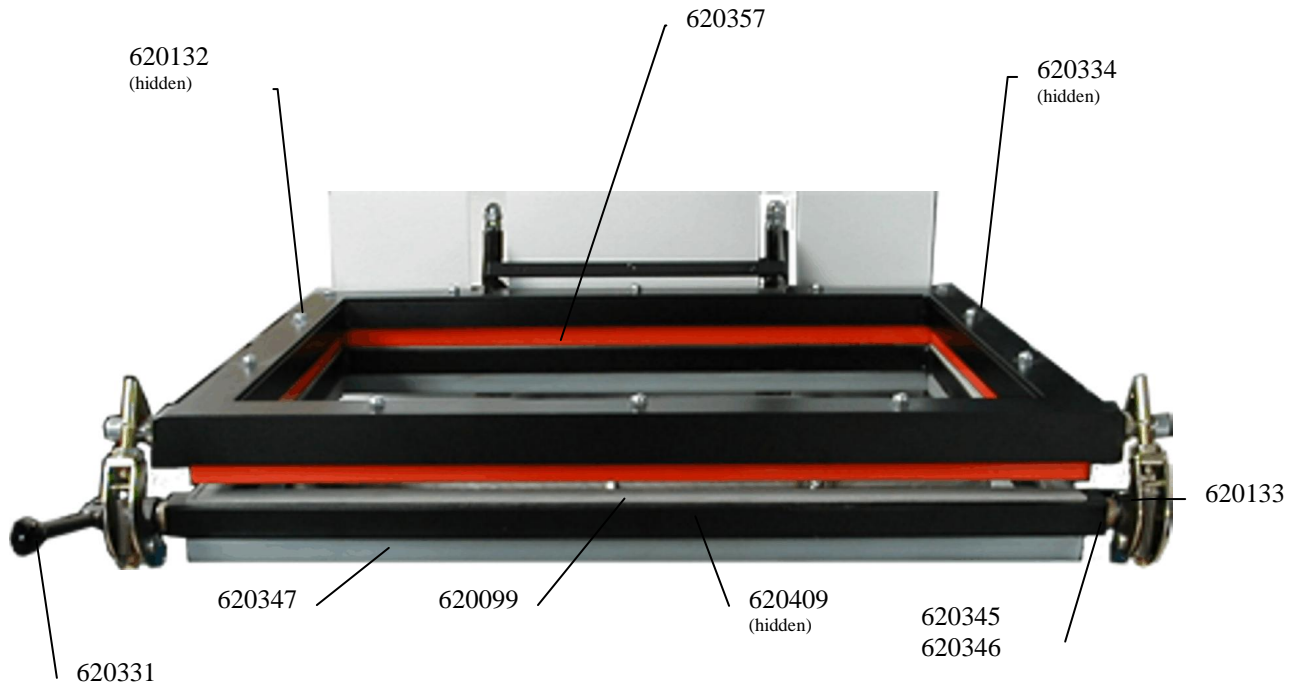


Front

6.2.6 Backside

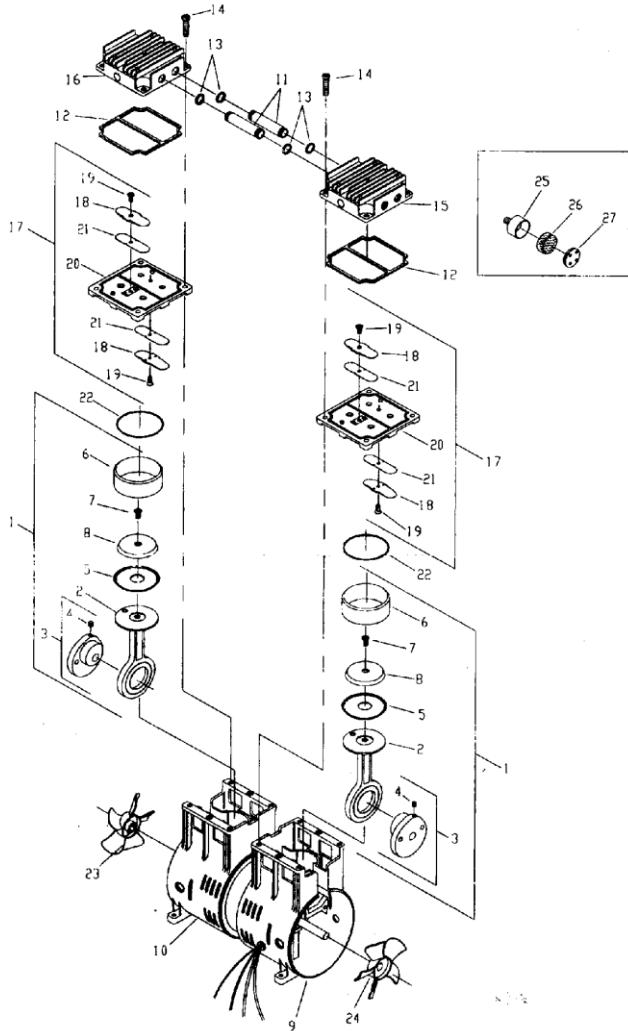


6.2.7 Working Frame



7 Vacuum pump – spare part list

DRAWING AND PARTS LIST



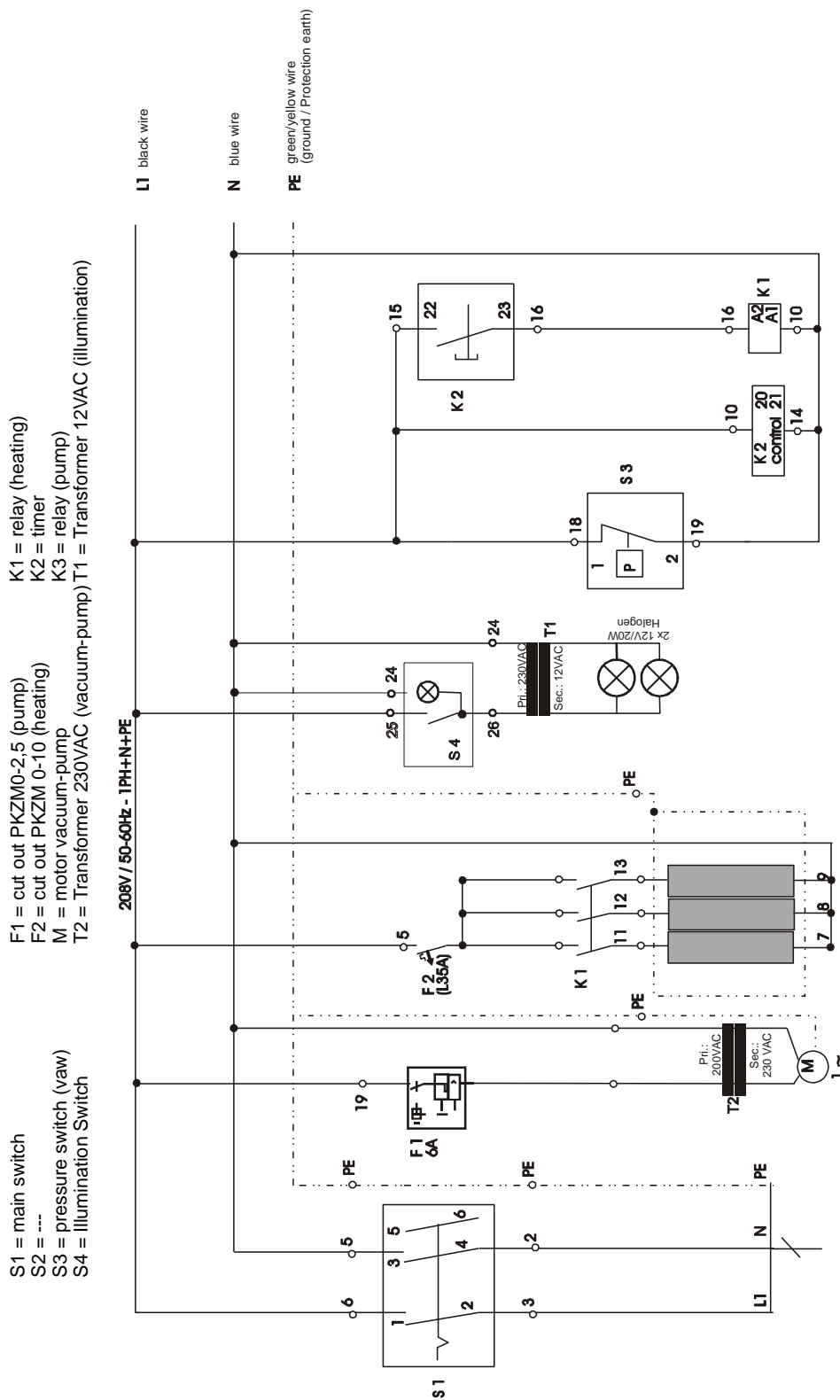
MODEL 2750CE50*, 2750CGH150+				
Item No.	Part No.	Component Part	Description	Qty
1	607635		Corn. Rod, Ecc. Sleeve & Brg. Ass'y	2
2	607540		Corn. Rod & Bearing Assembly	2
3	645907		Eccentric Assembly	2
4	625008		Set Screw - Eccentric	2
5	614753		Piston Cup	2
6	618119		Piston Sleeve	2
7	625776		Screw - Piston Cup Retainer	2
8	626730		Retainer - Piston Cup	2
9	864061		Housing	1
10	864062		Housing	1
11	615866		Connector Tube	2
12	623624		O Ring Gasket - Head	2
13	623632		O Ring - Connector Tube	4
14	625645		Screw - Head	8
15	864651		Head	1
16	864652		Head	1
17	662307		Valve Plate Assembly	2
18	617312		Valve Restraint	4
19	625071		Screw - Valve Flapper	4
20	662306		Valve Plate	2
21	662054		Valve Flapper - Intake & Exhaust	4
22	623638		O Ring - Sleeve	2
23	638208		Fan - Black	1
24	638223		Fan - White	1
25	660777		Filter Body	1
26	641010		Filter	1
27	860603		Cap - Filter Body	1

