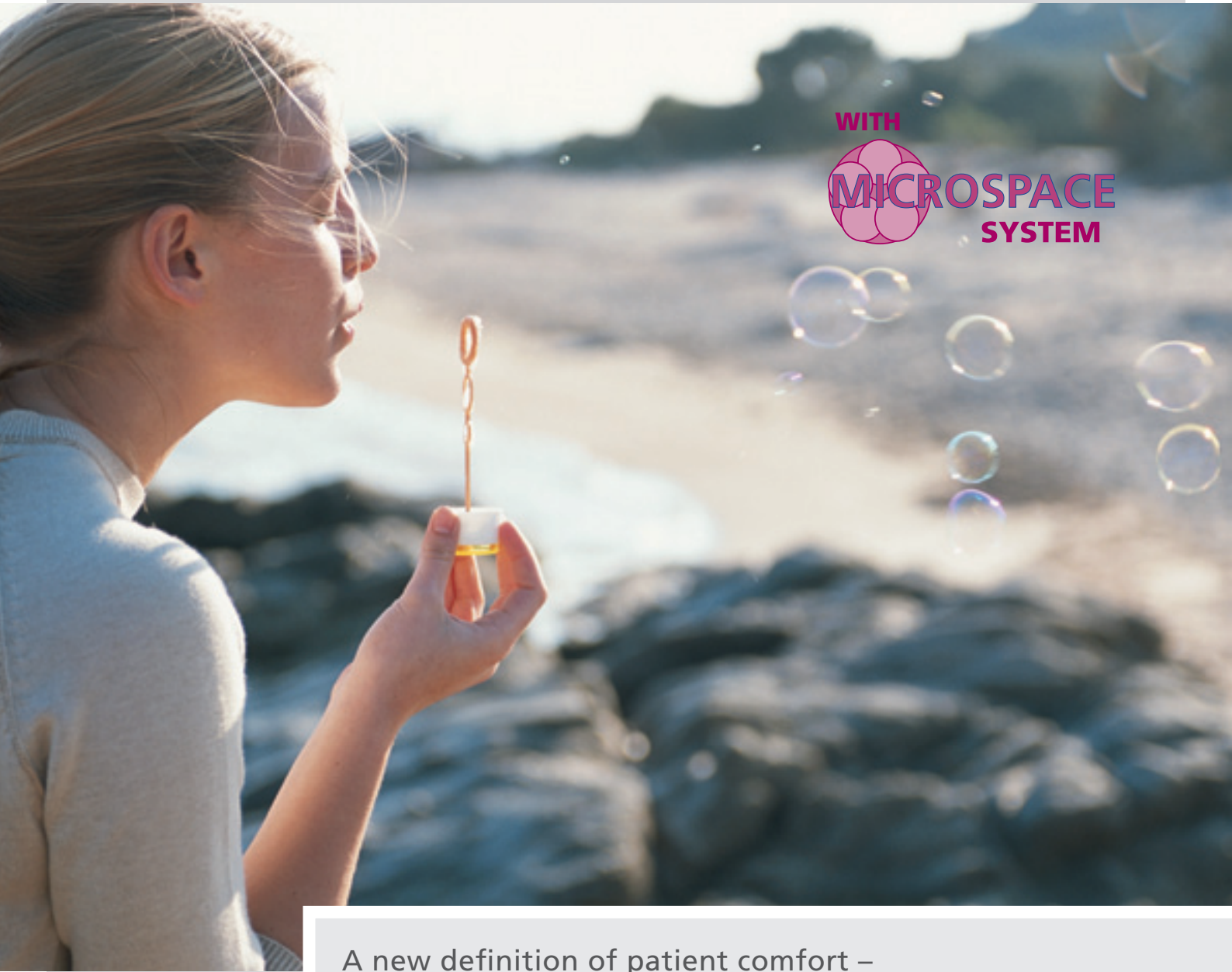


THE SURGICAL BEDDING CONCEPT – A NEW GENERATION



WITH
**MICROSPACE
SYSTEM**

A new definition of patient comfort –
the feeling of weightlessness in surgery



The product benefits of Vacuform® 2.0 surgical mattresses



- **Optimized pressure relief (pressure test of ETH-HEMPA**)**
- **Free of latex, PVC and softening agents (biocompatible)**
- **100% suitable for X-ray, MRI and CT use**
- **Image converter application possible during surgery**
- **In color-therapy, the color magenta next to green is described: "Having a general harmonizing effect on body and soul"**

Vacuform® 2.0 is provided with a new technology of a special coated PUR foil on the bottom side and makes them slip-proof. The coating of the upper side is

particularly soft, flexible and absolutely stable in form. Vacuform® 2.0 contains no latex, PVC and zero softening agents such as e. g. DEHP and biocompatible. The optimized pressure relief ensures the micro-circulation needed by skin.

