

# Catalog

**Infrared-Ovens Convection-Ovens** 



Vacuum-Presses Vacuum-Equipment Laminating devices



Workshop Equipment Accessories







# more than 40 years VACUPRESS

### How we started...

In the beginning there has been a custom made prototype of a vacuum-press for own purpose. It had to have a large working area, had to have an improved techno-logy and of course it had to be available at a fair price. With building the prototype in 1970, which worked faultless for 8 years, this small story would have found its end - if my father, Peter Witzel, wouldn't have been asked to report his experiences in vacuum-technology at an O&P training course in 1977. He agreed to present his experiences, but thought about how useful it would be if there was no suitable machine to recommend for this technique. Suitable means nothing than a machine which has been large enough and not too expensive to start with the vacuum-technology. Thus the idea was born to provide vacuum-technology to a larger number of small and mid-sized workshops.

The company Peter WITZEL VACUPRESS Apparatebau has been founded in 1978. With this start up my father has been able to present two types of vacuum-presses at the "ORTHOPÄDIE und REHA-TECHNIK 1979" trade show in Nürnberg. VACUPRESS 450 and VACUPRESS 850 showed up a completely new concept. The simultaneous availability of vacuum and compressed air, vacuum-automatic and timer controlled Infrared-heating among others have been the features which founded the successful story of VACUPRESS from the beginning.

Today "Witzel VACUPRESS" is worldwide represented and known in the O&P and orthopaedic shoe technique field as a name for innovative technologies - "from experience - to practice". Many of the features described above can still be found in our units today. Other developments, like the patented UNILOCK material clamping system or the optical temperature measurement system have been added within the last 30 years and are established as "state of the art" in the market.

Other product fields like the Infrare-ovens have been since the last ten years and we have been able to set new standards in technology and usability. Today WITZEL VACU-PRESS provides the largest range of special VACUUM-EQUIPMENT and OVENS for the O&P and other fields.

# more than 40 years VACUPRESS





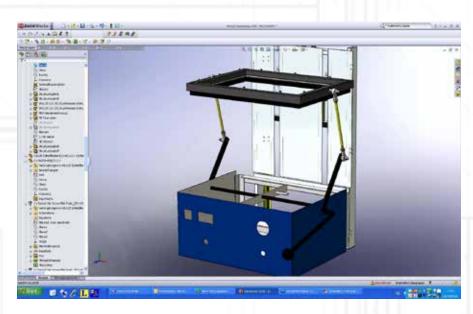


In the beginning there has been a concept. Out of this concept the company WITZEL VACUPRESS is accrued, today family owned in the second generation. Apparently my fathers concept has been right and is still our guideline, even in modern high-tech development and production times.

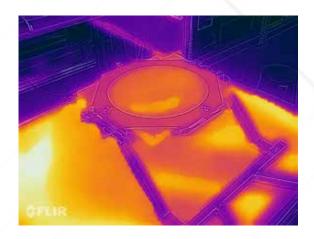
But all this success wouldn't have been possible without you, our worldwide customers, who trusted us for more than 30 years. We feel especially obliged and we will do everything to keep on being an observant partner on your side.

#### Yours

#### Hendrik Witzel



State of the art 3D CAD-CAM technology allows to validate and optimize new products at the point of development and engineering. Computer based motion simulation and load tests reduce development periods significant and helps us refine mechanical designs to enhance reliability - also and especially when realizing custom made solutions for our clients.







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### News





Witzel Vacupress

# Infrared-oven Series 03 ... Update for your workshop

The new series ..03 of our infrared ovens comes with new software and many practical improvements that help to optimise workshop processes. The updated user interface offers even easier operation. The proven material trolley has been equipped with a fully integrated holder for blister-forming thermoforming frames. And for trouble-free workshop operation, individual maintenance instructions and up-to-date access to online manuals via QR code scan have been integrated.





## DUO Height Gauges

### **DUO-Universal neo**

(Article No. 05-010N)

### Comparative measurements - at a fair price

DUO UNIVERSAL Is oriented around the daily requirements of a modern

orthopaedic-shoe technology company

DUO UNIVERSAL Shows the real height difference between two shortening

adjustments of any kind in seconds

DUO UNIVERSAL When constructing in cork: measure the pair of lasts before

starting to install the cork on the lasts. Now check the installation

(VACUPRESS)

of the cork, taking the initial difference into account

DUO UNIVERSAL Also monitors the shortening adjustments during base work

up to completion

DUO UNIVERSAL With its direct comparison measurements,

it is indispensable during shoe finishing

DUO UNIVERSAL Can obviously also be used as an

individual measuring instrument for one

shoe

DUO UNIVERSAL Assists you to work smart and provides

certainty in your highly responsible tasks



## DUO Height Gauges





### **DUO-Digital neo**

(Article No. 05-015N)

### **ELEKTRONIC** comparative measurements

- at a fair price

DUO DIGITAL Is oriented around the daily requirements of a modern

orthopaedic-shoe technology company

DUO DIGITAL Shows the real height difference between two shortening

adjustments of any kind in seconds

DUO DIGITAL Measures alternatively at the heel or the big toe joint by

means of the forefoot sensor

DUO DIGITAL Can be reset in any position (by cancelling the digital display),

enabling flexible measurement, with or without the last.

DUO DIGITAL Also monitors the shortening adjustments during

base work up to completion

DUO DIGITAL With its direct comparison measure-

ments, it is indispensable during

shoe finishing

DUO DIGITAL Can obviously also be used as an

individual measuring instrument

only for one shoe

DUO DIGITAL Assists you to work smart and

provides certainty in your highly

responsible tasks



Digital Gauge



The standard metatarsal sensor allows to measure either the heel or the metatarsal area.







### **VACUPRESS 520 GK/LC**

(Article No. 01-520LC)

VACUPRESS 520 GK/LC is a low budget unit for an easy entry in the vacuum-technology. With the same frame as the years approved models 520 GK/1 and 520 GK/2 (see next double page) this unit is a perfect solution for moulding insoles and foot-orthotics. The units of the LC series are simply connected to an external vacuum system like a small pump or central supply. No electrical power supply is needed. Thus even a larger numbers of these units can be connected to a central vacuum-supply.

Even with these low budget units the standards in quality and design are guaranteed. All 520 GK/LC units are equipped with a separate vacuum- and ventilation valve a s well as a one-way valve a nd a dust filter. Large sized vacuum-hoses guarantee a optimized vacuum speed.





### **Technical Details**

Type: Vacuum-press , bench top version, for use with external vacuum-supply

Frame Dim. (LxW): 570 x 350 mm

(equipped with Soft-bladder)

Vacuum-Control: manually, Vacuum and Ventilation

separately adjustable

Power supply: none

Vacuum connector: Vacuum hose 3m (ID=13mm)

Dimensions W 360 x D 670 x H 180 mm

Weight: 18 kgs







### **VACUPRESS 520 GK/LC - DUAL**

(Article No. 01-520LCD)

The DUAL version of VACUPRESS 520 GK/LC provides a double sized working frame. Thus it can also be used for larger moulds like AFO's etc..





#### **Technical Details**

Type: Vacuum-press ,bench top version, for use with external vacuum-supply

Frame Dim. (LxW): 570 x 570 mm (equipped with Soft-

oladder)

Vacuum-Control: manually, Vacuum and Ventilation

separately adjustable

Power supply: none

Vacuum connector: Vacuum hose 3m (ID=13mm)

Dimensions W 580 x D 670 x H 180 mm

Weight: 22 kgs

### Vacuum-Pump 520/LC

(Article No. 01-528LC)

The Vacuum-pump 528/LC is a small, but powerful unit to connect up to three 520 GK/LC /LCD vacuum-presses. It can also be used for mobile applications.

PLEASE NOTE ALSO OUR VACUUM-AGGREGATES AT PAGE 28 ff.



#### **Technical Details**

Type: Vacuum-Pump for vacuum-presses etc..

two stage piston pump, oil- and

maintenance-free.

Vacuum capacity Volume 6m³ /h / Vacuum 60 mbar

Power supply: 230V / 50/60Hz - 0,25kW

manual I/0 inline switch

Vacuum connector: D=13mm

Dimensions (LxWxH): 280 x 200 x 265 mm (incl. Accessory,

Filter)

Weight: 9,5 kgs

Recommended Filter / water separator 1/4"

accessories: (Art. No. 01-522LC)

pic. shows vacuum-pump 528/LC with optional accessory: filter / water-separator Art. No. 01-522LC



### VACUPRESS 520 GK/I+GK/II

(Article No. 01-520 + 01-522)

With Vacupress 520 GK we provide a small vacuum-press suitable for a variety of application fields. This unit is available in two versions.

The 520 GK/1, without its own vacuum pump, as ancillary equipment for connection to a main unit like VA 620 S3, etc. or to a vacuum supply like TLV 10, etc.. Therefore the 520 GK/I is simply integrated into the central vacuum system. Thus the main unit's automatic system characteristics are not affected in any way. An electrical controlled magnetic valve ensures that the deep drawing frame can be loaded both in the main and the ancillary unit independently of each other, without disrupting the other unit's operation.

This provides the unrestricted possibilities of 2 or more deep drawing units with automatic pressure monitoring now available on all the connected equipment.

Up to 6 ancillary units can be installed.

(Example 1)

Furthermore, up to 10 units of this type can be operated using a special vacuum unit (e.g. TLV10, Art. No. 20-048 please note technical information). All installed units can than operate automatically, switching on automatically when the frame is closed and the pressure falls, switching off again when the nominal low pressure is attained. (Example 2)

The 520 GK/2 is an autonomous master unit with integral vacuum pump (6m³/h). Automatic monitoring of the vacuum, is compulsory as with all our Vacupress deep drawing units.

(Example 3)

Up to 3 Type 520 GK/1 units can be connected to this unit

(Example 4)

	lechnical Details		
1111	520 GK/I (01-520)	520 GK/II (01-522)	
Туре:	Vacuum-press , Bench-top version for use with external vacuum-supply	Vacuum-press , Bench-top version for use with external vacuum-supply	
Frame Dim. (LxW)	520 x 350 mm gas-shock supported, frame tension adjustable (equipped with Soft-bladder)	520 x 350 mm gas-shock supported, frame tension adjustable (equipped with Soft-bladder)	
Vacuum-Pump:	none	Rotary vane, oil- and maintenance-free, 6 m /h / 200mbar, vacuum-automatic controlled	
Power supply:	230V / 50Hz	230V / 50Hz	
	W 360 x D 650 x H 250 mm	W 360 x D 650 x H 250 mm	
Weight	21 kgs	30 kgs	



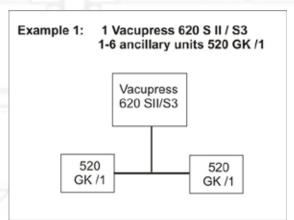


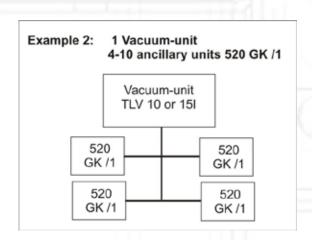


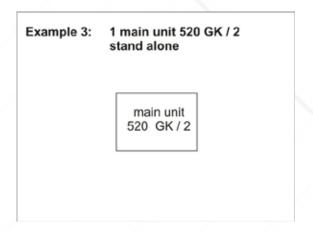


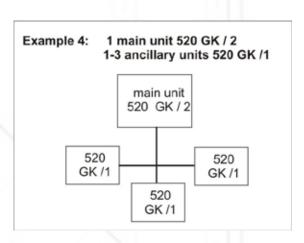


Filter with water-separator, vacuum automatic and a gasshock supported working frame are standard with all 520 GK units











### VACUPRESS 520 GK/I+GK/II - DUAL

(Article No. 01-520D + 01-522D)

With Vacupress 520 GK we provide a small vacuum-press suitable for a variety of application fields. This unit is available in two versions. This new unit is available in two versions. The DUAL versions shown here, allow to work in pairs or with larger moulds like AFO's or the like.

The 520 GK/1, without its own vacuum pump, as ancillary equipment for connection to a main unit like VA 620 S3, etc. or to a vacuum supply like TLV 10, etc.. Therefore the 520 GK/I is simply integrated into the central vacuum system. Thus the main unit's automatic system characteristics are not affected in any way. An electrical controlled magnetic valve ensures that the deep drawing frame can be loaded both in the main and the ancillary unit independently of each other, without disrupting the other unit's operation.

This provides the unrestricted possibilities of 2 or more deep drawing units with automatic pressure monitoring now available on all the connected equipment.

Up to 6 ancillary units can be installed.

(Example 1)

Furthermore, up to 10 units of this type can be operated using a special vacuum unit (e.g. TLV10, Art. No. 20-048 please note technical information). All installed units can than operate automatically, switching on automatically when the frame is closed and the pressure falls, switching off again when the nominal low pressure is attained. (Example 2)

The 520 GK/2 is an autonomous master unit with integral vacuum pump (6m³/h). Automatic monitoring of the vacuum, is compulsory as with all our Vacupress deep drawing units .