MODEL 2750CE60*, 2750CGH160+			
Item	Add	Description	Delete
1	607640	Corn. Rod, Ecc. Sleeve & Brg. Ass'y	607635
2	607523	Connecting Rod & Bearing Ass'y.	607540
3	645903	Eccentric Assembly	645907

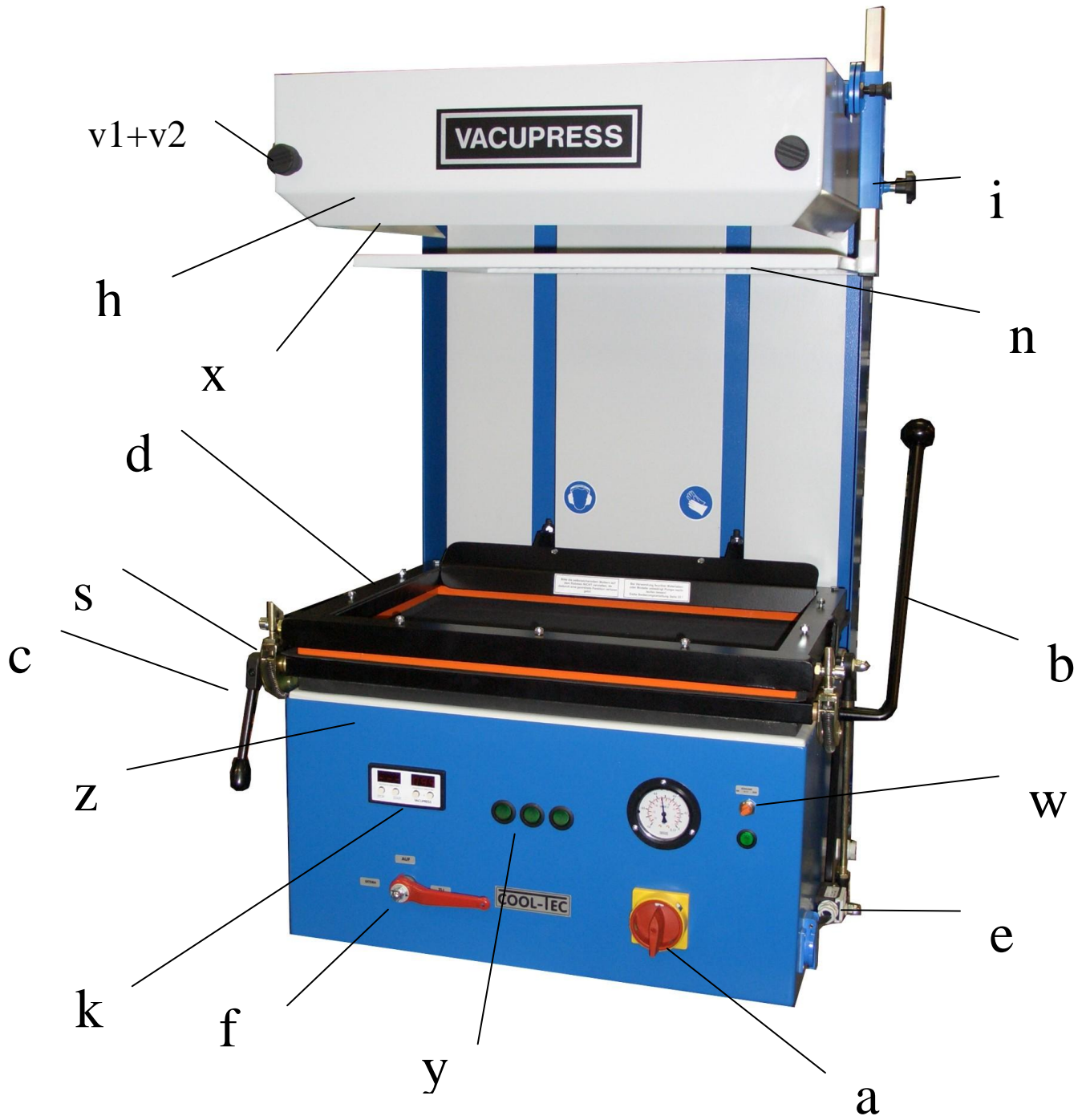
MODEL 2750BE75*, 2750BGH175+			
Item	Add	Description	Delete
1	607638	Corn. Rod, Ecc. Sleeve & Brg. Ass'y.	607635
2	607530	Connecting Rod & Bearing Ass'y.	607540
3	645901	Eccentric Assembly	645907

