

Successfully optimised window carrier presented at trade fair

23 November 2022, 09:50 Bart Verlinden

This innovative concept to lift and move window profiles more efficiently first went through a nice development process before it became an optimised tool for the joinery industry. All this is the result of valuable feasibility and marketing advice.

Some time ago, following the advice of Innovation Centre Limburg, Herwig Louwet, manager of construction trading and consultancy firm Herlou Group, went to see Sirris with some sketches for a new concept which was aimed at improving the efficiency and quality of lifting and moving PVC window profiles. Sirris first had a closer look at the plans and then refined them, while also putting the feasibility to the test.

From concept to prototype

PVC window profiles are usually manipulated with bare hands and traditional tools such as straps. The downside? This method is not very efficient in terms of ergonomics. For example, not all installers are of equal height. This means they either have to bend down, kneel or bend over, which is not optimal from a safety and body strain perspective. Hands also leave traces of grease on the PVC. To optimise the manipulation of window profiles, Herwig Louwet of Herlou Group decided to design a new tool.

Based on the sketches - a mechanical concept which consists of, among other things, some sort of 'teeth' which are pinned down onto the softer PVC of the window profiles - the Sirris team came up different concepts which meticulously consider specifications such as mass and clamping force. To check the feasibility of the development, 3D designs and two prototypes of the new concept were made. These, in turn, were extensively tested (and approved!) on existing window profiles.

From patent to Polyclose

Herlou Group subsequently filed a patent application for the development and is also working with Sirris on a more refined and more affordable design. To give the imminent commercialisation even more chances of success, the design was also extended to different types of window profiles and sizes.

The result was that Lecot-Optimont, an important supplier in the cabinet-making industry, decided to partner with Herlou Group to produce and distribute the window carrier across Europe. The carrier was further adapted to fit all brands and even aluminium windows thanks to the universal toothed slats, which significantly increases the market.

The lifting tool only grips the window laterally in the place where the window anchors are screwed in. This offers some advantages: no damage to the window on the paint or colour film sides, can be handled with one or two hands, increased mobility while carrying the window and the grip can be placed and removed very quickly.

The window carrier is made of metal and therefore very durable. The toothed slats are made ultrasharp using a special process, for perfect grip in the anchor grooves of the window. If the grip is too high, it can be pushed down even when attached, but if you lift the grip (window carrier), it lifts the window. Lecot recently successfully launched the window lifting tool at Polyclose, the trade fair for joinery and hardware. This makes the job of window installers and processors across Europe more enjoyable.

Authors



Bart Verlinden