



Batec Justification Information

Batec is Catalonian for Heart Beat!

The company was founded by Pau Bach, an industrial design student working on electric bikes, motorcycles, and cars who ended up with a cervical injury. As a C6 quadriplegic, he turned his design efforts toward meeting his own personal needs in getting around the city of Barcelona. A decade later he has a going concern world wide business embarking on ISO Certification for a social entrepreneurial business that is a model for companies on any continent!

A Batec is a manual or power add-on device to any manual wheelchair. When this device is used, the smaller front wheels are lifted slightly off the ground and the wheel base of the unit is made much greater. The end user benefits from a gear related and/or power advantage in propelling the manual wheelchair with enhanced properties to that of a user in a power wheelchair.

A Manual Batec

The manual Batec provides the end user with an opportunity to lift the front casters of the chair off the ground and extend the wheelbase of the connected Batec and wheelchair. Couple this with 24-gear Sram Dual Drive (3 hub gear + 8 sprocket gears) and you provide a mechanical advantage for the end user to go long distances (unlimited) over most any terrain in a safe fashion.

An Electric Batec

The Electric Batec provides the end user with an opportunity to lift the front casters of the chair off the ground and extend the wheelbase of the connected Batec and wheelchair. Then you add in a 36 Volt 11 Amp Lithium Ion battery without memory effect and with a cable-free connection system and you provide the end user with 30-35 kilometers' autonomy with the advantage to go over most any terrain in a safe fashion.

A Hybrid Batec

The Hybrid Batec combines the battery/engine power and mechanical functions of the Electric and Manual units above while still providing the end user with an opportunity to lift the front casters of the chair off the ground and extend the wheelbase of the connected Batec and wheelchair. This unit provides the end user with 30-50 kilometers' autonomy while still be safe (good stability front and rear) travelling over most any terrain in a safe fashion.

Why is the Batec Line So Popular?

What often happens with some of the equipment on the market like hand cranks is they become cumbersome to own and use. Storage may be an issue, transporting them to where you want to use them, getting on and off, or the simple fact that when you get to where you are going you do not have your wheelchair.

The Batec line of products are designed to be functional and make it easier and safer to take care of everyday needs. Because they are so easy to use (a C6 quad can put it on and take it off in seconds and therefore will use it multiple times per day) the end user starts to be much more active and participates in many more activities as a result of the ease of involvement.

Key Proprietary Features of the Batec Line!

The **Batec Easy Fix** fast anchor system and the **Batec Docking Bar** allow installation on 99% of the manual wheelchairs on the market. The **Batec Easy Fit** allows for adjustment for easy operation for the end user and the **Batec Safe Feet** allow the product to be easily moved and stored upright in the smallest of places.

These features combined with ease of operation for para's and quad's including special features for multiple types of disabilities and the invention of the **Batec Magic Lever** sets these **Class 1 Medical** supply products apart from anything else on the market.

Who benefits from a Batec?

More than half of manual wheelchair users develop repetitive-use shoulder pain. Using the Batec line of products is an excellent way to protect shoulders from repetitive strain injuries and the potential of falling out of the wheelchair if the front casters were to hit something while wheeling on all fours or falling over backward if the terrain changed and the end user was not quick enough making an adjustment.

An active wheelchair user may push 1500-3500 times every day, easily putting these individuals into an "at risk" range for repetitive tasks in the workplace. The Batec line of products reduce the number of repetitive pushes required each day and may protect the end user from overuse of certain muscle groups and curtailing the amount of pushing as per their wishes.

Why Else Should Funding Agencies Purchase a Batec?

More than half of manual wheelchair users develop repetitive-use wrist, forearm, and shoulder pain. Using the Batec line of products is a great preventative measure to ensure long term health and wellness, but the benefits most recognized by the industry are those that:

- Independent Mobility is hampered by pain in the wrists, forearms and shoulders
- Independent Mobility is constrained by the end users limited pushing range
- Independent Mobility is too difficult for the end user because of the surfaces they need to go over, the rougher terrain, and their ability to feel safe in their wheelchair while traveling in certain places
- Independent Mobility is often difficult in pushing consistently in an intended direction and is compounded when there is something that needs to be carried ... Batec products resolve these issues!

Why Use a Batec instead of a Power Wheelchair?

In comparing benefits of the Batec Products with benefits that might be gained from using a power wheelchair, the Batec Units provide a mechanical and/or power type of performance without the need to provide a more expensive power wheelchair.