MODEL 2750BH175-329 +			
Item	Add	Description	Delete
9	610708	Housing	864061
10	864317	Housing	864062
28	647220	Fan Guard (Not Shown) - Qty 2	---
29	625448	Screw - Fan Guard (Not Shown) - Qty 4	---

8. Circuit diagram (208-220V / 50-60 Hz / 1 ph.)



9. Outline of control elements



10. Adjustment of the pressure switch

The pressure switch is easy to reach from outside on the left side of the housing. The adjustment of the set-screw for the upper shut-off point of the vacuum-pump is located behind the labeled opening at the housing. The upper shut-off point can be adjusted by use of a fitting screw-driver.

The standard shut-off point is set to approx. $-0,8$ bar.

To REDUCE (-) the shut-off point, turn the set-screw to the RIGHT.

To INCREASE (+) the shut-off point, turn the set-screw to the LEFT.

ATTENTION! Always adjust the set-screw just for approx. a $\frac{1}{2}$ turn and than first check the result of your adjustment. A massive disadjustment of the pressure switch can cause a malfunction and thus the vacuum-pump might not turn on or off at all.

Please don't hesitate to contact our technical support in case of any check-backs or problems. Phone number: +49 201 6462284.



Declaration of Conformity

for the Vacuum-Press
VACUPRESS 620S3 CT (Art.Nr. 01-620-S3)

Witzel VACUPRESS e.K.
Max Keith Str. 66 / D-45136 Essen

declares as manufacturer and in sole responsibility that the Vacuum-press VA 620 S3 CT complies with the fundamental requirements of the directive 2006/42/EG and the directives listed below - including all changes, valid at the time of declaration.

The following additional EU-directives have been applied:


2006/95/EG
2004/108/EG

The following harmonised standards have been applied:

DIN EN ISO 12100-1, DIN EN ISO 12409, DIN EN ISO 14121-1
DIN EN 60204-1, DIN EN 60335-1
DIN EN 55014-1, DIN EN 55014-2

Name and address of the person who is authorized to assort the technical documents:
Hendrik Witzel

Witzel VACUPRESS e.K.
Hendrik Witzel


Essen, 29.06.2012



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**... and each day you'll find
new ways to manufacture
your products more
efficiently**