(Example 3)

Up to 3 Type 520 GK/1 units can be connected to this unit

(Example 4)

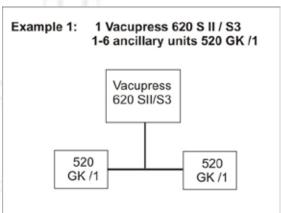
	<b>Technical Details</b>	
The state of	520 GK/I DUAL (01-520D)	520 GK/II DUAL (01-522D)
Туре:	Vacuum-press , Bench-top version for use with external vacuum-supply	Vacuum-press , Bench-top version for use with external vacuum-supply
Frame Dim. (LxW)	520 x 520 mm gas-shock supported, frame tension adjustable (equipped with Soft-bladder)	520 x 520 mm gas-shock supported, frame tension adjustable (equipped with Soft-bladder)
Vacuum-Pump:	none	Rotary vane, oil- and maintenance-free, 6 m /h / 200mbar, vacuum-automatic controlled
Power supply:	230V / 50Hz	230V / 50Hz
Dimensions	W 590 x D 650 x H 250 mm	W 590 x D 650 x H 250 mm
Weight	26 kgs	35 kgs

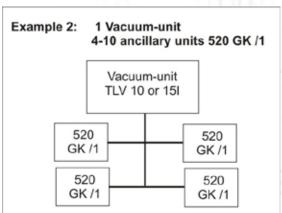


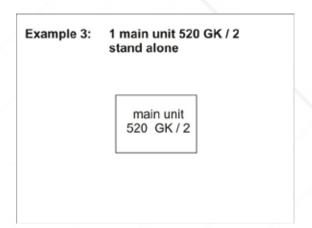


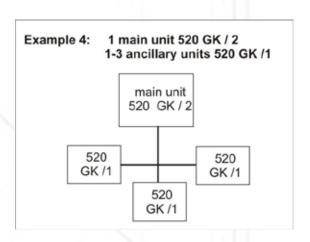














## **VACUPRESS 620S3 - UNILOCK**

(Article No. 01-620-53

# With standard COOL-IEC cooling-system

with 4 casters 3. Convection oven No.I 06-111

The current version of the VACUPRESS 620 S3 deep-drawing-unit

is equipped with the new developed COOL-TEC cooling-system. By use of adjustable special air jets materials can now be cooled automatically at the VACUPRESS unit. Thus cooling duration is reduced up to 75%. Increase the productivity of your workshop by shortening the turnaround times!

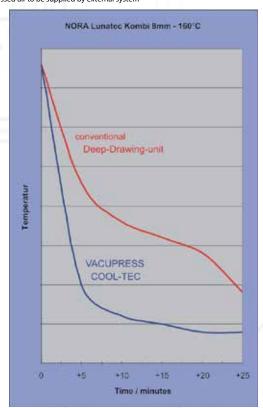
Revolutionary Cooling-System!

 Speeds up the cooling of moulded Thermoplastics up to 75%!

• Increases productivity!

 Special air jets ensure a minimum air consumption at a low pressure of just 1,5bar!

\* compressed air to be supplied by external system







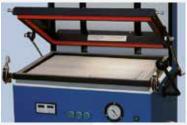


## VACUPRESS 620S3 - UNILOCK

COOL-TEC

# UNILOCK - The Standard for practice-oriented material fixing

Since its introduction in 1990 the VACUPRESS UNILOCK-system has revolutionized the handling of vacuum-deep-drawing units. With the current stage of development - VACUPRESS 620 S3 - many details could be optimized again - improving the ergonomics has been the center of our considerations.



#### Tantering frame easy to open approx. 45° with the usual lift of the main handle

#### From experience - to practice

With further development of the UNILOCK-system, the workingarea has been raised to the level of the clamped material. Hereby inserting the material becomes easier and the results of the deepdrawing-process are getting optimized by a better utilization of the material.



- Easy insertion of material. The tantering frame stays at the machine and doesn't need to be removed.
- fast and uncomplicated handling
- opening and closing of the working frame
   with only one handle
- supported by gas-shock
- locking with articulate hinges



Easy closing of the tantering frame:

Downwards with main hadle - Interlock - Done.

- no adjustment to different material thickness
- no bothering levers and gear
- no sophisticated master lock devices

Vacupress 620 S3 UNILOCK moulds all thermoplastic materials. The integrated vacuum-control guarantees highest molding accuracy and efficient production. Its powerful vacuum-pump with high reserve capacity is lifetime maintenance-free and, due to permanent improvements, it is running smooth as never before - We assist you making you workplace as ergonomic as possible!



# VACUPRESS 620S3 - UNILOCK

## practice-oriented know-how and technology at the state of the art.

A full integrated working area illumination allows to control the complete deep-drawing-process optimal and guarantees perfect results. - We think about your problems and convert your enquiries to the practice!





An outlet on the right side of the machine gives the opportunity to connect additional equipment like heat-guns or an oscillation-saw directly at your working place (available just for Europe)



### Hot product - cool design!

Electronic timer controlled infrared tubes with high efficiency mirrors and a rigid ball bearing guided safety grill are the components of the automatic heater. The grill-tray can be moved to the side and additionally rotated to the top (180°)

Selection of a heating period 30-199 sec. is achieved by a code switch. The selected time starts running down to 0 by pushing the "START" button. The procedure can be interrupted at any time. An audio alarm indicates the end of the heating process.









### **Technical Details:**

Type: VACUPRESS 620 S3 UNILOCK - COOL-TEC - Vacuum-Press for the orthopaedic

shoe technique / O&P field

Footprint: approx. . 0,34 qm / Bench-top version

Dimensions: H: 1050mm - W: 750mm - D: 590mm

Power supply: 400V / 50Hz / 3 Phase / other available

Capacity: 4,0 KW

Heating: 3840 W / 6x Infrared Quartz tubes with single reflector

Heating-time: Adjustable from 30-199 sec.,

2 LED Displays / Set-time + Remaining-time

Vacuum-pump 0,45 Kw 12 m<sup>3</sup>/h, two-stage - oil- and maintenance-free / motor-protection-

switch

Airfilter: cartridge-type, high capacity

Fram dimensions: 450mm x 600 mm / vertical lift, working area raised on material level

Frame guide: 16 ball bearing, running in steel rails

Vacuum cavity: W: 140mm L: 190mm D: 190mm / integrated in working area, standard

Frame locking: Main handle, located on the right hand side

UNILOCK mechanism: patented one handle material clamping system, self-adjusting from 0,5 up to

8,0 mm material thickness.

Activation grill: lateral moveable, ball bearing guided, additionally rotateable to the top

(180°), vertical adjustable.

Illumination: 2 x 35W / 12V Halogen spotlight

Vacuum automatic: Standard - vacuum pump starts automatically when working frame is closed,

shuts off when vacuum is reached Vacuum pressure is controlled during

moulding process.

Heating automatic: Standard - The Infrared-Heating elements are controlled by an electronic

timer and shut off automatically when pre-set heating time is reached.

COOL-TEC Cooling System: Standard - Integrated cooling-system to decrease cooling period of vacuum-

moulded materials by use of special air jets. External compressed air supply

required. Pressure is internally reduced to 1,5 bar.

Colour: structural effect paint, blue / light grey RAL 5017/7035



## **VACUPRESS 620S3 - UNILOCK**

COOL-VEC

# Option - Thermostat control with opto-electronic reading for VACUPRESS 620 S3 - UNILOCK

(Article No. 01-622)

You are looking for a vacuum-former with temperature -controlled Infrared Heating? We transfered the newest technology from our high-tech Infrared Ovens to make the best solution available for you! With VACUPRESS 620 S3 this technology is now available for the orthopaedic shoe technique and O&P field as the first unit world-wide!



pic. shows VACUPRESS 620S3 with optional accessories



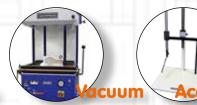
The electronic PID-Controller combined with the optical measuring-unit and the powerful Infrared-heating elements allows exact heating results



The optical measuring-unit is integrated in the heating girder

Infrared-heat is radiant heat and thus that fast and efficient. Conventional sensors pass their intrinsic temperature to the PID-Controller and thus these sensors can not handle infrared-heating systems in a perfect way! Our optical sensor is "looking" onto the material which has to be heated and thus our system is the only one in the orthopaedic field which provides a real control of the material's surface temperature! If we do a temperature-control at all, let's do it properly - as you expect as a pro!





### **Accessories VA 620**

### **Heating selection switch for VA 620S3**

This useful accessory gives your VACUPRESS 620 S3 the extra possibility of separate switching of the three heating elements. This is important especially when you increasingly heat small workpieces on the grating. By switching off unnecessary heating elements, the heat selection switch provides substantial energy savings.

Article No. 01-621





### Work bench (stand)

Stand for VACUPRESS 620 S3, VACUPRESS 520 GK series or other units. The convection oven Article 06-111 can be integrated easily.

Outside dimensions: DxWxH 575x630x780 mm

Other dimensions possible on request.

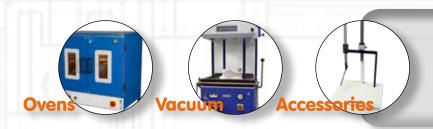
Article 01-625

# Work bench (stand) with integrated drawer-block

This VACUPRESS work-bench is equipped with a space saving drawer block. The steel-drawers are guided by ball-bearing rails. The drawers can be pulled out 80% of its depth and can be loaded with 60 kg each. A pull-out stop provides from pulling out several drawers at the same time and avoids it from tipping by this.

See page 66 for more details.





### **VACUPRESS 900 XR - UNILOCK**

(Article No. 03-900XR)

## With standard COOL-IEC cooling-system

VACUPRESS 900 XR, the newest development among the Witzel vacuum-presses combines the capabilities of the successful VACUPRESS 620 S3 and VACUPRESS 900. Leading technologies like the unique UNILOCK-System and the COOL-TEC feature have been added to the extended capabilities of a large vacuum frame of 870 x 660 mm.

The result is a vacuum-press which clears the way to new innovative technologies and covers conventional methods of the O&P field and shoe- technique at the same time. Thus insoles, foot orthotics or test-shoes can be handled as well as modern carbon fibre composits\* by use of the latest processings with just one unit.

A special focus has been set on the backwards compatibility to existing materials and dimensions of this sector. So common test-shoe foils of the dimension 600x450mm can be easily processed by use of the optional reduction frame.





\* Learn more about the innovative EASYPREG carbon fibre composits at www.exact-plastics.de



With standard connection for optional EASYPREG vacuum-frame!



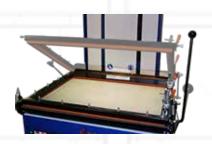




### **VACUPRESS 900 XR - UNILOCK**

# UNILOCK - The Standard for practice-orientated material fixing

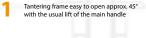
Till today the adopted UNILOCK-system of the VACUPRESS 620 S3 is unique in handling and function. VACUPRESS 900 XR also offers the benefit of the ergonomics and reliability of this thousandfold proven technology.



### From experience - to practice

With the further development of the UNILOCK-system, the working-area has been raised to the level of the clamped material. Hereby inserting the material becomes easier and the results of the deep-drawing-process are getting optimized by a better utilization of the material.

- · fast and uncomplicated handling
- opening and closing of the working frame with just one handle
- supported by gas-shock
- locking with articulate hinges
- no adjustment to different material thickness
- no bothering levers and gear
- no sophisticated master lock devices



- Easy insertion of material. The tantering frame stays at the machine and doesn't need to be removed.
- Easy closing of the tantering frame:
  Downwards with main hadle Interlock Done.



### Hot product - cool design!

7+4 infrared tubes with high efficiency reflectors, controlled by an electronic timer ensure an optimized heating-process.

VACUPRESS 900 XR UNILOCK moulds all thermoplastic materials. The integrated vacuum-control guarantees highest molding accuracy and efficient production. Its two powerful vacuum-pumps with high reserve capacities are lifetime maintenance-free and - due to permanent improvements

- smooth as never before. We take care of your toughts - we convert your input into practice and assist you making your workplace as ergonomic as possible!



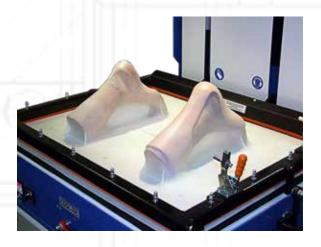


### **VACUPRESS 900 XR - UNILOCK**

# Practice-orientated know-how and technology at the state of the art.

A full integrated working area illumination allows an optimal control of the complete deep-drawing-process and guarantees perfect results.







Selection of a heating period 30-199 sec. is achieved by a code switch. The selected time starts running down to 0 by pushing the "START" button. The procedure can be stopped at any time. An audio alarm indicates the end of the heating process.

### **Versatility has a name:**

#### **VACUPRESS 900 XR**

The optional reduction frame allows to produce test shoes by use of common PVC-foils of the dimension 600x450 mm. The adjustment of the heating is realized by a standard Heating-selection switch.









### **Technical Details:**

Type: VACUPRESS 900 XR UNILOCK - COOL-TEC - Vacuum-Press for the orthopaedic

hoe technique / O&P field

Footprint: approx. 1,0 qm

Dimensions: H: 1880mm - W: 1140mm - D: 860mm

Power supply: 400V / 50Hz / 3 Phase

Capacity: 8,3 KW

Heating: 5400 W Infrared Quartz, reflector, 9 elements

Heating-time: Adjustable 30-199 sec., 2 LED Displays / Set-time + Remaining-time

Heating automatic: Standard - The Infrared-Heating elements are controlled by an electronic

timer and shut off automatically when pre-set heating time is reached.

Vacuum-pump 2 units 0,45 Kw 12 m<sup>3</sup>/h, two-stage - oil- and maintenance-free

Airfilter: 2 units, cartridge-type, high capacity

Frame dimensions: 870mm x 660 mm / vertical lift, working area raised on material level optional

reduction frame for test shoe production

Frame guide: 16 ball bearing, running in steel rails

Frame locking: Main handle, located on the right hand side

UNILOCK mechanism: patented one handle material clamping system, self-adjusting from 0,5 up to

12,0 mm material thickness.

Illumination: 2 x 35W / 12V Halogen spotlight

Vacuum automatic: Standard - vacuum pump starts automatically when working frame is closed,

shuts off when vacuum is reached. Vacuum pressure is controlled during

moulding process.

COOL-TEC Cooling System: Standard - Integrated cooling-system to decrease cooling period of vacuum-

moulded materials by use of special air jets. External compressed air supply

required. Pressure is internally reduced to 1,5 bar.

Colour: structural effect paint, blue / light grey RAL 5017/7035



### **VACUPRESS 850**

(Article No. 02-850)

# Vacuum-Press for the O&P field. The low budget entry into the vacuum deep-drawing technique

The VACUPRESS 850 is a special vacuum-press for the O&P field. The working frame is fixed on hinges at the back so that it folds and the frame is guided by a gas shock on the right side. A vacuum tank accelerates the deep drawing process and acts as a buffer when using the equipment for larger external deep drawing processes.

A powerful vacuum pump ensures the quickest possible, and therefore the optimum moulding of the relevant thermoplastic materials. The maintenance-free vacuum system is working smooth and vacuum-controlled. The system switches off automatically on reaching the nominal vacuum and switches back on again when the permitted pressure difference is exceeded.

