

Safely Glazing Curved Glass Panels – Special Requirements on a Standard Vacuum Lifting Device



The “Montage van der Linde b.v.” from Leimuiden, Netherlands (www.montagevdlinde.nl), specialist for difficult glazing applications, had the task of glazing a round arch for the Nieuwbouw Chinees Zakenhotel in Delft. Panel dimensions 2380 x 680 mm with a radius of 3900 mm to 2380 x 3740 mm and a radius of 4190 mm, maximum weight 490 kg.

The machinery was not yet ready to meet this challenge, although several vacuum lifting devices from Pannkoke Flachglastechnik GmbH, Lübeck, Germany (www.pannkoke.de) were available. In addition the intention was to purchase a vacuum lifting device for higher weights and dimensions that is capable of turning and tilting the glass panels.

In accordance with the specified customer requirements, Pannkoke Flachglastechnik GmbH developed from its standard programme the battery – operated device **KOMBI 7211-DSG3** with special conversion kits for curved panels up to a weight of 500 kg. The device was equipped with several special conversion kits, as it was intended to enable the small and large panels to be turned by max. +/- 360° and tilted by max. 90°. Conversion of the device is quickly and easily possible back to the standard device **KOMBI 7211-DS3** and can then be safely and without problems used for turning and tilting of flat insulating glass panels up to a weight of 1000 kg. The special feature of the **KOMBI 7211-DS3** is the particularly low structural depth of the device, this being only 210 mm. Due to its maximum of six extensions, it offers the possibility of individual adaptation to on-site challenges.





The curved special insulating glass panels for glazing came from the production of the "Franz Döring GmbH & Co. KG" Company from Berlin, Germany. "Franz Döring GmbH & Co. KG" also uses a multitude of various Pannkoke vacuum lifting devices in production.

A particularly high degree of safety requirements is demanded for glazing work on EU building sites according to EU standard EN 13155. This was an important and decisive aspect for Henk-Jan van der Linde in making his decision on acquiring the new device.

An important requirement of standard EN 13155 is a redundant vacuum system for vacuum lifting devices, meaning a vacuum lifting device with two independent vacuum circuits and corresponding vacuum monitoring functions. Each vacuum circuit must be capable of holding the rated load with double security. 2-circuit devices, which actually and reliably meet these requirements are only offered by a handful of manufacturers. Pannkoke Flachglastechnik GmbH from Lübeck in Germany is one of the manufacturers offering such vacuum lifting devices and who has from an early stage intensively been involved in the topic of "redundant vacuum lifting devices".

This is why Henk-Jan van der Linde personally picked up the vacuum lifting device manufactured for him in Lübeck and took the time for a practical on-site demonstration and explanation with the corresponding required load values. The version of the **KOMBI 7211-DS3** with all six extensions and a total of 20 suction cups can transport 1000 kg with double security. This means that each vacuum circuit must be able to carry 2000 kg. And that was what convinced Henk-Jan van der Linde in Lübeck during testing.



The staff of "Montage van der Linde b.v." from Leimuiden, Netherlands, quickly, easily and effectively glazed the facade of the Nieuwbouw Chinees Zakenhotel in Delft. First of all, each insulating glass panel was sucked on by the inner side and taken out of the box. Then the device was changed to the front side of the glass panel. This was no problem for the experienced staff team and the device supplied by Pannkoke Flachglastechnik.GmbH, Lübeck using the assembly lift and crane of "Montage van der Linde b.v."

The stated device characteristics played an important role in order placing. The investment in a new device technology from Pannkoke Flachglastechnik GmbH is another important step to securing the future for Henk-Jan van der Linde and his glazing specialists.

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