Vacuform® 2.0 is 100% permeable to X-rays as well as suitable for MRI and CT use, and they are equipped with a plastic valve for one-handed operation. Thanks to the new materials and technologies, Vacuform® 2.0 provides highest possible comfort for the patient while ensuring optimal working conditional for the surgical stuff and surgeon.

The innovative Vacuform® 2.0 MicroSpace System



MicroSpace filling in the evacuated state



Conventional filling in the evacuated state



Arrangement of the Vacuform® 2.0 MicroSpace balls without vacuum



Arrangement of the Vacuform® 2.0 MicroSpace balls under vacuum



Arrangement of conventional styrofoam balls without vacuum

- **Further optimized pressure relief**
- **"Weightless" feeling (like a water-bed) despite stable immobilization**
- **Surface nearly untextured**

The secret of perfected adaptation to the body by Vacuform® 2.0 surgical mattresses is microballs of styrofoam, which are stabilized by vacuum to give a lasting, completely supportive form. Only Vacuform® 2.0 contains since many years about the well proven and unique MicroSpace System an increases the feeling of physical comfort for the patient significantly compared to conventional fillings.

Reducing the diameter of the filler balls by a fifth enables significantly more precise adaptation of the surgical mattresses to the body.

* PUR = Polyurethane foil (bio compatible)

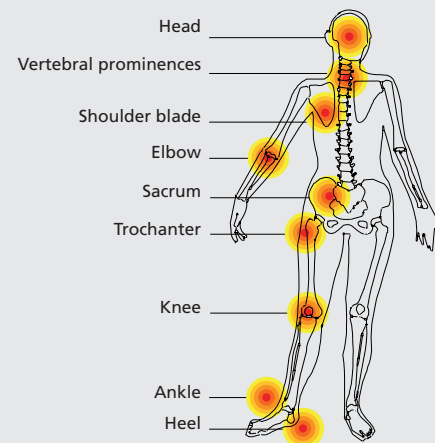
** Ask us for detailed measuring values to the edition pressure measurement.

Decubitus prophylaxis in the operating theatre

Particularly during **time-consuming** operations or with patients who are older and in poor condition, there is a risk of pressure points leading to acute decubital ulcers* and paresis (paralysis from nerve damage). The individual, **ergonomic body adaptation** of Vacuform®2.0 surgical mattresses effectively prevents such damage. The **support pressure** of the

patient is optimally distributed over the whole body and thus reduced to a minimum. The **microcirculation** needed by the skin is unaffected. The patient has a noticeable feeling of **comfort**, a feeling of lightness and warmth.

* Decubitus (bedsore, pressure sore) is damage to the skin and underlying tissue caused by pressure sustained for a longer period of time. It results in pain, isolation and reduced quality of life for the patient. Problems with decubitus can arise with as little as 10 to 20 minutes of increased pressure. Follow-up therapy for this results in Germany costs between 0.7 and 2 billion euros. (Pelka 1997)



Parts of the body at risk from decubitus

Safety on the operating table

- No slippage on the surgery table
- Safe immobilization
- Extreme surgery table inclination possible
- Fast, simple handling

The patient can be immobilized quickly and securely in any desired position. This gives the surgeon optimal access to the operation area and allows **safe handling** of the patient. Even the most extreme tilting of the surgery table does not change the defined position of the patient. The surgical positioning can be corrected at any time by relieving the vacuum, forming the surgical mattress to the new position of the patient and then evacuating the air again. Moreover, Vacuform®2.0 surgical mattresses enable **transport between hospitals** in a **defined surgical position**.