VACUPRESS 850 is equipped with a separate vacuum connection to connect external vacuum working areas like thin laminate resin work, pulling sockets, drape moulding, etc.. All the functions of the automatic vacuum system can also be used so the unit can also be remote controlled from these locations.

	<b>Technical Details</b>				
Туре:	VACUPRESS 850 - Vacuum-press for the O&P field				
Frame size:	W 850 x D 685 mm frame hinged at the backside				
Vacuum-Pump:	25 m³ /h/ Rotary vane / oil-lubricated / end-pressure 5mbar				
Filter:	Cartridge filter / water separator				
Vacuum automatic:	standard				
Power supply:	400V / 50Hz / 3Ph. (others available on request)				
Dimensions:	W 960 x D 1050 x H 1070 mm				
Weight	145 kgs				





## **VACUPRESS 850**





### **VACUPRESS 1500**

(Article No. 04-150)

# Vacuum-Press for the O&P field. For orthotics, shaped seats, etc. - also for adult patients.

The VACUPRESS 1500 deep drawing unit is closely developed from the 850 model range. Unlike the previous closed construction, the VACUPRESS 1500 is now designed in open, table-like construction.

The advantages of this design are the significantly lower construction height and the ability to use the space under the work surface. The lower construction significantly facilitates the loading of large and heavy models.

The working frame is fastened at the nackside, assisted by two gas shocks. The maintenance-free vacuum system is working smooth and vacuum-controlled. The system switches off automatically on reaching the nominal vacuum and switches back on again when the permitted pressure difference is exceeded.

VACUPRESS 1500 is equipped with a separate vacuum connection to connect external vacuum working areas like thin laminate resin work, pulling sockets, drape moulding, etc.. All the functions of the automatic vacuum system can also be used so the unit can also be remote controlled from these locations.

	<b>Technical Details</b>
Type:	VACUPRESS 1500 - Vacuum-press for the O&P field
Frame Dim.:	W 1100 x D 1500 mm
Vacuum-Pump:	40 m <sup>3</sup> /h / Rotary vane / oil- lubricated / end-pressure 5mbar
Filter:	Cartridge filter with Water-separator
Vacuum automatic:	standard
Power supply:	400V / 50Hz / 3Ph. (others available on request)
Dimensions:	W 1200 x D 1600 x H 750 mm
Weight	197 kgs





## **VACUPRESS 1500**





## Vakuum-Aggregates

## Vakuum-Aggregate TLV10

(Article No. 20-048)

### **Central Vacuum-Unit**

### - suitable for mobile purposes as well

Suction speeds demanded by manufacturers of modern thermoplastics for optimum processing can be realized with this vacuum aggregate. It comprises a maintenance-free vacuum pump mounted along with the control electronics and a vacuum-gauge in a convenient and easy to transport housing. The device is set on standby when turned on and starts to run automatically when the vacuum is used at the workstation. The vacuum is constantly monitored by a vacuum-controller, so the device shuts off again when work is done and the nominal vacuum inside the system has been reached again. A dust filter is part of the standard equipment.

Due to the compact size and the smooth operating of the pump, the system is perfect for mobile use in hospitals etc.

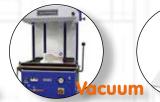
We recommend the following accessories:

special vacuum hose D=13mm - tees for branching ring lines - vacuum distributor with 4 connections for workstations - vacuum tank in different sizes



## Vakuum-Aggregates







### Vakuum-Aggregate TLV25HV-II + TLV40HV-II

(Article No. 20-053 / 20-054

# High-Vacuum Aggregate for central vacuum-systems including vacuum-tank and controller

This Vacuum-Aggregate fits the high requirements of precessing modern thermoplastic materials in the O&P field. The system consists of a powerful oil-lubricated vacuum-pump with a high capacity airflow of 40m³/h (=667 l/min.) and high end pressure of 5 mbar (99%). The units is movable on 4 casters and has a 25L vacuum-tank. The intake connection is realised by a 1" ball-valve.

The full integrated vacuum-controller monitors the vacuum of the connected workshop loop system and shuts the system automatically on and off. A large dimensioned filter with water-separator completes the system and makes it the perfect solution for central vacuum supply

Weight



#### Technical Details Type: Vacuum-Aggregate with twoavailable capacities TLV25HV-II and TLV40HV-II 25 m<sup>3</sup>/h/40 m<sup>3</sup>/h rotary vane pump, oil-lubricated Vacuum-Pump: end-pressere 5mbar / motor-protection-switch High capacity dust-filter with extra water-separator Filter: Vacuum automatic: standard Vacuum connection: 1" ball valve / vacuum-hose connection Power supply: 400V / 50Hz / 3 Ph. (others available on request) W 600 x D 500 x H 490 mm (590mm for TLV40HV-II) Dimensions:

60 kgs (TLV40HV-II)

Available Options / Accessories:

Special vacuum-hose D=6, 13 or 19mm - T-joint to set up a loop system - Vacuum-distributor with 4 connectors for the workplaces - Water-separator for the workplaces

Find more details on Catalog page 68 ff



# Laminating devices

### Laminating device TLV6-II

(Article No. 07-320)

### Compact unit to provide vacuum for two Lamination work-places (4 separate inlets) + 1 direct-connection for vacuum supply

Powerful lamination device with 6 m /h vacuum capacity. The device has four connections for two workstations and a direct connection for vacuum applications like drape moulding etc.. The vacuum automatic ensures efficient use of the device without continuous running of the pump and with constant monitoring of the vacuum.

The lamination device comprises a maintenance-free vacuum pump mounted along with the control electronics and a vacuum-gauge in a convenient housing. An included vacuum-tank allows a powerful pulling on drape moulding processes as well.

The device is set on standby when turned on and switches on automatically when the vacuum is used at the workstation. The vacuum is constantly monitored by a vacuum-controller so the device switches off again when work is done and the nominal vacuum in the system has been reached again.



Refer to Catalog page 68 ff for available options and accessories like vacuum-hose, water separator or cast resin vacuum pipe.

#### **Technical Details** Laminating device TLV6-II Type: Vacuum-Pump: 6 m /h / oil- and maintenance-free / end-vacuum 200mbar Inlet / connections 4x 8mm, separately switchable 1x DIN coupling for vacuum supply etc. dust-filter, per inlet Vacuum automatic: standard Power supply: 230V / 50Hz Dimensions: W 435 x D 390 x H 240 mm Weiaht 22 kas



# Laminating devices







### Laminating device TLV6-II PRO

(Article No. 07-330)

# Based on TLV6-II the PRO version provides a separate vacuum-regulation at two of the four inlets.

By use of the integrated vacuum regulator two of the four inlets can individually be adjusted. For example when a different vacuum-pressure is required for inner and outer foil during a laminating work.



### Technical Details

Type: Laminating device TLV6-II PRO

Vacuum-Pump: 6 m /h / oil- and maintenance-free /

end-vacuum 200mbar

Inlet / connections 4x 8mm, separately switchable, 2 of them with sepa-

rate vacuum-pressure control

1x DIN coupling for vacuum supply etc.

Filter: dust-filter, per inlet

Vacuum automatic: standard
Power supply: 230V / 50Hz

Dimensions: W 435 x D 390 x H 240 mm

Weight 22 kgs

Refer to Catalog page 68 ff for available options and accessories like vacuum-hose, water separator or cast resin vacuum pipe.





### **Convection Ovens**

### **Convection Oven No.1**

(Article No. 06-111)

This very compact convection oven is an optimal addition to your vacuum deep drawing equipment. Its compact dimensions enables it to be integrated, for instance, directly into the workbench of the VACUPRESS 620 S3. Further the unit offers unique inside dimensions for its class, which enables it to heat almost every material size which can be handled in a VACUPRESS 620 S3. The thermostat control of the temperature range is infinitely adjustable from 50°C to 250°C.



	Technical Details
Type:	Convection Oven No.1
Heating:	1x 2400W, 1x fan motor heating active light
Thermostat:	infinitely up to 250°C
Timer:	infinitely 0 - 120 minutes, On/Off active light
Housing:	Stainless steel, inside and outside, door with large viewing window, opens down to the front, double side bouncy supports
Accessories:	1 grill, 1 tray, standard
Power supply:	230V / 50Hz / 2,5 kW
Dimensions:	outside: W 527 x D 450 x H 316 mm inside: W 404 x D 308 x H 254 mm
Weight	20 kgs

### **Notes**





### **Convection Oven No.2**

(Article No. 06-121G)

This mid-sized Heater has been improved again. Larger than the compact model 06-111 but still compact enough to be integrated in an VACUPRESS work-bench! In addition to the integrated Timer it can also be turned ON permanently.

Integration in our VACUPRESS work benches is possible on request!



### **Technical Details**

Type: Convection Oven No.2

Heating: 2400W, fan motor with reversing rotation direction

Heating active light

Thermostat: infinitely 60° to 280°C

Timer: infinitely 0 - 60 minutes and permanent on

On/Off active light

Housing: Stainless steel, inside and outside, door with large

double pane viewing window, opens down to the front, double side bouncy supports, 25W illumination

2 trays standard

Power supply: 230 V / 50Hz / 2,6 kW

Dimensions: outside: W 600 x D 550 (+40) x H 590 mm

inside : W 450 x D 360 x H 360 mm

Weight 35 kgs

Accessories:





### **Convection Ovens**

### **Convection Oven No.4**

(Article No. 06-124G)

The latest member of our convection oven line provides a larger inside width as the models No.1 and No.2. The powerful combination of heating and fan allows a short preheating period and guarantees a perfect heat distribution. In addition to the timer control the oven can be turned on permanently.



	<b>Technical Details</b>
Type:	Convection Oven No.4
Heating:	3000W, fan motor with reversing rotation direction Heating active light
Thermostat:	infinitely 60!° to 280°C
Timer:	infinitely 0 - 120 minutes and permanent on On/Off active light
Housing:	Stainless steel, inside and outside, door with large double pane viewing window, opens down to the front, double side bouncy supports, 25W illumination
Accessories:	2 trays standard
Power supply:	230 V / 50Hz / 3,2 kW
Dimensions:	outside: W 860 x D 820 x H 555 mm inside : W 600 x D 450 x H 290 mm

59 kgs

Weight

# Notes







## **Convection Ovens Pre-Preg**

### **Convection Oven - PO1200**

Special unit for Pre-Preg processing

(Article No. 06-500)

- Control with Touch-Panel
- For Pre-Preg processing optimized program
- Material-temperature controlled heating process Standard 4x vacuum connec



## **Convection Ovens Pre-Preg**







## **Convection Oven - PO1200**

Retain control! - The new PO1200 is the only unit in the O&P field which is able to operate the heating process by the material temperature



#### **Feature overview**

- Microprocessor based control with PID feature, optimized for Pre-Preg processing
- User friendly control interface with touch-panel
- Timer- and Ramp-feature for programming individual heating graphs
- Mould/Material-sensor to control the unit by material temperature
- Energie-saving 3-zone segmentation to reduce inside dimensions of the heating cabinet for small moulds
- Standard 4x vacuum-connector with external water-separator

The PO1200 convection oven has been developed for the special needs of Pre-Preg processing in the O&P field. The large housing with double doors allows to place multiple hanging moulds inside the oven. A standard 4x vacuum connector is mounted inside the oven. An external water separator is placed at the right side of the housing.

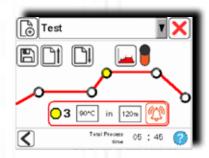
During development a special attention has been focused on the control which manages the heating process. "Heart" of the system is the microprocessor based central control unit with its special inhouse engineered software and user interface. The integrated touch-panel and its interactive menu control allows an intuitive operation of the multiple functions. For a specific monitoring of the entire process it



can also be controlled by an external temperature sensor (standard scope of delivery). For that just a thin wire sensor is placed at the edge of the Pre-Preg material, between the layers and plugged into the front panel of the control unit. Thus the entire heating process is controlled by the exact core temperature of the material.

Further an integrated Timer- and Ramp-feature allows to program and store individual heating graphs. Withal the user can visualize the entire heating process by a graphic trend. Disturbances can be monitored by a screen entered from the main menu.







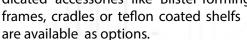
## Convection Ovens Pre-Preg

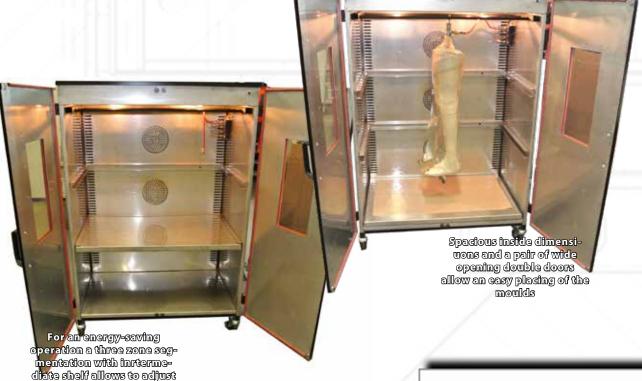
## **Convection Oven - PO1200**

- + Energy-saving by three zone segmentation
- + Processing of normal Thermoplastics possible as well.
- + Accessories for processing of Blister forming frames available as an option

Due to the three zone segmentation the user can adjust the inside dimension of the heating cabinet. Thus the energy consumption is reduced to a minimum when processing smaller moulds. The specific zones are automatically activated by placing the intermediate shelf.

If required, the PO1200 Pre-Preg oven can also be used for processing normal Themoplastics like PE or PP. Dedicated accessories like Blister-forming





Extensive capabilities offer to adjust the oven setup to the specific demands of every user. Due to its multi-lingual user interface and the option to switch between °C and °F the unit is well prepared for global markets



the inside dimensions of the heating cabinet in three steps.

