



Belron Technical

Windscreen replacement

Brief

Belron Technical is the world's largest vehicle glass repair and replacement company, operating well-known brands around the world including AUTOGLASS® in the UK and CARGLASS® across Europe. Replacing over three million windscreens a year, Belron Technical faced the issue that today's windscreens are increasingly being fitted with adhesives that make removal difficult. Considerable physical strength is required to cut out the glass, which could lead to potential damage to the vehicle and the fitter.

Belron's internal research and development company Belron Technical, who had been working closely with PDD on a number of projects, asked PDD to investigate this area for them. We then reviewed all the current tools, methods and issues involved in removing windscreens.

The challenge was to develop an improved manual tool that would reduce effort, minimise damage to the vehicle and improve control.

Approach

PDD's team of behavioural researchers, designers, ergonomists and engineers completed extensive field research throughout Europe. Over a series of months they worked closely with Belron Technical to fully understand all windscreen removal scenarios fully and to test current methods and tools.

Initial brainstorm ideas and later proof of principle models (POP) were all tested and validated by PDD and Belron Technical in PDD's laboratory. A number of ideas were then progressed before a single route was agreed that offered less physical

"PDD has spent considerable time in the field and fully understands the nature of our business. It has identified a number of innovative opportunities, from natural technical evolution to truly bluesky ideas that will revolutionise future business. PDD is our first port of call for any problem"

Chris Davies, Belron Technical

effort for the fitter, more control in problem scenarios, less damage potential to customer vehicles, greater flexibility for vehicle variation and higher customer perceived value of equipment.

This route was developed through a rapid iterative process of 3D CAD development, prototyping and fieldtesting throughout Europe.

On approval of the final prototype, PDD assisted Belron Technical by managing all tool development, assembly development and final production implementation in the Far East.

Result

Belron Technical believes this innovation in windscreen removal will help to reduce the physical effort required by its fitters, speed up the removal process and reduce the potential for vehicle damage.



For more information email info@pdd.co.uk or visit our website:

www.pdd.co.uk

