

**WACKER**

CREATING TOMORROW'S SOLUTIONS

ELASTOSIL®

MOLD MAKING | COMPOSITE INDUSTRY

FORM HAS NO LIMITS.  
ELASTOSIL® C  
SILICONE RUBBER FOR NEW  
VACUUM BAG TECHNOLOGY

# SIMPLY GOOD: SILICONE BAG TECHNOLOGY

Silicone rubber vacuum bags increase the efficiency of making workpieces from fiber-reinforced plastics, especially for small production runs.

Fiber-reinforced plastics are innovative materials, which guarantee high stability, low weight and huge design latitude. These properties make them ideal for, e.g. automotive and aircraft engineering and shipbuilding. Reusable vacuum bag technology has revolutionized the

vacuum bag technology of the conventional manufacturing process.

The novel ELASTOSIL® C 1200 silicone rubber now makes this technology even more attractive.

## Advantages of the Silicone Bag Technology:

- Faster production
- Lower emissions of volatile components
- Less waste
- Less labor intensive



The French company Durisotti uses vacuum-bag technology to make floor panels for commercial vehicles. Composite floor panels are ten times lighter than conventional ones and exhibit the same stability.

# SIMPLY BLUE: ELASTOSIL® C 1200

ELASTOSIL® C 1200 is a new silicone rubber grade that makes vacuum bag technology

- More ecological
- More economical and significantly better in terms of health

Bags made of ELASTOSIL® C guarantee more processing runs, fewer vapors and more flexibility.

#### Advantages:

- Flexible
- Yet self-leveling
- Longer pot life and curing time
- Suitable for large surfaces
- Suitable for vertical surfaces
- Reusable

The following pages contain further details on the production process.



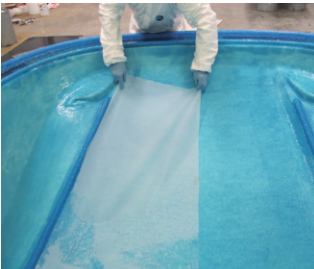
# STEP 1: PRODUCTION OF REUSABLE VACUUM BAG



1.1 Preparing the gasket



1.2 Spraying of ELASTOSIL® C 1200



1.3 Applying the fabric



1.4 Spraying the final layer

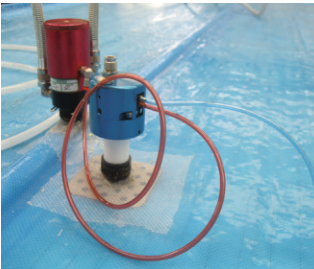
## STEP 2: PRODUCTION OF COMPOSITE PART



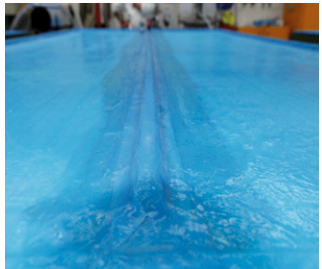
2.1 Filling of different fibers



2.2 Covering the fibered mold with reusable vacuum bag



2.3 Fixing the filler pipes to the bag

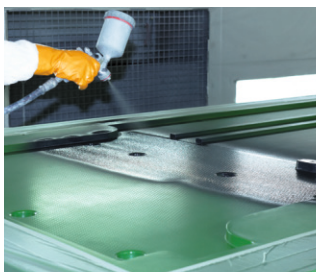


2.4 Resin Infusion (approx. 1 hour)

## STEP 3: FINALIZATION OF COMPOSITE PART



3.1 Removal of bag after curing (2 hours)



3.2 Coloring of the plate



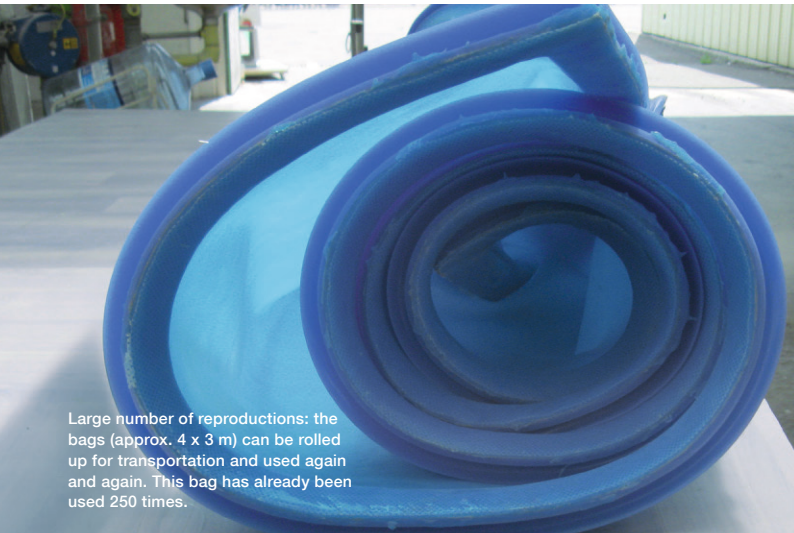
3.3 Final installation

### ELASTOSIL®

Product	Color	Properties	Hardness [Shore A]
C 1200 A/B	Blue	Soft	25



Simultaneous serial production: the molded parts are made on three tables at the same time.



Large number of reproductions: the bags (approx. 4 x 3 m) can be rolled up for transportation and used again and again. This bag has already been used 250 times.

Tensile Strength (approx.)	Elongation at Break	Tear Strength
[N/mm <sup>2</sup> ]	[%]	[N/mm]
5.0	500	25



**WACKER**

**Wacker Chemie AG**  
Hanns-Seidel-Platz 4  
81737 München, Germany  
Tel. +49 89 6279-1741  
Fax +49 89 6279-1770  
info@wacker.com

[www.wacker.com](http://www.wacker.com)

The data presented in this brochure are in accordance with the present state of our knowledge but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this brochure should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The information provided by us does not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the product for a particular purpose.