

When can an economical approach prove to be dangerous?

From time to time, the suction cups on a vacuum lifter need to be replaced because they age, and their carrying capacity decreases.

There are many manufacturers of vacuum suction devices. It is a quick task to find a replacement unit. Possibly, the price of that type is lower, and perhaps it is available more quickly. The diameter is identical, and to an extent these suction cups look absolutely the same as the original. As things turn out when you make a copy of something good. What could I possibly be doing wrong, says the buyer to himself. The supplier might even state a level of carrying capacity. Everything looks great. What could possibly go wrong here? Surely I have done everything correctly?

Not necessarily, because this statement is founded on the carrying capacity and on the other properties. When transporting glass, predominantly in a perpendicular position, everything depends on the level of friction. As we were obliged to learn, friction is not always a predictable parameter, and this is a decisive factor in relation to safety. We check our suction cups using a load test with a static load, over a period of 5 minutes. And for a test of this kind, as we can see, 5 minutes are a very long time, during which a great deal can happen. That is differentiates our products from the many other claims that our competitors like to make. We could not evaluate the results of our tests in any other way.

Since the suction cups are responsible in very large measure for the carrying capacity of a vacuum lifter, this is a safety component, so is one that must not be replaced using third-party products. To retain the same product properties stated by the manufacturer, the replacement suction cups used must be sourced from the same manufacturer.

As part of our product monitoring obligation, and to enable us to perform maintenance to a high standard, we also inspect and test any third-party products we discover during maintenance work. We have carried out our load tests with suction cups of this kind, and we have documented some of the outcomes in this video clip. In some cases, the result is a matter of concern. Which prompts us to warn our customers against the use of replacement products of this kind.

In the next section, you can view a few of these load tests conducted with individual suction cups. Perhaps this will also convince you, and prompt you to consider that you can do for your health and that of your employees before it is too late. There is a lot of damage that cannot be avoided. Here you can find results for corresponding suction cups in the video clip:

The outcome of our load test

Here you can also view individual tests with different new and unused suction cups, which may perhaps help you to understand why it is so important for **your safety and that of the people around you** only ever to use genuine suction cups.

Find this on YouTube:
Tensile test with a new 388 suction cup

		https://youtu.be/77jR_M7hYxQ
		https://youtu.be/GC43_Intrwc

Find this on YouTube:
Tensile test with a 388-4N/TR suction cup that is 6 months old

		https://youtu.be/iOOkTbqGvqc
---	---	---

Find this on YouTube:
Tensile test with a new Eurotech BLSP.280.111.001 suction cup

		https://youtu.be/O1exV64Zolo
		https://youtu.be/tzWdssR-X7E

Carrying capacity of vacuum suction devices

Find this on YouTube:

Tensile test with a Eurotech BLSP.280.111.016 suction cup that is 10 months old

		https://youtu.be/mznP5BQIC-4
		https://youtu.be/Nv_1bweF1BM

Find this on YouTube:

Tensile test with a new Eurotech BLSP.200.111.007 suction cup

		https://youtu.be/O-X5hzbXHWA
		https://youtu.be/mt7Q9Xttqdl

Find this on YouTube:

Tensile test with a new Eurotech BLSP.200.111.012 suction cup

		https://youtu.be/ehsdvK3r8cE
		https://youtu.be/tjvh3B3GriU

Carrying capacity of vacuum suction devices

Find this on YouTube:

Tensile test with a new Wood's PowrGrip G3370 suction cup

		https://youtu.be/hoT6A9cWmfY
---	---	---

- Investigation by Kiel higher technical college (2001)

www.pannkoke.com		http://www.pannkoke.de/upload/15501699-vt-info-13-saugervergleich-d.pdf
www.pannkoke.com		http://www.pannkoke.de/upload/15533462-vt-info-13-comparison-of-suction-cups.pdf
www.pannkoke.com		http://www.pannkoke.de/upload/17305484-VT-Info-13-Saugervergleich-F.pdf

- Investigation by Kiel higher technical college (2001)

www.pannkoke.com		http://www.pannkoke.de/upload/17305927-VT-Info-20-Saugertest-EuroTech-D.pdf
www.pannkoke.com		http://www.pannkoke.de/upload/17305941-VT-Info-20-Saugertest-EuroTech-GB.pdf
www.pannkoke.com		http://www.pannkoke.de/upload/17305951-VT-Info-20-Saugertest-EuroTech-F.pdf

Frequently, we are unable to agree with the claims made by other manufacturers. All we can then do is to warn you against replacing the suction cups on our vacuum lifters with third-party products. If you do so, you can greatly reduce the carrying capacity of your vacuum lifter. This change inevitably voids the conformity declaration and the CE mark. In legal terms, the person who replaces the suction cups is viewed as the manufacturer, because he replaced a safety component. Were you aware of that? Suddenly you work with a non-compliant vacuum lifter and, if something happens, things get difficult for the person responsible. No-one in the EU is allowed to work with equipment that is not CE-compliant.

Carrying capacity of vacuum suction devices

The only remedy here is to use genuine suction cups, i.e. ones made by the original manufacturer. Not everything is as simple as it looks. Especially if safety is compromised because carrying capacity is too low. In such cases, the level of workplace safety declines, even to a point where conditions are totally unsafe. The situation then becomes very dangerous, and the consequences for you become highly unpredictable. Your personal safety is at stake. When materials being transported fall to the ground, their structural integrity is compromised. This is not a place where you should be making false economies. Always use genuine suction cups, i.e. ones from the original manufacturer.