In addition, Batec use limits the number of transfers in using a manual and power chair while reducing a stigma attached to a heavy, bulkier, power wheelchair product. Combine this with the fact that the Batec product is much lighter and easier to transport it makes the economical picture of Batec use much more attractive.

Occupational and Physio Therapists acting as equipment prescribers are aware, changing from a manual wheelchair to using a power wheelchair is often much more complicated and expensive than just the cost of the power wheelchair. The need for a larger vehicle with custom modifications, more extensive ramping and home modifications, and a loss of personal independence are often associated with the change from a manual to power wheelchair. The stigma attached to power wheelchairs alone has a negative impact on the end users social and psychological well being.

Who are the best candidates to use a Batec?

The Batec products are most effective with people who have muscle weakness and/or limited stamina for propelling a manual wheelchair, but real benefit is for all manual wheelchair users as the impact on the quality of life is not only dramatic, but we would argue is a basic necessity!

The bullet points for this category include:

- Individuals with shoulder fatigue and related long-term weakness due to over-use of upper arms and shoulders in propelling a manual wheelchair benefit from the reduced frequency of 'pushing' when using Batec Products;
- Individuals requiring a more portable power wheelchair will benefit from using Batec Products since they will essentially be transporting a manual wheelchair instead of a scooter or power wheelchair;
- Individuals living in areas where hills and/or ramps are part of their daily terrain will benefit from Batec Products making their otherwise inaccessible environment accessible;
- Individuals who can propel their chair, but are unable to achieve meaningful and effective mobility due to inconsistent direction, speed or stamina will benefit from Batec Products;
- Individuals who are unable to propel their wheelchair independently on anything but a flat or tile surface may benefit from Batec Products.

Things to be cognizant about!

The Batec Products may make a manual wheelchair behave like a power wheelchair. For this reason, individuals with cognitive limitations and/or visual impairments may not be able to use the device safely.

The Batec Products provide cycle computer features, braking mechanisms, and a number of other features designed to safely and effectively assist end users in wheelchairs to get from A to B.

End users need to know that as a Class 1 Medical Device they are a pedestrian in the eyes of the law. This does not preclude them from taking reasonable road safety tips like wearing a helmet when using their Batec and making sure they know how to handle a start, stop, steering of the unit, and most importantly the speed in which they can safely travel.

There is a complete website of helpful data at www.Batec-Mobility.com to make the Batec end users experience the best possible!

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BATEC POWER ADD-ONS RANGE



BATEC URBAN Keep the essentials	BATEC ELECTRIC Choose the original	Surpass your limits
Maximum speed 14 Km/h	20 Km/h	30 Km/h
Autonomy 20 - 25 Km *	25 - 35 Km *	20 - 30 Km *
Motor Motor Brushless 150RPM 350 W	Motor Brushless 200 RPM 500 W	Motor Ultra-Fast Brushless 300 RPM Ultra-Fast 500 W
Battery 280 Wh** 3A charger (3,5 hours)	396 Wh 4A charger (4 hours)	396 Wh 4A charger (4 hours)
Frame 7005 T6 Aluminium Black FSA Orbit Mx headset	7005 T6 Aluminium Black FSA Orbit Mx headset	7005 T6 Aluminium White FSA Orbit Mx headset
Handlebar FSA Comet Aluminium handlebar	FSA V-Drive Aluminium handlebar	FSA K-Force Carbon handlebar
Brakes Mechanical Avid BB5 brakes Avid FR5 brake levers Avid G2 180mm rotor disc	Mechanical Avid BB7 brakes Avid Speed Dial 7 Adjustable brake levers Avid G2 200mm rotor disc	Hydraulic TRP HY/RD brakes Avid Speed Dial Titanium Adjustable brake levers Avid Centrline 200mm rotor disk
Wheel 20" ultra-grip Maxxis tyres 20" Black Aluminium Doble-Wall rims	20" ultra-grip Maxxis tyres 20" Black Aluminium Doble-Wall rims	20" ultra-grip Maxxis tyres 20" White Aluminium RYDE Double-Wall rims
Equipment 200 lumens front light — — — (Optional BATEC ACOPLA) (Optional removable QR weights)	900 lumens front light Dual led tail lights Display panel with battery gauge and speed regulator Cycle computer with LED screen and 4 functions Two USB ports BATEC ACOPLA Removable QR weights	900 lumens front light Dual led tail lights Display panel with battery gauge and speed regulator Cycle computer with LED screen and 4 functions Two USB ports BATEC ACOPLA Removable QR weights

^{*} Depending on user weight, driving style and terrain \mid ** Optional 396 Wh battery

