Vacuum Technology

....doming without adhesive sprays



1. Vacuum Technology for the SurADoming Workstations

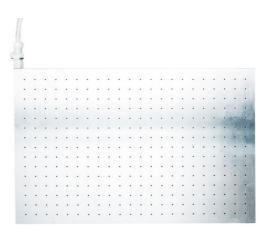
The processing of the SurACer® 4460 doming resin can be significantly simplified by using the different sized vacuum plates. Both during dispensing and curing of the resin, the foils to be coated remain tightly fixed on the vacuum plates, in absence of adhesive sprays or other complicated fixing techniques.

The vacuum shelves provide a safe and easy handling of the vacuum plates, as they easily slide inside and outside the vacuum shelves. This results in an optimum temporary space-saving storage of up to five vacuum plates at the same time, as also a perfect protection against dust and damages.

The vacuum pumps generate the necessary vacuum to fix the foils to be coated on the vacuum plate, thereby ensuring a firm surface during the entire workflow of doming process.

2. Vacuum Plates

The foils to be coated are fixed on vacuum plates by means of generated vacuum, securing a firm and level surface throughout the entire workflow. After the dispensing of the doming resin on the foils to be coated, the vacuum plates can be directly placed in the light-curing boxes. The vacuum plates replace, in this way fixing techniques, such as adhesive sprays, which lead to contamination of the back of the sheets. As a result, the foils can be tack-free packaged and shipped. If necessary, the foils can be temporary stored under vacuum in the special vacuum shelves.



| Vacuum Plates | | | | |
|--------------------------|-------------------|-------------------------------|-------------------|--|
| Type: | VP 3122 | VP 4530 | VP 5050 | |
| Material: | Aluminum | Aluminum | Aluminum | |
| Weight: | 0.54 kg | 1.5 kg | 2.3 kg | |
| External dimensions: | 310 mm x 220 mm | 450 mm x 300 mm | 500 mm x 500 mm | |
| Utilized surface: | 300 mm x 210 mm | 440 mm x 290 mm | 490 mm x 490 mm | |
| Height: | 17 mm | 17 mm | 17 mm | |
| Hole-size: | 2 mm | 2 mm | 2 mm | |
| Number of holes: | 150 Holes | 330 Holes | 676 Holes | |
| Drill-hole distances: | 18 mm | 18 mm | 18 mm | |
| Vacuum connection: | Pipe 10 mm x 8 mm | Plug connection - hose x 8 mm | Pipe 10 mm x 8 mm | |
| Vacuum shelf: | Possible | Possible | Possible | |
| Vacuum pump: | Vacuum pump 1-23 | Vacuum pump 1-40 | Vacuum pump 1-40 | |
| For Ight-curing box: | SurALux 8204-LC | SurALux 8202-V | SurALux 8202-V | |







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3. Vacuum Shelves

The special vacuum shelves provide a safe and easy handling of the vacuum plates, as they easily slide inside and outside the vacuum shelves. This results in an optimum temporary space-saving storage of up to five vacuum plates at the same time, as also a perfect protection against dust and damages.

Advantages of the shelf:

- Safe and easy handling of the vacuum plates, with easy inside- and outside slide in the shelves
- Space-saving with the tepmorary storage of the vacuum plates in the shelves
- Perfect protection against dirt and damage





3.1 Connection Posibilities

- 1-distributor with 5 hose-connections
- 2- distributors with 5 ball-valves
- 3-distributor mit 5 push-button quick-couplers for hoses

3.2 Technical Data

| Vacuum shelves | | | |
|----------------|----------------------------|--|--|
| Material: | Aluminium | | |
| Dimension: | L / D / H: 540 / 320 / 210 | | |
| Weight: | 5.6 kg | | |
| Feet: | 4 adjustable feet | | |

Special shelves with vacuum-plate dimensions up to 1000x500 mm can be also manufactured.



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4. Vacuum Pumps

The processing of the SurACer[®] 4460 doming resin can be significantly simplified by the usage of the special vacuum plates. while dispensing and curing of the doming resin, the foil used can be fixed on the vacuum-plate with the help of the VP 1-23 and 1-40 vacuum-pumps. In that way, fixing techniques, such as adhesive sprays or similar, are not needed.

The vacuum-plates take up the foils to be coated and secure their fixation and ensure a firm surface during the entire workflow of the doming process.

The VP 1-23 and VP 1-40 vacuum-pumps are very strong and compact devices. The vacuum-pumps are oil-free and, therefore completely maintenance-free. The already low vibrations produced are reduced to an absolute minimum using rubber feet. Included is a straight screw-connector G 1/8 " inside (hose outer diameter 8 mm).

| Vacuum Pump VP 1-23 | | | |
|---------------------|------------------------|--|--|
| Suction capacity: | 23 l/min | | |
| Dimensions: | 24,5 x 13,5 x 17 cm | | |
| Weight: | 4 kg | | |
| Max. Vacuum: | 0,867 bar | | |
| Noise level: | Extreme low DB(A) 35dB | | |
| Motor power: | 0.2 PS / 148 W | | |
| Voltage: | 220-240 V/ 50Hz | | |
| Connection: | 1/8 " | | |

| Vacuum Pump VP 1-40 | | | |
|---------------------|-----------------------|--|--|
| Suction capacity: | 40 l/min | | |
| Dimensions: | 35 x 25 x 15 cm | | |
| Weight: | 6 kg | | |
| Max. Vacuum: | 0.867 bar | | |
| Noise level: | superleise DB(A) 47dB | | |
| Motor power: | 0.25 PS / 184 W | | |
| Voltage: | 220-240 V/ 50Hz | | |
| Connection: | 1/4 " | | |

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