

The Gtech HyLite

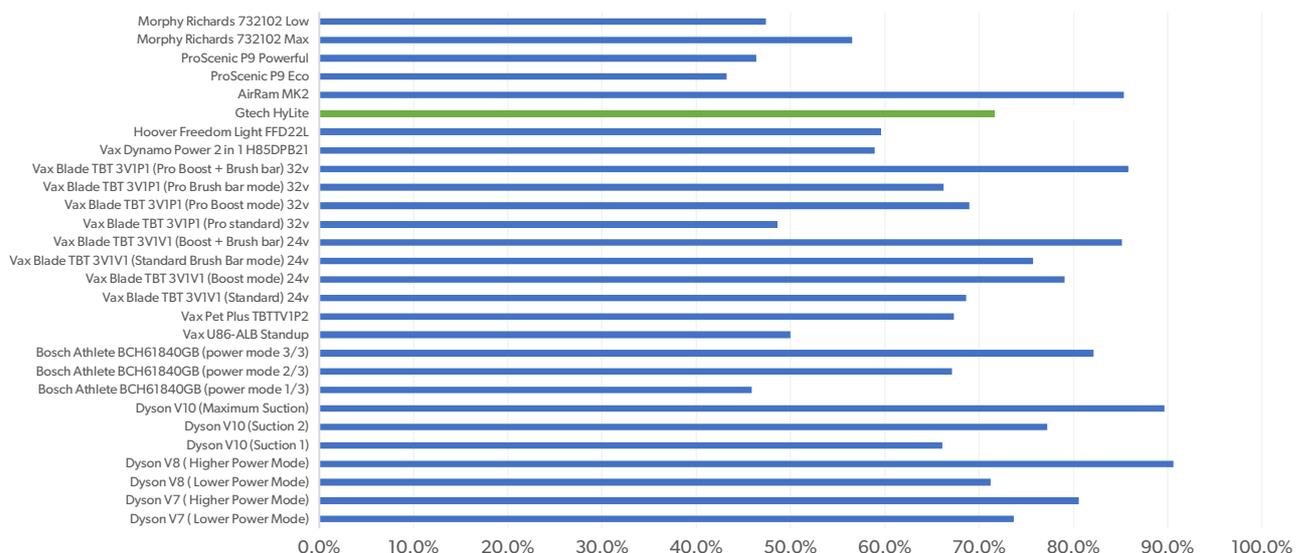
We believe in full transparency, which is why we want to make it clear how we calculate any claims we make in our copy. Where we can, we test all of our products in accordance with IEC guidelines using standard IEC62885-2 – these are official international standards that determine how vacuum cleaner manufacturers can talk about their products. That means that all vacuum cleaners have to pass certain tests (that follow the same rules) in order for them to be sold in certain ways. Everyone has to follow these same rules so that customers can make fair comparisons between products. If there are not currently international standards, we refer to the British Standards and test guidelines.

Cleaning results and cleaning performance

Pick up performance

When we talk about cleaning results, we’re referring to how well our products clean on hard floors, carpets and in crevices according with IEC 62885-2; 5.1, 5.2 and 5.3. The results are calculated as the percentage of dirt we lay out that the vacuum picks up. For example, if a vacuum were to pick up $\frac{3}{4}$ of the total dirt applied from a controlled surface (one set up as per IEC standards), it would have a cleaning result of 75% on that surface. An average cleaning result from the 3 tests is then taken, as shown below in comparison to other vacuum cleaners on the market.

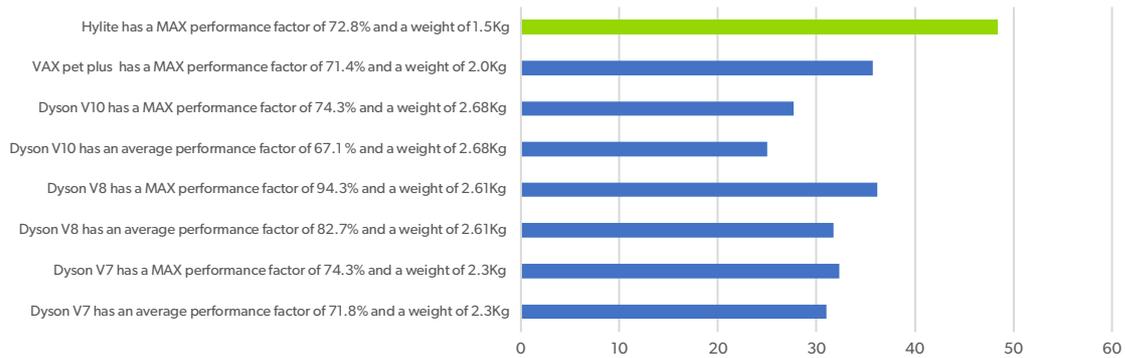
Pick up performance



Performance per kg

This is established by using the average cleaning performance figure (average of carpet, hard floor and crevice figures on all cleaning modes, and then dividing this by the weight of the product). The Hylite has a maximum performance factor of 72.8% and a weight of 1.5kg – giving a performance per kg factor of 48.4.