## Convection Ovens Pre-Preg





## **Convection Oven - PO1200**

**Techncal Details:** 

Type: PO1200 - Convection Oven for the O&P field

Special unit, otimized for Pre-Preg processingt

Footprint:  $\sim 1.2 \text{ m}^2$ 

Dimensions: Outisde: W 1230mm - D 920mm - H 1570mm

Inside: W 1000mm - D 620mm - H 1200mm

Housing: Moveable on 4 casters with stop, double doors with double-pane viewing

window

Three zone heating cabinet segmentation by intermediate shelf

Electr. Connection: 400V / 50Hz / 3 Phase / (16 Amp. CEE) / total capacity 10,2 kW

other voltages on request

Heating: 3x 3300W, 3x fan motor with reversing rotation diretion

Temperature sensor: either by oven or mould/material temperature

Temperature control: Microprocessor controlled, User interface with touch-panel, PID-controller

feature, Temperature infinitely adjustable 30°C to 250°C, Temperature unit adjustable °C/°F, Timer- and Ramp-feature individually programable, graphic

trend indicator, multi-lingual user interface (DE,EN,FR,IT)

Illumination: 2 x 25 watts

Colour: Inside stainless steel, outside structural effect paint RAL 7035 light grey,

other RAL colours available on request (surcharge)

Weight: net: 283 kgs

gross: 418 kgs (incl. crate)

Accessories: • Universal-crate for Blister-Forming frame

(width adjustable) (Art. No. 07-131)

Blister-Forming frame D=360mm (Art. No. 07-132)

• Baumeister Pre-Preg Set for PO ovens



## Convection Ovens Pre-Preg

## **Convection Oven PO1800**

Special unit for Pre-Preg processing

(Article No. 06-600)

Same specs as PO1200 but with taller inside height of 1800mm





## **Convection Ovens Pre-Preg**





## **Convection Oven PO1800**

#### **Techncal Details:**

Type: PO1800 - Convection Oven for the O&P field

Special unit, otimized for Pre-Preg processingt

Footprint:  $\sim 1.2 \text{ m}^2$ 

Dimensions: Outisde: W 1230mm - D 920mm - H 1950mm

Inside: W 1000mm - D 620mm - H 1790mm

Housing: Moveable on 4 casters with stop, double doors with double-pane viewing

window

Three zone heating cabinet segmentation by intermediate shelf

Electr. Connection: 400V / 50Hz / 3 Phase / (16 Amp. CEE) / total capacity 10,2 kW

other voltages on request

Heating: 3x 3300W, 3x fan motor with reversing rotation diretion

Temperature sensor: either by oven or mould/material temperature

Temperature control: Microprocessor controlled, User interface with touch-panel, PID-controller

feature, Temperature infinitely adjustable 30°C to 250°C, Temperature unit adjustable °C/°F , Timer- and Ramp-feature individually programable, graphic

trend indicator, multi-lingual user interface (DE,EN,FR,IT)

Illumination: 2 x 25 watts

Colour: Inside stainless steel, outside structural effect paint RAL 7035 light-grey,

other RAL colours available on request (surcharge)

Weight: net: 395 kgs

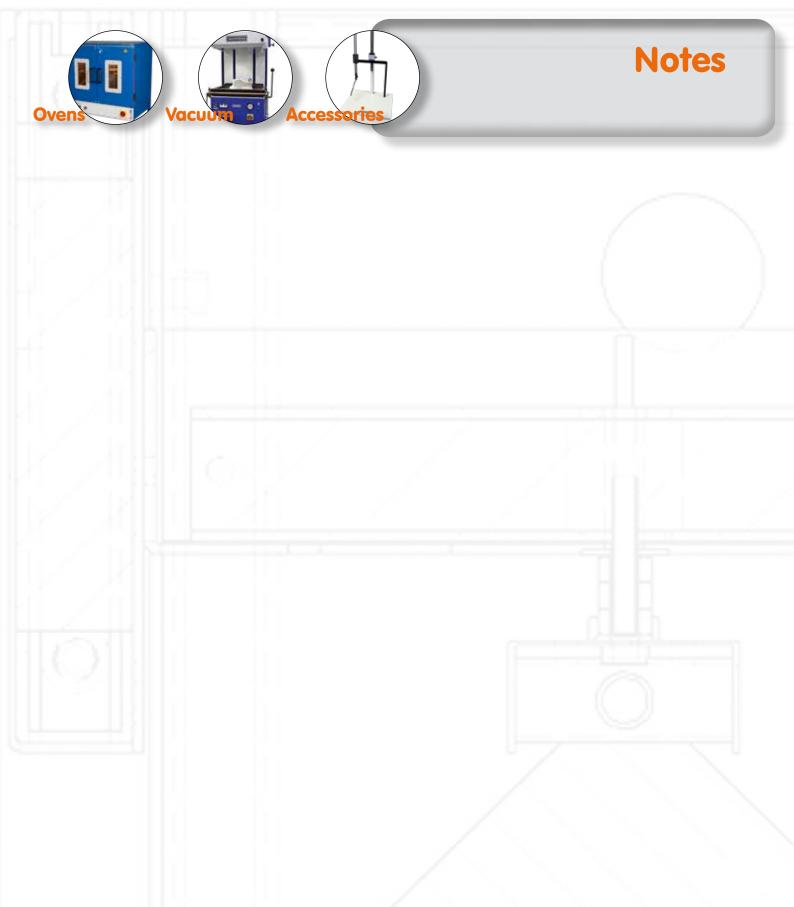
gross: 550 kgs (incl. crate)

Accessories: • Universal-crate for Blister-Forming frame

(width adjustable) (Art. No. 07-131)

• Blister-Forming frame D=360mm (Art. No. 07-132)

• Baumeister Pre-Preg Set for PO ovens



## Glue Activation unit







## Glue Activation unit AG33

(Article No. 06-101)

This redesigned Glue Activation unit allows to heat up materials on two trays from both sides (!) by 9 ultra fast Infrared tubes on three independently switchable levels. Beside the heating selection switch a 15 Minute timer allows to control the heating process. The materials are handled very comfortably on a removable tray in each of both levels. The housing of this unit is made from stanless steel and combines a pleasant design with the robust requirements of a workshop.







#### **Technical Details**

Type: Glue Activation unit AG33

Heating: 3x 3 Infrared-Quartz-tubes 330W,

switchable in three levels

1) top 2) center + bottom 3) top + center + bottom

Timer: infinitely 0 - 15 minutes

Housing Stainless steel, inside and outside

Accessories: 2 shelfs standard
Power supply: 230 V / 50Hz / 3 kW

Dimensions: outside: W 440 x D 260 x H 400 mm

inside: W 360 x D 240 x H 2 x 55 mm

Weight 11 kgs





## **Infrared Oven IR803**

(Article No. 07-802)





Setup as benchtop oven or with moveable stand which is available as an option.



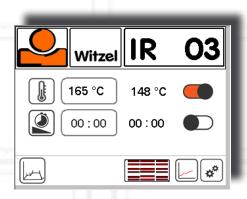






The IR803 has been engineered specifically for the O&P field for heating Blister-Forming trays and smaller pieces of flat plastics. Like all Witzel Infrared-ovens, the IR803 uses a combination of Quartz Infrared tubes and an optical temperature measuring system which measures material surface. The result is an "Instant On" unit that never overheats, heats evenly and uses less energy!

The updated software with a reduced and modern design offers new features and practice based improvements. Well known features like Timer or Heating-ramp options or the graphic trend of the heating process are even more intuitive to use. Equipped with an external USB interface for program updates the ovens are prepared for future extensions or improvements.



Suitable for either blister forming trays (tray not included) or heating flat plastics at the tray with teflon coating (1x included as a standard)



#### **Technical Details**

Type: Infrared Oven IR803

Heating: Infrared-Quarz-tubes with single reflector

8x 460W + Standby-switch

Thermostat: Optical temperature control system with digital PID-

Controller with Software build 3.x, infinitely adjustable from 30°C to 250°C (can be switched to °F) .SPS controller with 3,5" Touch panel, showing SET and CUR-RENT temperature, timer- and Heating-ramp feature, software based maintenance info, multi language user interface, software updates available via USB port

Housing: Stainless steel inside, structural effect paint, RAL 7035

lightgrey outside, double-door with double pane

viewing windows 2x 25W illumination

Accessories: 1 tray with teflon coating, standard

Power supply: 400 V / 50/60Hz / 3,5 kW

Dimensions: outside: W 900 x D 700 x H 890 mm

inside: W 810 x D 580 x H 510 mm

Weight 133 kgs net / 183 kgs gross (including crate)



Eight Infrared-tubes, each with single reflector guarantee a fast and even heating process of the thermoplastic materials.





## **Infrared Oven IR1001 COMPACT**

for the O&P field

(Article No. 07-101C)



"Instant on" unit - less energy consumption! Heat on demand - no preheating necessary!







## **Infrared Oven IR1001 COMPACT**

The IR1001 COMPACT is designed to fit the needs for compact Infrared-Ovens at the small to mid-sized range. As a bench top oven or equipped with the optional stand the IR1001 COMPACT replaces also normal heating plates.

It is of course equipped with the innovative optical temperature sensor and a controller of the latest generation. Same as the larger Infrared-ovens the two-line PID-Controller keeps the user constantly updated of the preset and actual temperature values. The preselect feature allows the user to store four temperature settings which can be easily called up by use of a single button. A signal light informs the user when the set temperature is reached, even if he is not standing right in front of the control panel.



#### The components of the WITZEL IR control

- Digital PID-Controller with two-line display and signal-light for set point
- Optical Temperature-sensor, measures the exact surface temperature of the material
- Speed dial button for calling up 4 preset temperature values
- Automatic IR-tube shut-off when oven door is opened





## **Infrared Oven IR1001 COMPACT**

### Never burn your plastics again!

Infrared-heat is radiation-heat which heats materials and not air. The ingenious optical temperature control system of our Witzel Infrared-ovens gives you the absolute control over the surface temperature of the material - and that's what is important!

Thus we have been able to combine the enormous heating-power and -speed of the infrared-tubes with a reliable temperature control. Due to the measuring of the material's surface temperature (and not the inside air temperature) the full performance of the IR-tubes can be used.

The result is an oven which is instant on, which needs no preheating time and does not overheat and burn materials. Caused by this "ON DEMAND" use the energy consumption is drastically reduced. Long lasting preheating times are definitely a thing of the past!







## **Infrared Oven IR1001 COMPACT**

#### **Technical Details:**

Type: IR1001 COMPACT - Infrared Oven for the O&P field

Bench-top design

Footprint: approx. 1m<sup>2</sup>

Dimensions: Outside: W 1270 mm - D 920mm - H 455mm

Inside: W 1000mm - D 800mm - H 140mm

Tray: tray movable full size on ball bearing guides

easy to remove without tools for fast teflon replacement

effective heating area: W 950 x D 750 mm

Power supply: 400V / 50/60Hz / 3 Phase / (16 Amp. CEE) / total capacity 5,9 kW

(other voltages available)

Heating: 12 Infrared-Quartz-tubes with reflector

Stand-by switch

Temperature control: opto-electronic IR-measuring unit

Measuring of the material's surface temperature!

Temperature control: PID-Controller, infinitely variable from 30°C to 250°C

Door mechanism: Flap, opening to the top, gas shock supported (2x),

Double-pane viewing window

Illumination: 2 x 25 watts

Colour: Inside Stainless steel,

Outside structural effect paint, blue/lightgrey RAL 7035.

Weight: net: 150 kgs (Housing and Roll-about tray)

gross: 200 kgs (including crate)

Available Options: Stand, movable on 4 casters with stop



## **Infrared Oven IR1003**

for the O&P field (Article No. 07-103-400-32)

New 2021 model with additional features



"Instant on" unit - less energy consumption! Heat on demand - no preheating necessary!









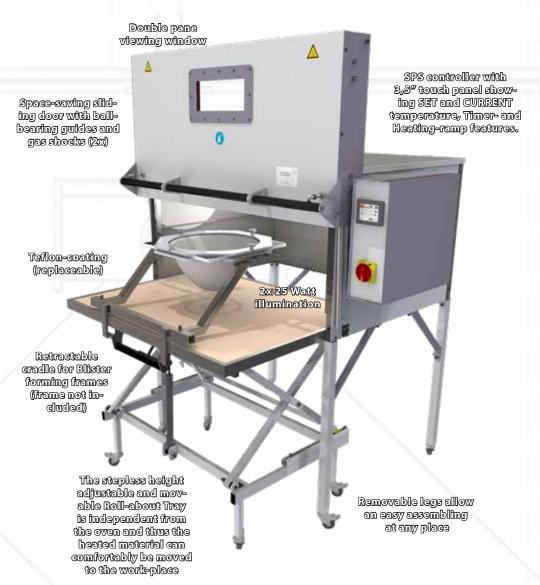
## **Infrared Oven IR1003**

### Never burn your plastics again!

Infrared-heat is radiation-heat which heats materials and not air. The ingenious optical temperature control system of our Witzel Infrared-ovens gives you the absolute control over the surface temperature of the material - and that's what is important!

The innovative Witzel Infrared-ovens are equipped with an optical temperature-sensor. Thus we have been able to combine the enormous heating-power and -speed of the infrared-tubes with a reliable temperature control. Due to the measuring of the material's surface temperature (and not the inside air temperature) the full performance of the IR-tubes can be used.

The result is an oven which is instant on, which needs no preheating time and does not overheat and burn materials. Caused by this "ON DEMAND" use the energy consumption is drastically reduced. Usual pre-heating times of up to one hour are definitely a thing of the past!



The IR1003 is the follower of the successful IR1002 which has become state of the art in thousands of O&P shops worldwide. The updated software with a reduced and modern design offers new features and practice based improvements. Well known features like Timer or Heating-ramp options or the graphic trend of the heating process are even more intuitive to use. The new fully integrated cradle for Blister forming frame processing saves time and prevents handling errors. And it protects the teflon foil of the Roll-about tray from scratches.



## **Infrared Oven IR1003**

The latest Witzel Infrared-Ovens of the ..03 series with software improvements and practical new features

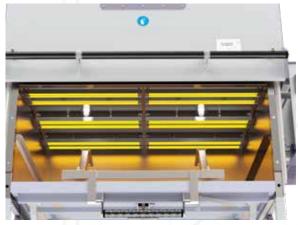
- Easy operation by central Touch panel with new, updated user interface
- Roll-about tray with fully integrated cradle for Blister forming frames
- ✓ Individual maintenance info with access to online manuals via QR-Code scan
- Space saving sliding door for all ovens with Roll-about tray
- Precise thermostat control by measuring the material temperature
- User-defined heating process memory
- ✓ Graphic trend visualization for heating process control

As well as the known and state of the art features like Direct SET temperature input, Timer feature, Ramp feature for slow heating processes (Pre-Preg processing),

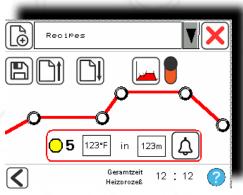


## Customized heating processes with timer and heat-ramp feature

Today's high end materials require individual solutions. The updated software of the microprocessor controller of the ..03 series provides a reduced and modern user interface as well as additional features.