Examples of Vacuform®2.0 indications:

- Side position
- Semi-lateral position
- Supine position
- Seated / half-seated position
- Screw position
- Lithotomy position
- Laparoscopic positions
- Inter-clinical transport



Cost reduction with Vacuform® 2.0

- Prevention of sequelae
- Saves additional materials
- Long reusability
- Covers a wide range of surgeries
- Intra-operative illumination possible

Vacuform® 2.0 contributes to efficiency and leads to **considerable cost reduction** through fast, simple handling, prevention of sequelae such as decubitus and paresis,

saving of additional materials, fast cleaning and long reusability even with constant use.

The University Hospital Inselspital in Berne regarding the experience with Vacuform® surgical mattresses:

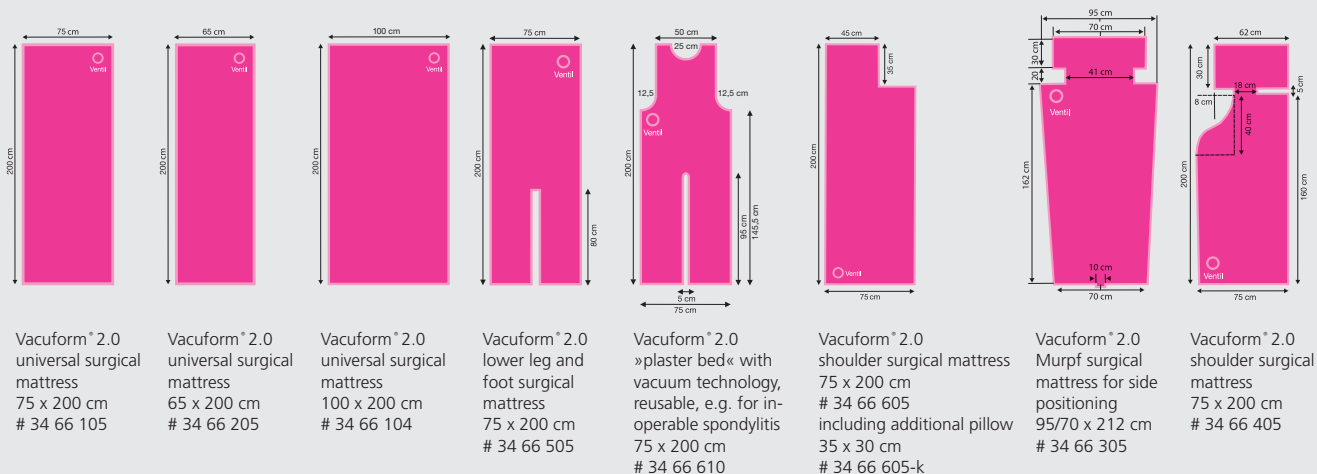
"The many years of work with the vacuum mattress have given us many advantages with respect to patient safety, quality of the individual positions, simplified handling, time savings and cost reduction by saving of additional bedding material. Once could maintain that the number of sequelae such as decubitus and paresis have decreased to insignificance with the use of Vacuform® surgical mattresses."

The expanded Vacuform® 2.0 selection of surgical mattresses

- Expanded standard selection
- Models for obese patients
- Custom product production

For all interventions requiring special positioning for surgery, the Vacuform® 2.0 product line offers surgical mattresses to satisfy all the relevant requirements for the indication. The **new, expanded Vacuform® 2.0 product line** includes sur-

gical mattresses for obese patients as well as a vacuum mattress as a contemporary alternative to a plaster bed. Furthermore, we are able to make nearly any **special size** you require.



The Vacuform® 2.0 surgical hood

This specially developed hood encloses the entire head and fits the head ideally using the Vacuform® 2.0 principle. The valve for evacuating the air is on the outer left side of the hood; there is an opening on the outer right side which enables styrofoam balls to be added or removed to obtain an **ideal fit**. The hood can be used to immobilize the patient's head during computer tomography (CT), angiography,

etc., because it is **permeable to X-rays**. For use in radiology, we offer a special plastic vacuum hand pump equipped with a non-magnetic brass rod.