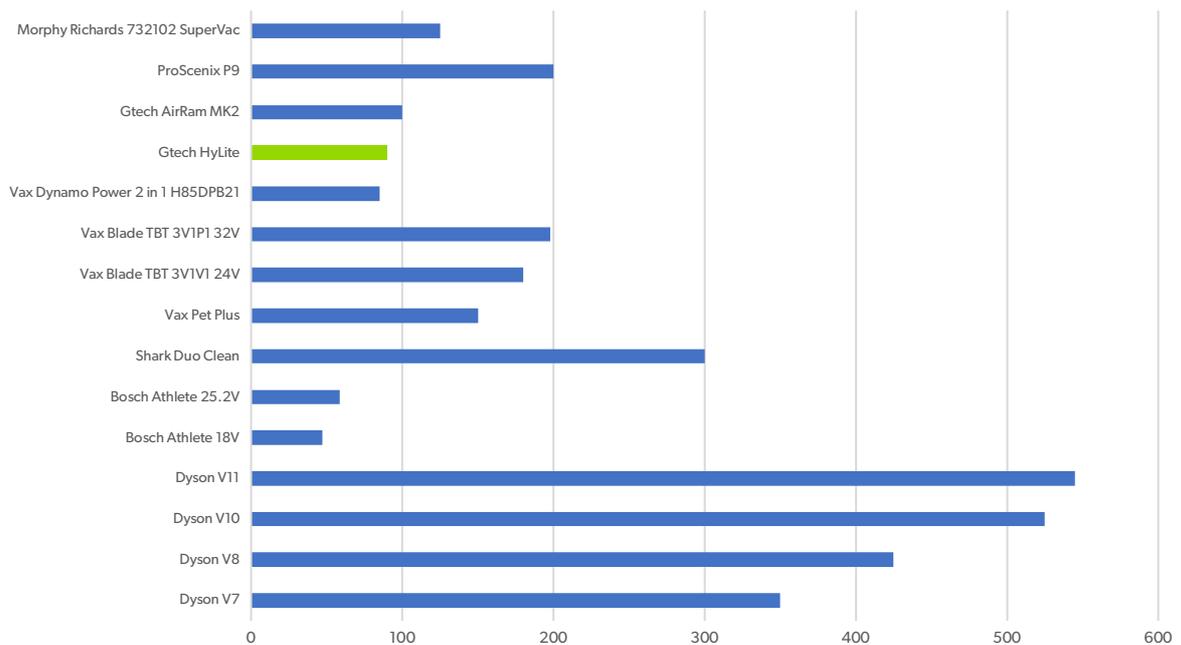
Performance per kg factor



Power consumption

When we look at IEC test results, we divide the average cleaning percentage by its rated power consumption (RPC). For example the Hylite has an average cleaning result of 80.4% (across the 3 tests) and an RPC of 90W. That gives it a cleaning performance score of 89. For reference, this is a comparative table of the power consumption of a variety of vacuum cleaners on the market.

Power consumption (Watts)



Bag usage

All homes have different cleaning schedules (and levels of dirt and dust), but we do our best to offer the most accurate results possible. We conduct user home trials and record how many bags different households use across the year, from those with pets to family homes with young children. From that, we calculate the average number of bags that would be used in a full year.

Our tests are still ongoing, but our calculations show that the average number of days a bag took to fill was 30.9 – this would require 12 bags per year, dependent on the size of area cleaned and amount of debris.

Some homes with rigorous cleaning routines and 4 inhabitants (and pets!) filled their bag in around a week; others who used the HyLite alongside another main vacuum, or in a single-person home, took around 3 months to fill their bag. We chose a wide range of household styles and cleaning routines to replicate those of real-life customers. It would have been easy to simply choose tiny flats with no pets, but we asked a range of people with different living situations in order to be as realistic and honest about the HyLite's performance as possible.

Highest amount of days: **98**

Average per unit: **30.9**

Bags needed per year: **12**

As this is a new product, tests are still ongoing – results will be updated as we discover more.

Energy consumption

Charging the HyLite's 14.4V Lithium-ion battery uses over 8 times less mains power than many corded vacuum cleaners need during use (per year)

We talk about how much power the HyLite uses because it's important to us. Our aim with cordless products has always been to deliver fantastic cleaning performance that rivals that of corded products – without the high energy consumption that many of them rely on.

The maximum amount of power that a corded vacuum can use is 900watts, according to European Energy consumption directive 2017. If you use a 900w corded vacuum for 20 minutes, you're using 300wh (watts/hour is worked out by dividing the wattage by the amount of time it's used for). The HyLite is cordless, so we worked out how much wattage would be needed to fully charge the battery so that it could be used for the same amount of time – 20 minutes. The HyLite uses just 34.6wh to provide 20 minutes of runtime. That means it uses over 8 times (8.6 times, to be precise) less mains power than an average corded vacuum cleaner that uses 900w.

HyLite runtime

We test all of our floorcare products in accordance with IEC standards (international guidelines that all floorcare manufacturers have to follow). The HyLite's average runtime is up to 20 minutes.

The HyLite's runtime will be a bit longer when the bag starts to fill up and when you use it in handheld mode. This is because there's less air resistance and strain across the vacuum's fan, so less power is needed. The runtime may be slightly shorter if you're only cleaning carpet, especially if it has a thick pile.

Run 1	
Clean	00:20:26
Dirty	00:20:35
Run 2	
Clean	00:19:38
Dirty	00:20:02