12 Infrared-tubes with single reflector guarantee a fast and even heating process



Heating ramp feature with memory for customized process storage

#### IR1003 - suitable for:

- + Flat plastics
- + Blister-Forming
- + Pre-Preg







## **Infrared Oven IR1003**

**Technical Details:** 

Type: IR1002 - Infrared Oven for the O&P field

including movable Roll-about tray

Footprint: approx. 1 m<sup>2</sup> / oven housing movable on casters

Dimensions Outside: W 1320mm - D 970mm - H 1420mm

Total height with door opened: 1850mm

Inside: W 1000mm - D 800mm - H 500mm

Roll-about tray: Independent, 4 locking casters, Fully integrated and retractable cradle for

blister forming frames (frame not included) effective heating area: W 920 x D 720 mm

Lift range: 820mm - 1050mm

Power supply: 400V / 50/60Hz / 3 Phase / (16 Amp. CEE) / total capacity 5,9 kW

(other voltages available)

Heating: 12 Infrared-Quartz-tubes with reflector

Temperature reading: opto-elektronic IR-measuring unit

Measuring of the material's surface temperature!

Temperature control: Digital PID-Controller with Software build 3.x, infinitely adjustable from

30°C to 250°C (can be switched to °F) .SPS controller with 3,5" Touch panel, showing SET and CURRENT temperature, timer- and Heating-ramp feature, software based maintenance info, multi language user interface, software

updates available via USB port

Door mechanism: space saving vertical movement, gas shock (2x) assisted, ball bearing guided,

Double-pane viewing window

Illumination: 2 x 25 watts

Colour: Inside Stainless steel,

Outside structural effect paint RAL 7035 lightgrey.

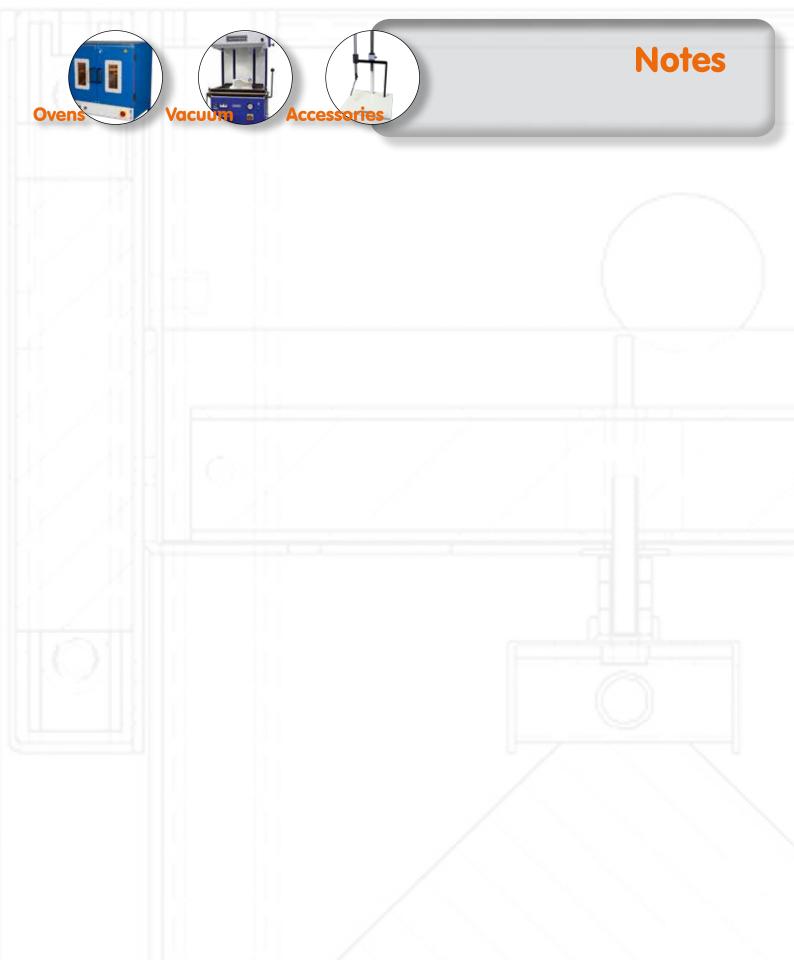
Weight: net: 230 kgs

gross: 275 kgs (including crate))

Available Options: • Pre-Preg Option (duct for Vacuum-hoses) (Art. No. 07-135)

• Cradle for Pre-Preg mould processing (Art. No. 07-136)

• Blister-Forming tray 360mm (Art. No. 07-132)







## **Infrared Oven IR1303**

for the O&P field (Article No. 07-133

New 2021 model with additional features



"Instant on" unit - less energy consumption! Heat on demand - no preheating necessary!



# Ovens Vacuum a Accessories

## **Infrared Ovens**

## **Infrared Oven IR1303**

## The latest Witzel Infrared-Ovens of the ..03 series with software improvements and practical new features

- Easy operation by central Touch panel with new, updated user interface
- Roll-about tray with fully integrated cradle for Blister forming frames
- √ Individual maintenance info with access to online manuals via QR-Code scan
- Space saving sliding door for all ovens with Roll-about tray
- Precise thermostat control by measuring the material temperature
- User-defined heating process memory
- ✓ Graphic trend visualization for heating process control

As well as the known and state of the art features like Direct SET temperature input, Timer feature, Ramp feature for slow heating processes (Pre-Preg processing),



#### Energy saving heating selection feature

The large IR1302 offers a standard heating selection feature which allows to activate a smaller or larger area of the 18 IR tubes. Thus the energy consump-

tion can be reduced when heating smaller material pieces.





#### Individual maintenance info



The software based maintenance info reminds the user individually and automatically when maintenance is due. Maintenance instructions and operating manuals are available on site at any time via QR code (retrieval via Internet-capable smart phone or tablet PC, not included in the scope of delivery).







## **Infrared Oven IR1303**

### Never burn your plastics again!

Infrared-heat is radiation-heat which heats materials and not air. The ingenious optical temperature control system of our Witzel Infrared-ovens gives you the absolute control over the surface temperature of the material - and that's what is important!

The innovative Witzel Infrared-ovens are equipped with an optical temperature-sensor. Thus we have been able to combine the enormous heating-power and -speed of the infrared-tubes with a reliable temperature control. Due to the measuring of the material's surface temperature (and not the inside air temperature) the full performance of the IR-tubes can be used.

The result is an oven which is instant on, which needs no preheating time and does not overheat and burn materials. Caused by this "ON DEMAND" use the energy consumption is drastically reduced. Usual pre-heating times of up to one hour are definitely a thing of the past!



The IR1303 is the follower of the successful IR1302 which has become state of the art in thousands of O&P shops worldwide. The updated software with a reduced and modern design offers new features and practice based improvements. Well known features like Timer or Heating-ramp options or the graphic trend of the heating process are even more intuitive to use. The new fully integrated cradle for Blister forming frame processing saves time and prevents handling errors. And it protects the teflon foil of the Roll-about tray from scratches.



## **Infrared Oven IR1303**

#### **Technical Details:**

Type: IR1303 - Infrared Oven for the O&P field

including movable Roll-about tray

Footprint: approx. 1,5m<sup>2</sup> / oven housing movable on casters

Dimensions: Outside: W 1595mm - D 1270mm - H 1400mm

Total height with door opened: 1850mm Inside: W 1300mm - D 1090mm - H 500mm

Roll-about tray: Independent, 4 locking casters, Fully integrated and retractable cradle for

blister forming frames (frame not included)

locking gas shock lift adjustment - locks at any height, Single-hand operation

effective heating area: W 1245 x D 1045 mm

Lift range: 820mm - 1050mm

Power supply: 400V / 50/60Hz / 3 Phase / (16 Amp. CEE) / total capacity 8,5 kW

(other voltages available)

Heating: 18 Infrared-Quartz-tubes with reflector

Dual zone switching (6/18)

Temperature reading: opto-elektronic IR-measuring unit

Measuring of the material's surface temperature!

Temperature control: Digital PID-Controller with Software build 3.x, infinitely adjustable from

30°C to 250°C (can be switched to °F) .SPS controller with 3,5" Touch panel, showing SET and CURRENT temperature, timer- and Heating-ramp feature, software based maintenance info, multi language user interface, software

updates available via USB port

Door mechanism: space saving vertical movement, gas shock (2x) assisted, ball bearing guided,

Double-pane viewing window

Illumination: 2 x 25 watts

Colour: Inside Stainless steel,

Outside structural effect paint, lightgrey RAL 7035 with RAL7031 applications

Weight: net: 290 kgs

gross: 365 kgs (including crate)

Standard accessory: Pre-Preg option (hose duct) included as a standard

Available Options: • Blister-Forming tray 360mm (Art. No. 07-132)

• Cradle for Pre-Preg mould processing (Art. No. 07-136)

## Notes







## **Infrared Oven IR1303 XTR**

for the O&P field

(Article No. 07-133XTR-400-3

Space-saving sliding

door with ball-bearing guides and gas shocks (2xx)

> Teflon-coating (replaceable)

New 2021 model with additional features

SPS controller with 5,5" touch panel showing SET and CURRENT temperature, Timer- and Heating-ramp features.

The stepless height adjustable and movable Roll-about Tray is independent from the oven and thus the heated material can comfortably be moved to the work-place

Retractable cradile for Blister forming frames (frame not included)) Oven-housing movable on casters

Removable legs allow an easy assembling at any place

The IR1303 XTR is a version of the successfull IR1303 (more details at page 55). The new IR1303 XTR offers the same features as the standard IR1303 plus an extended heating area of 50cm more depth. Thus the usable area has been increased to 124 x 154 cm and closes the gap between IR1303 and IR2103 DUAL. **Refer to the IR1303 product brochure to learn more about the innovative features of the Witzel Infrared-oven line.** 

Double-pane viewing window

> 4x 25 Watt illumination





## **Infrared Oven IR1303 XTR**

#### **Technical Details:**

Type: IR1303 XTR - Infrared Oven for the O&P field

including movable Roll-about tray

Footprint: approx. 2,4m² / oven housing movable on casters

Dimensions: Outside: W 1595mm - D 1770mm - H 1400mm

Total height with door opened: 1850mm Inside: W 1300mm - D 1590mm - H 500mm

Roll-about tray: Independent, 4 locking casters, Fully integrated and retractable cradle for

blister forming frames (frame not included)

locking gas shock lift adjustment - locks at any height, Single-hand operation

effective heating area: W 1245 x D 1545 mm

Lift range: 820mm - 1050mm

Power supply: 400V / 50/60Hz / 3 Phase / (32 Amp. CEE) / total capacity 11,1kW

(other voltages available)

Heating: 24 Infrared-Quartz-tubes with reflector

Dual zone switching (6/24)

Temperature reading: opto-elektronic IR-measuring unit

Measuring of the material's surface temperature!

Temperature control: Digital PID-Controller with Software build 3.x, infinitely adjustable from

30°C to 250°C (can be switched to °F) .SPS controller with 3,5" Touch panel, showing SET and CURRENT temperature, timer- and Heating-ramp feature, software based maintenance info, multi language user interface, software

updates available via USB port

Door mechanism: space saving vertical movement, gas shock (2x) assisted, ball bearing guided,

Double-pane viewing window

Illumination: 4 x 25 watts

Farbe: Inside Stainless steel,

Outside structural effect paint TAL 7035 lightgrey

Weight: net: 360 kgs

gross: 466 kgs (including crate)

Available Options: • Pre-Preg Option (2 ducts for Vacuum-hoses) (Art. No. 07-135)

• Cradle for Pre-Preg mould processing (Art. No. 07-136)

• Blister-Forming tray 360mm (Art. No. 07-132)



## Infrared-Oven IR2103 - DUAL

for the O&P field (Article No. 07-213D-400-3

# New 2021 model with additional features



#### IR2103 - DUAL suitable for:

- + Flat plastics
- + Blister-Forming
- + Pre-Preg







## Infrared-Oven IR2103 - DUAL

The IR2103 DUAL is the next step of the successful Witzel IR-oven line. It has been designed for the special needs of larger moulds in the O&P field. The IR2102 - DUAL combines two ovens in one.

A heated area of  $2140 \times 1040 \text{ mm}$  allows to heat larger material sheets even for custom made seats for wheel chairs etc. Additionally this DUAL version allows to use the oven for two totally independent heating tasks at the same time. So two sheets of 1x1 meter or two Blister-forming trays can be heated separately. The double thermostat controller allows to process materials with different temperature requirements at the same time.

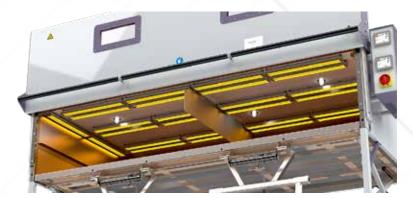
The updated software of the Series ..03 ovens with a reduced and modern design offer new features and practice based improvements. Well known features like Timer or Heating-ramp options or the graphic trend of the heating process are even more intuitive to use. The new fully integrated cradle for Blister forming frame processing saves time and prevents handling errors. And it protects the teflon foil of the Roll-about tray from scratches.

## The latest Witzel Infrared-Ovens of the ..03 series with software improvements and practical new features

- Easy operation by central Touch panel with new, updated user interface
- Roll-about tray with fully integrated cradle for Blister forming frames
- ✓ Individual maintenance info with access to online manuals via QR-Code scan
- Space saving sliding door for all ovens with Roll-about tray
- ✓ Precise thermostat control by measuring the material temperature
- User-defined heating process memory
- Graphic trend visualization for heating process control

As well as the known and state of the art features like Direct SET temperature input, Timer feature, Ramp feature for slow heating processes (e.g. for Pre-Preg processing)





The removable divider allows to opperate the IR2103 DUAL with two different temperatures. For example 130° C for EVA on the left side and 190° C for Polypropylen t the right side.

