

MOLD MAKING I COMPOSITE INDUSTRY

ELASTOSIL® C

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.



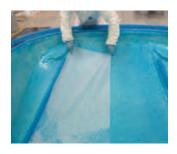
STEP 1: PRODUCTION OF REUSABLE VACUUM BAG



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



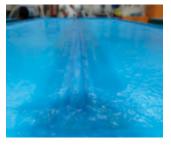
2.1 Filling of different fibers



2.2 Covering the fibered mold with reusable vacuum bag



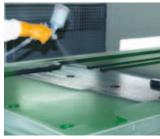
2.3 Fixing the filler pipes to the bag



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.



Tensile Strength (approx.)	Elongation at Break	Tear Strength
[N/mm²]	[%]	[N/mm]



Wacker Chemie AG

Hanns-Seidel-Platz 4 81737 München, Germany Tel. +49 89 6279-0 Fax +49 89 6279-1770 info@wacker.com

www.wacker.com

