

Eating is Cheating!

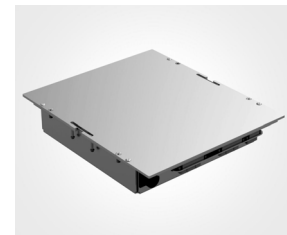
Maximizing your Return on Active Safety Equipment

All too often, test engineers find their daily proving ground agenda dictated by the battery life of the equipment – particularly in the case of platform robots. When the **Humanetics Ultra-Flat Overrunable (UFO) Robot Platform** first came to market in 2010, it was already equipped with a convenient swappable battery, which is a major advantage especially when there's no power source on site.



Markus Schmidl joined the Humanetics team in 2012 with the goal of taking a thorough look at the product offerings and answering the question – **how can we make these products even better than they already are?** With his background in printing press machine sales at Heidelberger, Markus already knew that in a machine-driven workflow, maximum efficiency is critical to success.

With a growing demand for ADAS testing came the need for a better platform battery that could be utilized at higher speeds for longer periods of time. As other manufacturers focused on either high-capacity integrated lithium batteries or lower-capacity swappable batteries, Markus pushed his development team to engineer **the best of both worlds – a high-capacity lithium battery in a convenient swappable format.**



Markus tells the story of how his father inspired him:



"My father was a determined man who was famous for his focus on solving impossible problems. I remember when my mother would interrupt him during one of his work marathons to take some food, he would say "eating is cheating."

It was very much with this in mind that we developed our swappable batteries. When we spoke to engineers and test track technicians, they would complain about the expensive downtime of waiting for the batteries to recharge during their extended lunchbreak. Engineers would tell us "Our lunches turned out to be 2 hours long, which literally wasted 25% of our track day." When

you've gotten to the final stage of testing – the cumulation of hundreds of thousands of hours of engineering and multi millions of dollars – the last thing you want to do is stop testing for something as elementary as a weak battery. It is as frustrating as it is fruitless.

This made us realize that in addition to having a high capacity, it was equally important that the UFO batteries remained swappable, that they could be easily changed out right on the test track with almost no downtime. It was countless hours of hard work on our part to deliver this, but we understood that it's not just a product detail – it's a core product requirement. And that is what makes Humanetics' the most compelling product in the market. We do not limit our products by the need for a two-hour lunch break - that's not important in safety.

I finally agree with my father: "Eating is cheating." It makes no sense to have a product that forces a delay in your testing – albeit an excuse to sit down and eat. You should design a product that facilitates seamless execution against and exacting testing schedule. So that is what we have done."



The Humanetics UFO and its fast-swap high-capacity batteries deliver uninterrupted testing with the highest accuracies available on the market. Thoughtful details keep test operations running as smoothly as possible:

- **Dummy car can remain mounted** atop the platform during the battery swap
- **GPS unit remains active** thanks to an internal buffer battery
- **No onsite power source needed** – charger can be set up back at the warehouse
- **Controlled charging** process for longer battery life
- **Extra batteries** can be leased anytime from local Humanetics office
- Humanetics UFO/Driving Robot battery packs are **certified safe for air freight transportation** under the UN38.3 battery transportation safety testing requirement



With the increasing demand for faster speeds in regulatory testing, integrated battery users are really suffering as they need to spend much of the day recharging, and low-capacity swappable battery users aren't faring much better as they need to stop and swap more and more frequently. The high capacity of the UFO batteries (when all three are installed) ensures that the platform can be used at low speeds for an entire day without need for replacing. While usage at higher speeds may require a swap at some point in the day, it's a matter of a couple of minutes rather than a couple of hours, thanks to the efforts of Markus and team!

Please [contact us](#) if you'd like to know more about how the Humanetics active safety portfolio of products can help you maximize your efficiency on the proving ground.