POWERING LEAD-ACID

Dear Reader,

Energy storage solutions, or batteries in particular, are a key component in every discussion on future mobility. Myriad new solutions are being developed and discussed globally to address the demands of the future, primary among them being efficiency and cost. We have already seen prices for energy storage fall, and experts are confident they will fall further. What they aren't sure though is how far and how quickly will energy storage prices become acceptable to the masses.

Enormous amount of money is being pumped into finding the right solution to drive mobility in coming years, essentially vehicles with some amount of electrification or ones that are purely electric. For now, the focus is on lithium-based battery technologies. Of course, many researchers are also experimenting with other chemistries such as sodium.

Any change future energy storage solution would not be limited to chemistries alone; a lot would also depend on the advancements made in the areas of electronics and software. The right power and thermal management would be one of the key drivers in determining a vehicle's performance.

Having said that, lead-acid continues to be the predominant battery solution for vehicles globally. In fact, the automotive industry is one of the largest end-users of lead-acid battery across the globe. A study by Future Market Insights projects that the global lead-acid battery market would reach \$ 58.5 bn by 2020 at an estimated CAGR of 4.6 % during 2014-2020. Last year, transportation accounted for 62.9 % of the total market realisation, while 34.2 % of that value came from the Asia-Pacific region.

As India prepares to take the arduous road towards electric and hybrid mobility, it is also important to focus on the role lead-acid batteries would play. Smart grid projects, vehicle charging infrastructure, installation of renewable energy systems and micro-grids could all make good use of the advances being made in lead-acid batteries.

On November 6, 2015, we are organising the third edition of our annual battery event – the India Battery Conclave – in New Delhi. The theme this year is “Reinventing Lead Acid: Solutions for the Next Decade”, and this would be in reference to the newer chemistries under development, discussion and deployment, especially lithium-ion. I invite your suggestions, and request your active participation in this conclave.

DEEPANGSHU DEV SARMAH
Editor-in-Chief
New Delhi, September 2015

@deepangshu