Vacuform® 2.0 surgical hood small

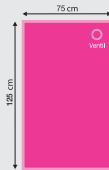
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Vacuform® 2.0 surgical hood large

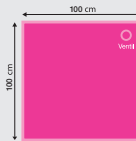
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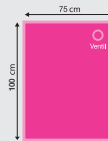
Vacuform® 2.0 short surgical mattresses



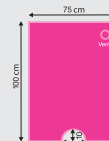
Vacuform® 2.0 short surgical mattress
75 x 125 cm
34 65 205



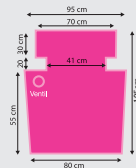
Vacuform® 2.0 short surgical mattress
100 x 100 cm
34 66 005



Vacuform® 2.0 short surgical mattress
75 x 100 cm
34 65 005

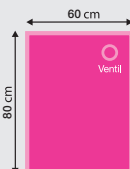


Vacuform® 2.0 short surgical mattress with cutout
· 75 x 100 cm
34 65 105
· 75 x 125 cm
34 65 305
· 100 x 100 cm
34 66 006

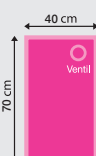


Vacuform® 2.0 short surgical mattress with cutout e.g. for hip surgery in side position
95/80 x 105 cm
34 66 007

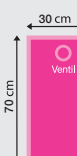
Vacuform® 2.0 surgical cushions



Vacuform® 2.0 surgical cushion
60 x 80 cm
34 64 005



Vacuform® 2.0 surgical cushion
40 x 70 cm
34 63 005



Vacuform® 2.0 surgical cushion
30 x 70 cm
34 62 005



Vacuform® 2.0 surgical cushion
30 x 40 cm
34 61 005



Vacuform® 2.0 surgical neck cushion
40 x 35 cm
34 67 005

Vacuform® 2.0 Siliplus – the further optimised vacuum mattress

- Once more modified pressure release
- Accurately fitting and efficient
- Especially for long term operations

Vacuform® 2.0 Siliplus is a new, further optimised vacuum mattress from the Vacuform® 2.0 series. A system that is essential in the Operation Theatre for many years.

Vacuform® 2.0 Siliplus is a compound system with which a silicone gel mat is firmly connected with a vacuum cushion. Because of the combination and the permanent compound of both components, which are already used as independent products in the OP, the pressure release becomes improved extensive. Especially while operations, e. g. in the oncological surgery, which can last sometimes longer than 20 hours, is this important to guaranty an optimum pressure release.

With Vacuform® 2.0 Siliplus a vacuum mattress which owns this determining quality is now available. At the same time all the other advantages are preserved

with a patient positioning with Vacuform® 2.0 mattresses or Vacuform® 2.0 cushions. This are mainly the security of the patient on the OP table also with extreme table inclinations, cost reduction by saving of time with positioning and cleaning, X-ray porosity, MRI- and CT suitability and many more.

Vacuform® 2.0 Siliplus siliconmat

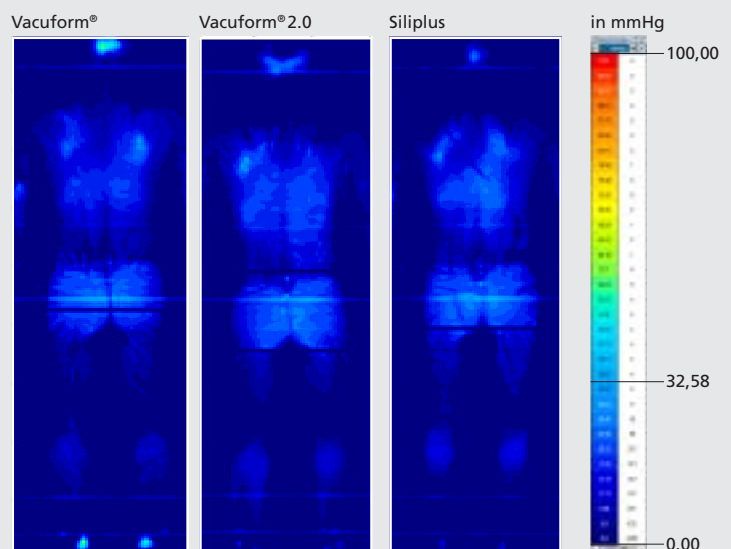
- 75 x 100 cm
 - transparent # 370 65 005
 - blue # 371 65 005
- 75 x 200 cm
 - transparent # 370 66 105
 - blue # 371 66 105



Pressure measurement:

The main reason for the occurrence of decubitus is the coaction of pressure, respectively shearing and time. How much pressure how long acting on the body, without causing damage is very different. To provide generally binding pressure and time specifications is not possible, as the underlying disease, state of health, age, etc. have an influence. But fact is: less support pressure allows a longer pressure impact!

