



A Doggone Good Idea



Steven Reiss had over 30 years of experience in the toy industry when he started doing freelance work for companies in the pet products industry. Through his veterinarian in New Hampshire, Reiss met Mark Robinson owner of HandicappedPets.com.

Robinson had just come up with a great idea for Walkin' Wheels, adjustable wheelchairs for dogs. Walkin' Wheels offer new freedom to animals that have lost control of their rear legs, from hip dysplasia, injury or old age.

Robinson had built a functional design out of modified hardware available on the open market. When he met Reiss he was looking to modify his existing designs to allow for different wheels or more adjustments, and to expand his line with whole new wheelchairs that utilized more injection-moulded plastic and less bolt-together metal parts.

So Reiss started sketching some of the interface parts, such as the knuckles where the struts of the wheelchair come together with the extenders.

"I told him that I used a 3D program of which I had become enamoured and I could probably build the parts for him here in the USA because these were going to be prototyped in China. He agreed with my suggestion and I started designing and building the parts in Xenon™"

When sent overseas for prototyping, the Chinese company had difficulties interpreting the drawings. This didn't surprise Reiss. He'd had problems with this in previous jobs. That's when he came up with the idea of getting a 3D printer and manufacturing the parts at home... quite literally. This would completely eliminate the problems with the Chinese factory and at the same time reduce the cost and turn-around time for the parts.

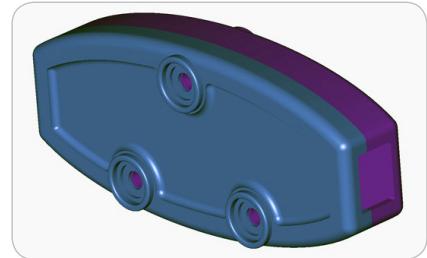
The 3D printed parts make excellent prototypes for the larger parts of the wheelchair. "They're good enough for them to bolt together and test them, they take a certain amount of abuse," says Reiss. "If it's a dog item it's something that can fall without shattering." For smaller items they use the 3D printer to do limited production runs.

Having used it extensively, Reiss finds his 3D printer a very practical device, but tells us Xenon makes it even better:

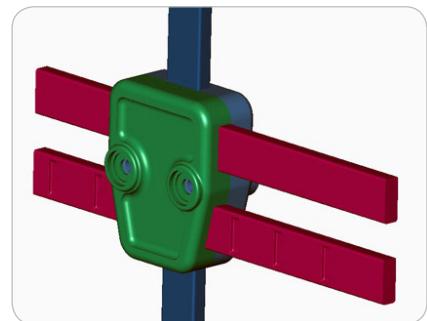
"Xenon makes it so much more worthwhile because we didn't buy this as a novelty to print off of Thingiverse. We bought this to build things that are useable through prototyping and it's working"



Steven Reiss helped Mark Robinson refine and build the parts for this canine wheelchair, giving this dog a new lease on life.



The rear sleeve (above) and knuckle (below) were modelled in Xenon by Steven Reiss as part of the design modifications for the dog wheelchairs.



Background/Contact

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