# Ovens Vacuum Accessories

## **Infrared Ovens**

## Infrared-Oven IR2103 - DUAL

## Never burn your plastics again!

Infrared-heat is radiation-heat which heats materials and not air. The ingenious optical temperature control system of our Witzel Infrared-ovens gives you the absolute control over the surface temperature of the material - and that's what is important!

Thus we have been able to combine the enormous heating-power and -speed of the infrared-tubes with a reliable temperature control. Due to the measuring of the material's surface temperature (and not the inside air temperature) the full performance of the IR-tubes can be used.

The result is an oven which is instant on, which needs no preheating time and does not overheat and burn materials. Caused by this "ON DEMAND" use the energy consumption is drastically reduced. Usual pre-heating times of up to one hour are definitely a thing of the past!







## Infrared-Oven IR2103 - DUAL

**Technical Details:** 

Type: IR2103- DUAL - Infrared Oven for the O&P field

including movable Roll-about tray

Unit with DUAL temperature control and removable dash panel. Suitable

either for heating 2m x 1m or independent 2x 1m x 1m.

Footprint: approx. 3,1m<sup>2</sup> / oven housing movable on casters

Dimensions: Outside: W 2400 mm - D 1240mm - H 1300mm

Total height with door opened: 1750mm Inside: W 2100mm - D 1090mm - H 500mm

Roll-about tray: Independent, 4 locking casters, Fully integrated and retractable cradle for

blister forming frames (frame not included)

locking gas shock lift adjustment - locks at any height, Single-hand operation

effective heating area: W 2040 x D 1040 mm

Lift range: 710 mm - 940 mm

Power supply: 400V / 50/60Hz / 3 Phase / (32 Amp. CEE) / total capacity 12,9 kW

(other voltages available)

Heating: 28 Infrared-Quartz-tubes with reflector

Dual zone switching (2x 14)

Temperature reading: opto-elektronic IR-measuring unit

Measuring of the material's surface temperature!

Temperature control: DUAL Digital PID-Controller with Software build 3.x, infinitely adjustable from

30°C to 250°C (can be switched to °F) .SPS controller with 3,5" Touch panel, showing SET and CURRENT temperature, timer- and Heating-ramp feature, software based maintenance info, multi language user interface, software

updates available via USB port

Door mechanism: space saving vertical movement, gas shock (2x) assisted, ball bearing guided,

Double-pane viewing window

Illumination: 4 x 25 watts

Colour: Inside Stainless steel,

Outside structural effect paint, blue/lightgrey RAL 5017/7035.

Weight: net: 448 kgs (Housing and Roll-about tray)

gross: 631 kgs (including crate)

Available Options: • Pre-Preg Option (2 ducts for Vacuum-hoses) (Art. No. 07-135)

Cradle for Pre-Preg mould processing (Art. No. 07-136)

• Blister-Forming tray 360mm (Art. No. 07-132



## **VACUPRESS Accessories**

## Work-bench / Stand

#### with integrated Drawer-block

This VACUPRESS work-bench is equipped with a space saving drawer block. The steel-drawers are guided by ball-bearing rails. The drawers can be pulled out 80% of its depth and can be loaded with 60 kg each. A pull-out stop provides from pulling out several drawers at the same time and avoids it from tipping by this.

Outside dimensions of the stand: WxDxH 640x645x820 mm

#### Other versions and accessories available on request!

Art. No. 01-690 1 Drawer 60 mm 1 Drawer 100 mm 1 Drawer 180 mm 1 Drawer 180 mm



## **VACUPRESS Accessories**







## **Mould-positioning unit**

(Article No. 01-626)

Your daily work is made easier with this practical aid. From low shoe to boot, stores practically every model securely and comfortably. The multiple fast adjustment enables quick "switching" from low to high models and vice versa. Thanks to the narrow support area, this bearing application assistance enables deep drawing results which are practically complete all the way around.



## **Heat Protection Gloves**

(Thin version, one size fits all)

(Article No. 20-008)

Light cotton heat protection gloves for working with soft foam thermoplastics or other thermoplastics and for short-term thermal loads.





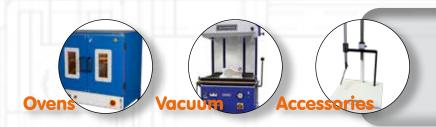
## **Heat Protection Gloves**

(Thick version, one size fits all)

(Article No. 20-009)

Thick cotton heat protection gloves (terrycloth) for heavy and long-term thermal loads. With long cuff to protect the forearm.





## VACUPRESS Accessories

## **Vacuum-Distributor**

(Article No. 09-160)

This vacuum distributor acts as the terminal for your central vacuum supply. Subsequently, at any workstation you have vacuum connections available which are independently adjustable (volume flow) at four ball valves. The distributor is designed for wall mounting (fixing material not included).

We provide several accessories for connecting the distributor and installing your vacuum line. Ask us about it. We will like to give you our advice.



## Vacuum-Distributor IRV-PRO

(Article No. 09-165)

Due to its features this adjustable Vacuum-Distributor provides extended capabilities. The vacuum of both connections can be individually and seperately regulated from 0 -100%. A seperate vacuum gauge allows perfect control over your working process.

We provide several accessories for connecting the distributor and installing your vacuum line. Ask us about it. We will like to give you our advice.



## Laminating jig

(Article No. 07-350)

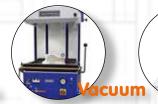
The laminating jig is used for fixing the mold during resin lamination work. Due to two vacuumlines the lower and upper vacuum bag can be evacuated separately. Bracket for vise assembly is standard. Standard version with 130mm plate, alterative version with 100mm is also available. All

components can be ordered separately as well.



## VACUPRESS Accessories







## Foot-operated vacuum valve

(Article No. 01-624)

The foot-operated vacuum valve can be used for thermoplastic drape molding or blister forming. The valve can be configred either as normally open or normally closed. A lockable version is available version is also available.

With the help of this valve as a "third hand" and due to the vacuum automatic of all VACUPRESS deep drawing devices you have both hands free during the complete deep drawing procedure and can control the suction speed comfortably with your foot. A practically indispensable accessory, especially for the production of test shoes and bath shoes in particular!

Connection is possible to all VACUPRESS as well as most other vacuum-presses.





## INFRARED-OVEN Accessories

## **Blister Forming Tray (Type A)**

(Artikel No. 07-132

Blister-forming tray for prostetic sockets. Item with lateral bars for use in ovens with rails or with cradle Art.No. 07-134.

Dimensions LxW: 450 x 450 mm inner diameter: D=360 mm



## Cradle for Blister Forming Tray

(Artikel No. 07-134)

This width adjustable cradle allows to use Blister-forming trays without legs (e.g. Art.No. 07-132) with Infrared-Ovens IR1001, 1302, IR1302 XTR or IR2102 DUAL.

Dimensions LxWxH: 400 x 300 x 250 mm / Width adjustable 350-515 mm



## INFRARED-OVEN Accessories





## **Blister Forming Tray Type B (Set)**

(Artikel No. 07-132BS)

Blister-forming Set for BK and AK prostetic socket production. The set includes a Blister-forming tray with two plates (D=320mm and D=265mm) and a vacuum-table with fitting silicone-rings and assembly material.

All components can be purchased separately as well.



## **Blister Forming Tray Type B**

Blister-forming tray (solo), incl. two plates (D=320mm and D=265mm).





## INFRARED-OVEN Accessories

## **Teflon-coating**

Teflon-coating, glass fibre-reinforced, for oven purpose etc.

#### Available as running meter in dimensions below:

Article No. 13-150 Surface porous, colour: beige thickness: 0,20mm running meter / 1500mm wide

Article No. 13-151 Surface even, colour: beige thickness: 0,25mm running meter / 1500mm wide



#### **Replacement Teflon-coating sets for Infrared Ovens**

Article No. 07-100-009/P
Teflon Replacement Kit for IR1000/1001/1002, consists of
-Teflon coating porous, thickness 0,20mm, all 4 sides sewn weft

Article No. 07-130-009/P
Teflon Replacement Kit for IR1300/1301/1302, consists of
-Teflon coating porous, thickness 0,20mm, all 4 sides sewn weft

Article No. 07-210-009/P
Teflon Replacement Kit for IR2101/2102 DUAL, consists of
-Teflon coating porous, thickness 0,20mm, all 4 sides sewn weft

## **Aramid-Felt**

Article No. 13-200 Aramid-felt 2,3mm thick, per running meter on a roll, width 1600mm, heat resistant up to 250°C, color yellow

Suitable for covering and protecting teflon sheets when using Blister forming frames or Pre-Preg cradles etc..





## **Pre-Preg hose duct (option)**

(Article No. 07-135)

This option is available for all Infrared-ovens. It consists of a stainless steel ducts (at the left side of the housing) which allows to put a vacuum-hose through to provide vacuum inside the oven. When not in use, the duct can be covered by an outside cap.

Inside diameter ~ 17mm





## Cradle for Pre-Preg mould positioning

(Artikel No. 07-136)

This cradle allows the horizontal positioning of orthotic moulds inside Infrared-ovens when processing Pre-Preg or EASYPREG materials. The moulds are placed in the socket of the cradle by use of special vacuum-tubes. The moulds can be rotated by 360°.

Dimensions LxWxH: 560 x 210 x 190 mm Inside diameter of socket fits vacuum-hoses up to D=37mm

(suitable with Infrared-Ovens IR1002, 1302, 1302 XTR, 2102 DUAL)



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Witzel Vacupress



# OVEN Accessories

### **Pre-Preg Vacuum-Tubes**

Vacuum-tube sets for Pre-Preg processing. The sets include:

- 1x 1/2" Vacuum-tube with ball-valve and coupling
- 1x crosbar to hang the mold inside an oven
- 1x Heat-reistant silicone-hose (1m) with 2x plug for coupling

Ball-valve and couplings are heat-resistant up to 120°C



Article 18-500-308/S

1-way vacuum-tube



Article 18-500-310/S

2-way vacuum-tube

### **Pre-Preg Accessories**

Below are assorted samples of accessory parts to connect the Pre-Preg vacuum-hose with a central vacuum-system or a vacuum-pump.



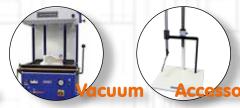
Special-Vacuum-hose, heatresistant up to 200°C (per meter)

Article 18-100 inner diameter = 4mm Article 18-100/6 inner diameter = 6mm Article 18-100/10 inner diameter = 10mm

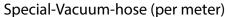


## OVEN Accessories









 $\begin{array}{lll} \text{Article 18-101} & \text{inner diameter} = 5 \text{mm} \\ \text{Article 18-102} & \text{inner diameter} = 6 \text{mm} \\ \text{Article 18-103} & \text{inner diameter} = 12 \text{mm} \\ \text{Article 18-104} & \text{inner diameter} = 20 \text{mm} \\ \end{array}$ 



Water-trap 1/2"

Article 02-881 incl. 6mm / 12mm hose connection



T-joint for Vacuum-hose

Article 18-200 inner diameter = 12mm Article 18-201 inner diameter = 20mm

Article 18-202 inner diameter = 2x 20mm / 1x 12mm



Ball valve with hose connection

Article 18-230 1/4" incl. 12mm connection Article 18-231 3/4" incl. 20mm connection



Coupling NW7,2

Article 18-302 incl. 12mm hose connection



Plug NW7,2

Article 18-304 incl. 12mm hose connection



Coupling 1/8"

Article 18-320 heatresistant up to 200°C



Plug 1/8"

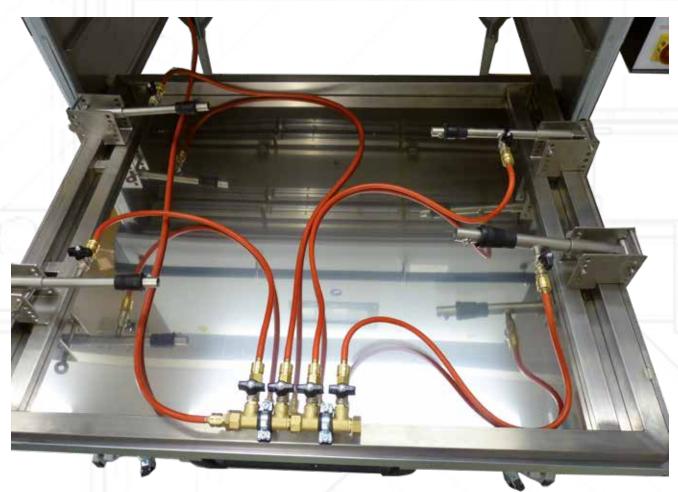
Article 18-321 heatresistant up to 200°C



### "Baumeister" Pre-Preg (BMP) set

The "Baumeister" Pre-Preg accessory line arised from professional O&P practice and has been developed to maturity phase now. This high-end stainless steel tool-box has been especially designed for processing Pre-Preg materials in Infrared-ovens. It is compatible with Infrared-ovens IR1302, IR1302 XTR und IR2102 DUAL.

The BMP accessory kit is available as four standard versions. As 4x or 6x version and with or without thermoforming option. All items can be purchased separately to extend the kits. Beside the basic frame with adapters and sockets for the included vacuum-tubes, the kits include handy clamping devices for wear-out free fixing of the vacuum-tubes during processing.



