A step-climbing attachment for wheelchairs fitted with maxon DC motors.

Developed by Australian researchers and fitted with maxon DC motors, the attachment is suitable for electric wheelchairs and offers a cost-effective functionality without having to purchase an entire new chair.

The step-climbing attachment replaces an electric wheelchair’s wheels with a DC motor drive mechanism that enables the user to navigate kerbs and single steps. Developed by Dr Michael Behrens from UTS: CAS in partnership with Northcott Innovation, the step-climbing wheelchair attachment has been patented. Dr Behrens said "…it’s innovative because the mechanisms are contained inside such a small space. There’s a lot of power required to do a step-climbing action and it was a big challenge but we’ve got it down to a very small compact space."

Performance of the step-climbing attachment is enhanced by maxon motors drive system. The same technology has been applied from the Mars Rover providing uncompromising dependability where safety and reliability are crucial. A tried and true graphite brushed motor and ceramic gearhead combination provides a rugged, compact drive train base. Controller feedback via a magnetic encoder ensures high resolution and tight drive system control by the user.

For more than 17,000 Australians who rely on electric wheelchairs to get around, a single step up and down curbs, or in and out of buildings presents barriers to what is usually overlooked by non-wheelchair users. Current research and development is focused on producing a commercial-grade prototype for demonstration.

To view the step-climber wheelchair attachment please click here or contact maxon motor +61 2 9457 7477.

Length of this press release: 259 words

The media release is available on the internet at: www.maxonmotor.com.au
The RE40 motor used in the step-climb attachment
© maxon motor