The support pressure measuring between the actual green Vacuform® and the new pink Vacuform® 2.0 pointed out optimized support pressuring values under equal conditions and same period. The specialized vacuum system Siliplus, developed for mayor surgery's, shows the best value.



Ask us for detailed measuring values to the edition pressure measurement. The measurements became in cooperation with the EMPA (Swiss) and Compliant Concept.

Vacuform® 2.0 surgical equipment



Vacuum hand pumps

In case there is no vacuum system in the operating room, we offer a selection of easy-to-use vacuum hand pumps for all Vacuform® 2.0 products:

Plastic vacuum pump

Length 55 cm # 5310

Metal vacuum pump with foot stand

Length 60 cm # 5320

Plastic vacuum pump

Length 32 cm # 5340

Plastic vacuum pump with non-magnetic brass rod

Length 32 cm # 5350

Repair set

for easy fixing of small tears and holes in all Vacuform® 2.0 products.

34 90 122

Carrier bag (not shown)

red, 80 x 100 cm

34 66 800

Non-slip sheeting

prevents slippage of the surgical mattress in extreme positions, such as during laparoscopic sigma resections. The sheeting is easy to clean and reusable.

Non-slip sheet

40 x 100 cm # 34 66 900

Roll of non-slip sheeting:

Rolle 40 x 900 cm # 34 66 901

The Vacuform® 2.0 surgical sheet

The Vacuform® 2.0 surgical sheet is equipped with 8 handles for turning and repositioning the patient. Its outstanding features include high durability, silky comfort and a long service life. The material consists of three layers:

1. A soft velour surface.
2. A extremely absorbent Triton™ layer able to handle up to 1.25 liters of liquid per m².

3. A layer impermeable to liquid to protect the surgical mattress and operating table. The composition of the fibers used effectively prevents rewetting, so the Vacuform® 2.0 surgical sheet essentially always feels dry.

Vacuform® 2.0 surgical sheet

80 x 220 cm

34 70 000





Plastic products for health
and emergency services

B. u. W. Schmidt GmbH

Porschestraße 29

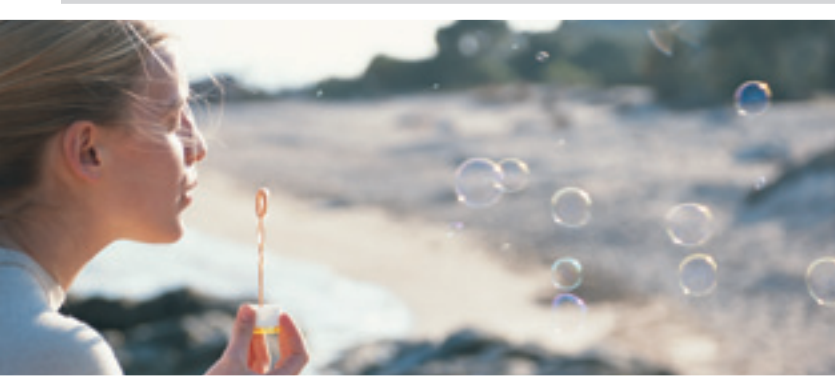
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Since 1961, B. u. W. Schmidt GmbH in Garbsen near Hanover has produced precision products made of high-frequency welded flat sheets for the health and emergency services sector. Faultless quality and workmanship, easy handling and rugged materials are the basis for the uncompromising safety of our products.

Our service ensures short delivery times and fast repairs in our factory. The quality management system of B.u.W. Schmidt GmbH is EN ISO certified. All equipment complies with the German Medical Device Act (MPG) and bears the CE mark.

If you cannot find the desired items or dimensions in this brochure, please contact us regarding custom production. Our computer-aided production system enables us to make equipment to meet your individual requirements in all sizes up to 150 x 250 cm.