Pic. shows "Baumeister" Pre-Preg Set 4x (Art. 18-500-445) placed in an IR1302 Infrared-Oven







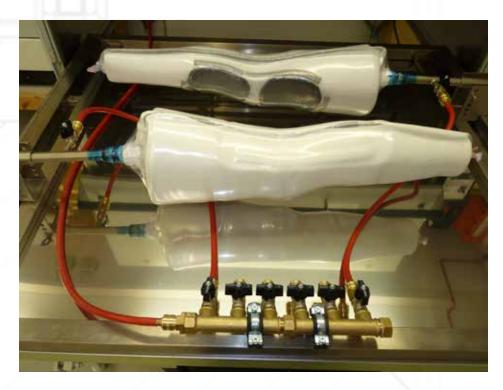
## "Baumeister" Pre-Preg (BMP) set



Easy assembly of the adapter at the basic frame. Infinitely adjustable and multiple change of vacuum-tube inclination

Tool-free placement of the moulds by vacuum-tubes with square fence







### "Baumeister" Pre-Preg (BMP) set

Article 18-500-446 "Baumeister" Pre-Preg kit 6x with thermoforming option

1x Pre-Preg basic frame

1x reflector stainles steel blank

6x adapter/holder, inclination adjustable for vacuum-tube sockets

5x vacuum-tube socket 1/2"

1x vacuum-tube socket 3/4"

5x vacuum-tube 1/2" with square socket

1x vise clamping device 3-form vertikal for 1/2"

1x vacuum-tube 3/4" with square socket

1x vise clamping device 3-form vertikal for 3/4"

1x vacuum-distributor 6x with valves

1x hose-kit for vacuum-distributor 6x (2x 60cm, 2x 90xm, 2x 120cm)

1x vacuum-hose inside oven to vacuum-distributor 180cm

1x vacuum-tube 1/2" for thermoforming

1x vise clamping device 7-form horizontal for 1/2"

1x vacuum-tube 3/4" for thermoforming

1x vise clamping device 7-form horizontal for 3/4"

Article 18-500-444 "Baumeister" Pre-Preg kit 4x with thermoforming option

Article 18-500-445 "Baumeister" Pre-Preg kit 4x

Article 18-500-447 "Baumeister" Pre-Preg kit 6x









## "Baumeister" Pre-Preg (BMP) set

Article 18-500-400 BMP Pre-Preg basic frame 1250 x 1080 mm incl. reflector blank D3, t=1mm



Article 18-500-401

BMP adapter/holder for vacuum-tube sockets

Article 18-500-402 Article 18-500-403 BMP vacuum-tube socket 1/2" BMP vacuum-tube socket 3/4"

1"

Pic. shows 18-500-401 + -402

Article 18-500-404

BMP vacuum-tube with square socket 1/2"

Article 18-500-405

BMP vacuum-tube with square socket 3/4"





### "Baumeister" Pre-Preg (BMP) set

Article 18-500-406 BMP clamping device 3-form vertical with square socket 1/2" Article 18-500-407 BMP clamping device 3-form vertical with square socket 3/4"



Article 18-500-411 BMP 4x vacuum-distributor with ball-valves, coupling, assembly clamps

Article 18-500-412 BMP 6x vacuum-distributor with ball-valves, coupling, assembly clamps



Pic. shows 18-500-412

Article 18-500-413 hose-kit for 4x vacuum-distributor, 2 hoses each: 80, 120 cm
Article 18-500-414 hose-kit for 4x vacuum-distributor, 2 hoses each: 60, 90, 120 cm
vacuum-hose inside oven to vacuum distributor, 1x 180 cm, coupling







## "Baumeister" Pre-Preg (BMP) set

Article 18-500-415 1/2" thermoforming vacuum-tube with ball valve and coupling 3/4" thermoforming vacuum-tube with ball valve and coupling Article 18-500-417 1/2" thermoforming vacuum-tube with ball valve and coupling

Pic. shows 18-500-415 + -416

Article 18-500-420 BMP wall holder for Pre-Preg basic frame adapter

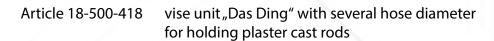


Article 18-500-408 clamping device 7-form, horizontal

for 1/2" thermoforming vacuum-tube

Article 18-500-409 clamping device 7-form, horizontal

for 3/4" thermoforming vacuum-tube









## Vacuum-tube 1-1/2" for large moulds

"BMP" 1-way vacuum-tube 1-1/2" with ball-valve, DIN coupling and bracket for a quick and safe assembly at the vise. Suitable for use with 1" tubes (like body-jackets) (Article 18-500-441)



"BMP" adaptation for 1-way vacuum-tube 1 1/2" for an easy and rotation prevented assembly of milled foam moulds. The integrated slot allows to turn the mould in 90° steps.

(Article 18-500-320/A)







## Clamping device for vacuum-tubes

BMP clamping device with bracket and quick release for powerful and damage-free fixing of standard vacuum-tubes. Available for different tube diameter: 28mm / 30mm / 35mm (Article 18-500-600-xx)





## **OVEN Accessories**

## "Baumeister" Pre-Preg (BMP PO) Set for PO1200 + PO1800

This Pre-Preg oven accessory set hase been developed on basis of the "Baumeister" accesssories for Infrared-Ovens. The components are designed from daily practice in a german O&P workshop. The vacuum-tubes and brackets are compatible to the Infrared-oven BMP sets. The high-class stainless steel accessories program has been developed especially for the PO1200 and PO1800 Pre-Preg ovens.

The set can be upgraded in different configurations and provides the opportunity to place up to 12 molds inside the oven at the same time. Beside a unit to hang the molds, a stand up unit can be placed at the bottom the oven.



# **OVEN**Accessories





## "Baumeister" Pre-Preg (BMP PO) Set for PO1200 + PO1800



Due to the available hanging and stand-up units it is possible to place molds at the top and the bottom. (Pic. shows BMP PO set at an PO1800)



The crossbars with quick release allow to prepare the molds easily with the vise clamping unit which is available as an option (see page 81). The hanging unit provides up to 88 different positions to hang the vacuumtubes / crossbars.



# OVEN Accessories

### "Baumeister" Pre-Preg (BMP PO) Set for PO1200 + PO1800

Article 18-500-300 "Baumeister" BMP PO Hanging unit set for PO1200/1800:

1 Hanging unit (frame) for installation inside the oven (top)

6 crossbars with square socket for Baumeister Prepreg-

vacuum-tubes 1/2" and 3/4"

6 secure plug bolts for fixing the square sockets

Article 18-500-301 Hanging unit installation set for 6x or 12x vacuum-distributor:

2 crossbars with square sockets

2 square bolts with holes

2 secure plug bolts for fixing the square sockets

2 thread bolts

2 mounting clamps

Article 18-500-302 6x vacuum-distributor for PO 1200/1800

Article 18-500-303 6x hose set for vacuum-distributor:

6 heatresistant silicone hoses with hose connectors on both ends

1 heatresistant silicone hose with hose connector and coupling

Article 18-500-304 12x vacuum-distributor for PO 1200/1800

Article 18-500-305 12x hose set for vacuum-distributor:

12 heatresistant silicone hoses with hose connectors on both ends

1 heatresistant silicone hose with hose connector and coupling

Article 18-500-306 silicone hose for PO1200/1800 inside connection to

distributor with hose clamp, hose connector, coupling and

1/2" nippel.

Article 18-500-307 "Baumeister" BMP PO stand-up unit for PO1200/1800:

1 stand-up unit with 46 options for 3x telescope tube inserts,

16 of them fixed and 8 loose ones as an option to optimize mold

positioning.

Article 18-500-308 Prepreg-vacuum-tube 1/2" with ball-valve and coupling NW 7,2

with thread and bolt for fixing the mold at the tube, square socket with

hole for crossbar assembly.

Article 18-500-309 Prepreg-vacuum-tube 3/4"(items delivered like 18-500-308)

Article 18-500-310 2-way Prepreg-vacuum-tube 1/2" (items delivered like 18-500-308)

Article 18-500-311 3-way Prepreg-vacuum-tube 1/2" (items delivered like 18-500-308)

# **OVEN**Accessories





## "Baumeister" Pre-Preg (BMP PO) Set for PO1200 + PO1800





A 3-way vacuum-tube for special applications is also available.





# **EASYPREG Accessories**

### **EASYPREG Vacuum-Frame**

Special Vacuum-frame for processing the EASYPREG materials with VACUPRESS or other vacuum-presses.

EASYPREG Vacuum-Frame suitable for VA 620 SII/S3 incl. connection hose + inline valve and fitting frame insulation (Please ask for compatibility with third-party products).

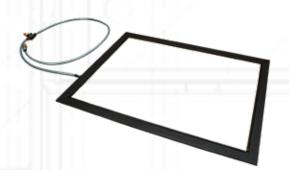
Dimesnions: 595 x 435 x 5 mm

Art.No. 01-623/S

EASYPREG Vacuum-Frame suitable for VA 900 XR incl. connection hose + inline valve and fitting frame insulation.

Dimensions: 870 x 660 x 5 mm

Art.No. 03-930





### Infrared hand-held Thermometer

Infrared hand-held Thermometer for processing EASYPREG materials.

With precision optic and laser sighting for accurate noncontact temperature measurement, visible nd auible alarm, HOLD feature, MAX und MIN feature, -32° ... 420°C / optics 20:1 / resolution 0,2°C, incl. 9V Batterie, Manual

Art.No. 20-110

Nylon bag for hand-held thermometer Art.No. 20-111



# **VACUPRESS Materials**





### **Bladder**

Standard-Bladder with very good endurance and high elasticity

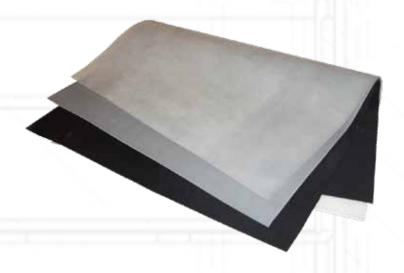
Colour: black

Surface: micro-patterned

Available dimensions:

Article size

10-450 450x400x1,2 mm 10-620 600x450x1,2 mm



### Soft-Bladder

Special-Bladder with excellent characteristics for thermoplastic materials. Does not stick on the most materials used in the O&P and shoe-technique field without using talcum. Extremely extensible and softly molding.

Colour: lightgrey Surface: even

### Available dimensions:

Article No.	size	
10-621	450x400x2,0 mm	
10-622	600x450x2,0 mm	
10-452	620x500x2,0 mm	
10-521	700x510x2,0 mm	
10-522	700x700x2,0 mm	
10-851	850x680x2,0 mm	
10-922	900x750x2,0 mm	
10-151	1500x1100x2,0 mm	1
10-951	running meter x 2,0	0 mm / 1300 mm wide

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© 2021 Witzel Vacupress



# **VACUPRESS Materials**

### Silicone-Bladder

100% Silicone-Bladder! Unbeatable stretchable and heat-resistant. This material meets even the highest demands!

Colour: white/transparent

Surface: even

### Available dimensions:

Article No.	size
12-450	450x400x2,0 mm
12-620	600x450x2,0 mm
12-451	620x500x2,0 mm
12-520	700x510x2,0 mm
12-522	700x700x2,0 mm
12-850	850x680x2,0 mm
12-900	900x750x2,0 mm
12-150	1500x1100x2,0 mm
12-950	running meter x 2,0 mm, 1200 mm wide

### **Test-shoe PVC-sheets**

PVC-foil available in different thicknesses for test-shoes and last/model copies. The 2,0 mm foil is also suitable for the O&P field.

Colour: transparent, clear

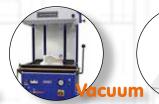
Surface: even

### Available dimensions:

Article No.	size
11-450	450x400x0,4 mm
11-620	600x450x0,5 mm
11-622	600x450x1,0 mm
11-624	600x450x2,0 mm

## ASSISTANT-System







### **ASSISTANT - Plaster shape support**

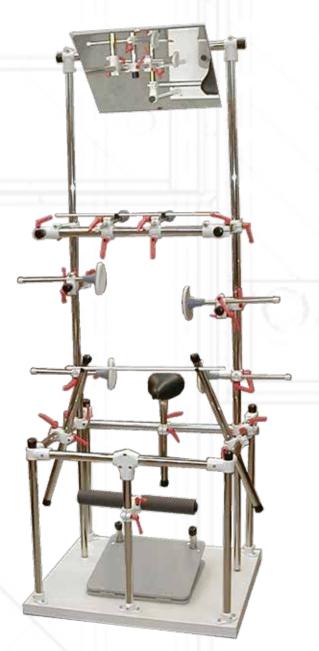
# The flexible system for all purpose adjustable – expandable – fair-priced

The basic-unit with individually inclinable foot plate, knee rests with adjustable elevation, as well as arm rests adjustable in 3 tiers. The patient will be able to tolerate the plaster cast procedure even over longer duration without modification of the position. The work becomes more secure and more comfortable for both sides.

ASSISTANT is a plaster aid with many faces. Altered with few manipulations making the work more precise to the plaster cast technique and helps in almost ranges. It gives the patient and the specialist safety through the different supporting and fixing elements. The Ba-



sic-Unit (shown on pic. above) with inclinable treadle, Knee-Support with adjustable elevation, upholstered and furnished, with armrests adjustable in 3 layers, finds its use in the case of all plaster works at the torso. in particular at Scoliosis casts. By use of the additional elements, variations and combinations many helpful configurations are available. From the extension and fixation and an adjustable seat-shape-unit up to support-units for knee- and hip-exarticulations.





## ASSISTANT-System

## **ASSISTANT - Plaster shape support**

### -the useful completion for your plaster cast technique

The picture on the right shows upgrade options for the "classical extension" with simultaneous stabilization of the patient by use of adjustable hand-rests.

This Scoliosis-unit allows to put and hold the patient in a correct casting position. 9 fixation- and correction-elements guarantee perfect results. The "de-Torsion-setting" is visualized by use of the mirror-unit.



### **Available Options:**

Article No.	Description
08-100	Basic-unit Assistant-System
08-110	Knee-rest Assistant-System
08-115	Foot-plate Assistant-System
08-120	Extensions-frame (with fixing parts)
08-121	Scoliosis-unit Assistant-System
08-122	Mirror-unit Assistant-System
08-125	Head strap with frame Assistant-System
08-130	Block and tackle Assistant-System
08-135	Seat- / stand-support (with fixing parts)
08-140	Knee-exarticulation load-unit Assistant-System
08-145	Hip-exarticulation load-unit Assistant-System

# Custom made units





# You did not find what you are looking for?

As a manufacturer we have all capabilities to realize your special requests and modify our machines to fit your individual needs. The use of up-to-date 3D CAD-CAM technologies gives us the capability of short-term feasibility analysis and a fast realization of customizations. We can provide computer based 3D simulations and motion analysis already at the time of quotation, so all involved parties, including the user can imagine how the customized product will work.

On these pages you can find some samples of special units and individual adjustments we made for our customers. Do you have any special requirements? - Don't hesitate to contact us. We would like to know your needs and try to find a solution for you.



