

Ageing of suction cups, and what that means for my safety

Vacuum suction devices age as time goes on, losing their carrying capacity. Fillers migrate to the surface, other substances from separating agents and coatings reach the surface, and this changes the friction factor of the vacuum suction device. This results in a reduction in carrying capacity and therefore in the supposed safety of the vacuum lifting device. This is independent of the manufacturer of the vacuum suction device.

You cannot tell, by looking at a vacuum suction device, what it is actually still able to carry. Without a load test, it is not possible to evaluate the carrying capacity of a suction cup.

We recommend, as does Wood's, a company based in the USA, that suction cups should be replaced every two years, unless the load test yields a different result. Also, at that time, all the suction cups should be replaced to ensure that the vacuum lifting device remains able to deliver its rated carrying capacity.

The following videos show you what becomes apparent during a load test.

Just click the link, and the video file will open on any Internet-capable PC.

Why do the suction cups on vacuum lifting beams need to be replaced?

- Example on a Kappel vacuum lifting beam DSZ2/12V

		https://www.facebook.com/Vakuumheber/videos/453868631477522/
		https://www.facebook.com/VacuumLifter/videos/1695553587324596/
		https://youtu.be/fvqDUp29o9o
		https://youtu.be/uKZwR9wAMmA


Why is the load test so important in maintenance?

- Example on a Kappel vacuum lifting beam DSZ2/12V





		https://www.facebook.com/Vakuumheber/videos/661611650703218
		https://www.facebook.com/VacuumLifter/videos/196695838351744
		https://youtu.be/GSLud4uQIyQ
		https://youtu.be/9a3YgUARSxg

Here you can also view individual tests with suction cups of different ages, and you may then understand why it is so important for **your safety and that of the people around you** to replace the suction cups from time to time.


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 suction cup that is 5 years old

		https://youtu.be/65RbdHEBRS4
		https://youtu.be/4WlzxUoJrsw

Find this on YouTube:
Tensile test with a 388 suction cup that is 10 years old

		https://youtu.be/MMHpvi2LFtc
		https://youtu.be/CbinMa_HwUA