CUSTOMIZED VACUUM-PRESS: VACUPRESS 620S3 with special heating und thermostat control for the photovoltaics filed



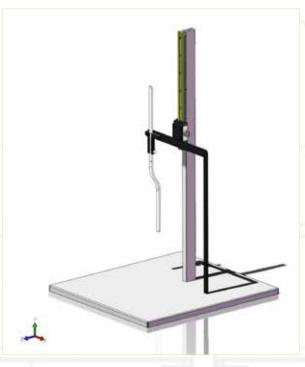
CUSTOMIZED VACUUM-PRESS: VACUPRESS 520 GK as a tandem unit with specialized vacuum-cavity 250x250x500 mm. Integrated vacuum-Pump 10m³/h. The unit is movable on casters.



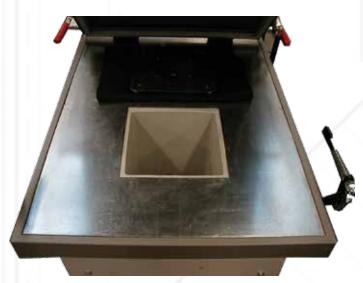
# Custom made units



CUSTOMIZED VACUUM-PRESS: VACUPRESS 620 S3 without Infared-heating and UNI-LOCK material clampingsystem for foot-orthotic production etc.



CUSTOMIZED HEIGHT GAUGE: DUO-Universal Height Gauge with extended caliper for skiboot measuring (3D Animation)



CUSTOMIZED VACUUM-PRESS:

VACUPRESS 850 with large vacuum cavity

# Notes







# General Terms of Business

## General terms of business Witzel VACUPRESS e.K., Inh. Hendrik Witzel (updated 01.05.2012)

The following General Terms and Conditions of Business (Conditions of Sale and Delivery) shall apply to all present agreements, offers and orders vis-à-vis companies as defined in § 310 clause 1 BGB [German Civil Code] (hereinafter: customers). Deviating, conflicting or supplementary General Terms and Conditions of Business of the customer shall not become parts of the contract, even if we not expressly object to them, unless we expressly approve of their validity. Apart from this, our Terms and Conditions of Sale and Delivery shall exclusively apply.

#### 1. Offers, orders, order acceptance and formation of contracts

- (1) Unless expressly otherwise agreed upon, our offers are non-binding and subject to confirmation (this means that they are revocable until acceptance).
- (2) We reserve the right to make technical changes as well as changes in shape, colour and/or weight within reasonable limits. Excess or short deliveries of up to 10% are admissible. In addition, excess or short deliveries of our suppliers which are admissible according to their General Terms and Conditions of Business authorise us to make excess or short deliveries to the same extent. The order will be executed within the technically required material and process-related tolerances. Deviations of the material quality according to our suppliers' terms of delivery shall be reserved.
- (3) By ordering goods from one of our catalogues in text form (e.g. by letter, fax, e-mail) or online, the customer declares his binding intent to purchase the ordered goods. The contract with us is concluded as soon as we accept the offer to enter into the contract in the order by order confirmation. We shall be entitled to submit this declaration of acceptance within two weeks after receipt of the order. The acceptance may be declared either in writing or by delivering the goods to the customer.
- (4) Our individual offers expire 20 working days after the date of the offer. By placing an order on the basis of this offer and within this period, the customer declares the binding acceptance of our offer.
- (5) The contract is concluded with the provision of correct and timely supply by our contract partners, subcontractors and suppliers. The customer will immediately, should certain supplies not be available. If we are not responsible for the non-delivery, in particular when effecting congruent hedging transactions with our suppliers, we shall be released from our performance obligation to the extent that such performance is hindered or delayed.
- (6) We shall not be bound by any details in offers and/or order confirmations which are obviously based on mistakes, i.e. a typing errors or miscalculation. Instead of this, the obviously intended declaration shall apply.
- (7) Offer documents, drawings, descriptions, samples and cost estimates may not be forwarded, published, reproduced or disclosed to third parties in any way whatsoever. Upon request, the documents shall be returned without keeping any copies of them.

#### 2. Delivery and delivery period

- (1) The agreed delivery periods are approximate periods. The arrangement of fixed delivery dates shall only be effective if expressly confirmed by us in written form.
- (2) The agreed delivery periods commence on the date of the order confirmation at the earliest; however, the delivery period commences not before we have been provided with all documents required to execute the order. Our delivery obligation is suspended as long as the customer is in default of a (advance) performance obligation. In the event that we culpably fail to meet an agreed delivery period, the default in delivery shall only be deemed to have occurred following the expiration of an adequate grace period.
- (3) Cases of force majeure these are understood to be circumstances and incidents that cannot be prevented with the due diligence of prudent business management shall result in the contractual obligations of the contract parties being suspended for the duration of the hindrance and to the extent of its effects. In case the resulting delay exceeds a period of ten weeks, both contract parties shall be entitled to withdraw from the contract with regards to the respective scope of performance. Any other claims shall be excluded.

#### 3. Prices, terms of payment

- (1) All prices are fixed prices excluding statutory value-added tax. In the absence of another agreement, our delivery is made excluding packaging, transport insurance, freight and assembly. Our prices are based on the labour and material costs/production costs as well as the value-added tax applicable at the time the contract is concluded. In the event that changes in the bases of calculation occur after the contract has been concluded as a result of higher labour and material costs/production costs, value-added tax or other circumstances, in particular technical changes in calculation, we shall be entitled to change the price in adequate relation to the change of the basis of calculation occurred. Alternatively, we shall be entitled to withdraw from the contract. This also applies to blanket or call-off orders, unless expressly otherwise agreed upon conclusion of the contract.
- (2) The agreed prices are binding. They shall be payable within 30 days after receipt of the goods or services (we grant a discount of 2% upon full payment within 10 calendar days); however, we reserve the right to demand advance payment from the customer (only a partial amount can be demanded as advance payment).
- (3) The customer falls in arrears after the 30-day period stipulated in § 3 clause 2 has expired. After this period, the customer shall pay interests amounting to 8 % above the base interest rate on the amount owed. We reserve the right to prove evidence of and enforce higher damages caused by default.
- (4) In the event of default in payment and justified doubts in the customer's solvency or creditworthiness, we shall be entitled without prejudice to our other rights to demand securities or advance payments for outstanding deliveries, to ship the goods COD, even if another payment method has been arranged, and accelerate the maturity of all rights arising from the business relationship. Only undisputed or legally determined claims entitle the customer to set off or retain payments. The customer may only exercise his right of retention if his counterclaim is based on the same contractual relationship.

#### 4. Place of performance, shipping, bearing of risk, transfer of risk

- (1) The place of performance is our place of business.
- (2) If the goods are shipped to a place other than the place of performance upon request of the customer, he shall bear the packaging and transport costs. The risk of accidental loss or deterioration of the goods is transferred to the customer upon handover, or in case of destination purchase upon delivery of the goods, to the forwarder, the carrier or any other person or institution commissioned with the shipping, even if such persons are our own employees. The handover of the goods shall be deemed to have been effected even if the customer is in default of acceptance.

#### 5. Customer specifications, further processing, instructions, assumption of liability, permissions

- (1) If we are to manufacture systems, products or other works and structures on the basis of the customer's specifications, the latter shall provide faultless, proper and complete specifications in due time. If it becomes evident that from our point of view modifications are necessary, we reserve the right to withdraw from an already concluded contract.
- (2) If we are to further process components, structures or materials, the customer shall be obliged to check them for faultlessness from the very beginning of our activity. This above all applies to partial works in an overall project so that damage or defectiveness of the end product is prevented.
- (3)If the cooperation of the customer is required within the scope of such contracts, he shall strictly observe our instructions and appropriately inform and instruct the respective operating staff.
- (4)In the event that a damage occurs resulting from the infringement of an obligation as stipulated in 5. clause 1 and/or clause 2, the customer shall be fully liable to the aggrieved party. In the event that third parties assert claims against us due to such damage, the customer shall indemnify us from the liability to full extent.
- (5) All permissions required to implement the contract shall be obtained by the customer.

continued on page 2 ...

# General Terms of Business





... page 2

#### 6. Warranty

(1) We provide warranty for defects at our discretion either by rectification or substitute delivery. In case the subsequent performance fails, the customer may demand the reduction of the purchase price (reduction) or withdraw from the contract (withdrawal). The customer shall, however, not be entitled to withdraw from the contract in case of only minor lack of conformity with the contract, in particular minor defects or nonconformities.

(2) The customer shall indicate patent defects in written from within a period of two weeks after receipt of the goods; otherwise, the enforcement of warranty claims shall be excluded. The full burden of proof regarding all prerequisites of claims, in particular relating to the defect itself, the time of the detection of the defect and the timeliness of the notice of defect, lies with the customer.

(3) In the event that the customers prefers to withdraw from the contract due to a defective title or material defect after the subsequent performance has failed, he shall not be entitled to assert further claims for damages based on the defect. In the event that the customer prefers to assert claims for damages after the subsequent performance has failed, the goods shall, where reasonable, remain in the possession of the customer. Claims for damages shall be limited to the difference between the purchase price and the value of the defective goods, unless the breach of contract has been caused fraudulently.

(4) The warranty period is 24 month from the delivery of the goods. As a matter of principle, only the details indicated by us as well as in the manufacturer's product description shall be considered as the agreed physical characteristics. Public statements, promotions or advertisements by the manufacturer shall not be deemed to constitute additional contractual physical characteristics of the goods. We disclaim all legal warranties to the customer. The procurement risk shall be excluded.

(5) Insofar as legally admissible, our obligation to provide compensation, no matter for what legal reason, shall be limited to the invoice value of those goods which are directly involved in the event causing the damage. In case of slight negligence of non-essential contractual obligations, any claims for compensation shall be excluded.

(6) Insignificant, reasonable deviations in size and design - in particular in case of repeat orders - shall not justify any complaints, unless absolute adherence has been expressly agreed upon. Technical improvements as well as necessary technical modifications shall also be regarded as in accordance with the contract, unless they impair the usability of the goods.

(7) If the operating and maintenance instructions are not observed, the products are modified, components are exchanged or consumption parts are used, the warranty shall expire, unless the ordering party is able to refute the appropriately substantiated assertion that the defect has been caused by one of these factors.

(8) The liability for normal wear and tear shall be excluded. Wear out parts are also excluded from liability.

#### 7. Reservation of title

(1) We reserve the title to the goods until all claims (including ancillary claims and claims for damages) arising from the ongoing business relationship with the customer have been fully paid for. Payment by cheque shall not terminate the reservation of title before its irrevocable value date.

(2) The customer undertakes to immediately inform us of any seizure of the goods, e.g. in case of pledging, as well as possible damage or destruction of the goods. The customer shall immediately notify us of any changes of ownership of the goods as well as the change of his own place of residence. The customer shall immediately inform us of pledging as well as seizure of the goods by third parties. We shall be immediately notified in written form and provided with all information we need to bring action against enforcement in accordance with § 771 ZPO [German Code of Civil Procedure]. The customer shall be liable if we suffer loss due to a third party's inability to reimburse us the judicial and extra-judicial costs of an action in accordance with § 771 ZPO. The customer may neither pledge nor transfer the contract item by way of security without or prior consent.

(3) In the event of breach of contract on part of the customer, in particular default of payment or infringement of an obligation as defined in 7. clause 2 and/or clause 4, we shall be entitled to withdraw from the contract and reclaim the goods.

(4) The customer shall be entitled to resell the goods in the course of ordinary business transactions; however, he hereby assigns to us all claims accrued against his purchasers or third parties from the resale of the goods equal in value to the outstanding invoice amount (including value-added tax), irrespective of whether the goods have been sold unprocessed or after the processing. This advance assignment also applies to possible substitute claims of the outstanding purchase price from the resale (such as e.g. claims for compensation for the simple reservation of title, alternative preferential rights, rights of separation for substitutes, etc.). The customer is herby authorised to collect such claims against the purchasers or third parties. Our authority to collect the claims ourselves shall remain untouched; however, we undertake not to collect the claims as long as the customer properly fulfils his payment obligation and is not in default of payment. If this is the case, however, we may demand that the customer disclose the claims assigned to us and the name of the debtors, provide us with all details required to collect the claims, hand over the associated documents and inform the purchasers of the assignment. Furthermore, the direct debit authorisation of the customer shall expire in this case.

(5) Any processing or transformation of the goods by the customer shall be done solely in our name and on our behalf. In case the goods are processed or transformed together with other items that do not belong to us, we shall acquire the shared ownership of the new product in proportion of the value of the goods to the other processed items at the time of the processing or transformation. Apart from this, the same applies to the product created by processing or transformation as to the goods subject to reservation of title (concerning the legal consequences of the simple, extended as well as prolonged reservation of title). The same applies in case the goods are combined as stipulated in § 947 BGB and mixed as stipulated in § 948 BGB with movables. The legal consequences stipulated in § 947 clause 2 BGB, 948 in connection with 947 clause 2 BGB as well as § 950 clause 1 sentence 1 BGB are settled by these processing clauses.

(6) The customer shall adequately insure the goods subject to reservation of title, in particular against fire and theft.

#### 8. Applicable law, place of jurisdiction, written form clause, severability clauses

(1) The law of the Federal Republic of Germany shall exclusively apply to these General Terms and Conditions of Business and all legal relationships between us and the customer, irrespective of the customer's place of business. This contract is subject to the non-unified German law, namely BGB/HGB [German Civil Code/German Commercial Code]. The provisions of CISG (United Nations Convention on Contracts for the International Sale of Goods) shall not be applicable.

(2) The place of jurisdiction is Essen. We shall, however, be entitled to take legal action against the customer at his place of residence or business.

(3) Modifications and supplements of a concluded contract must be made in written form/alternatively: text form (e.g. by letter, fax, e-mail). This also applies to the written form agreement itself. Oral side agreements shall be ineffective.

(4) In the event of individual provisions of these General Terms and Conditions of Sale and Delivery being or becoming ineffective or impracticable in whole or in part, the legal effectiveness of the remaining contractual provisions shall not be affected. The ineffective or impracticable provisions shall be replaced by an effective regulation that is as close as possible to the economic purpose of the ineffective provision. In case of doubts or disputes, the statutory regulations shall apply, if no supplementary interpretation in the aforementioned sense is possible or offered to fill the loophole.

The same applies in the event of contractual gaps.

Essen, 01.05.2012





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