Hybrid Systems Offer an Alternative to Going Fully Electric

These days, many manufacturers, such as Sennebogen, are offering fully electric drive for their machines. In most cases, switching to electric motors offers significant reductions in both emissions and in operating costs. However, as Clews Recycling discuss in the latest edition of Hub 4 Magazine, electric machines are not ideal for everyone.

“We are constantly evaluating our fuel costs and have looked at bringing in electric machines onto the fleet,” says Jamie Clews, General Manager. “However, going fully electric did not suit the infrastructure of the site and would have had very high set up costs.”

Fortunately, hybrid systems can offer a convenient alternative to going fully electric that still offers significant savings on fuel costs. “A good compromise was going for a hybrid machine to lower our fuel consumption and to reduce our carbon footprint,” says Jamie.

Kobelco hybrid offers the ideal compromise

Molson were able to meet the needs of the company by providing the Kobelco SK210 Hybrid, with its innovative energy recovery technology. Although still powered by a diesel engine, the Kobelco SK210 Hybrid incorporates state of the art energy recovery technology to reduce fuel costs by as much as half.

The Kobelco SK210 Hybrid recovers energy from the three-phase swing motor and the hydraulic systems and stores this in a Lithium Ion battery. This energy is then used when raising the

boom, reducing engine load and cutting the fuel required to just 6-7litres per hour, a saving of almost 50%.

“Molson were pleased to work with the team at Clews Recycling to help them achieve their environmental and cost-reduction goals without the need to invest in fully electric equipment,” says Molson Sales Manager, Dan Bailey, who handled the account. “The Kobelco range are pushing the boundaries on energy efficiency offering a third way that delivers the low set up costs and flexibility of diesel and the environmental benefits and cost savings of electric machines.”

Sennebogen Green Hybrid

Another leading manufacturer offering the benefits of hybrid technology is Sennebogen. Their innovative new Green Hybrid energy recovery technology uses a very simple principle, in a very effective way, to save as much as 30% in fuel costs compared to standard diesel powered models.

The Green Hybrid system works much like pressing down on a spring. Hydraulic systems and gas pressure accumulators recover and store energy when the boom is lowered. They then make this energy available to assist in raising the boom on the next lift. The recovery is so efficient that Sennebogen claim that the energy recovered is reused almost loss-free.

This system can be added to many of the machines across the Sennebogen range, including waste handlers, scrap handlers and telehandlers, along with their substantial port handlers like the 870 series or the impressive 875 series.

A future full of potential

The growth of hybrid machines, alongside standard diesel and energy efficient electric models, means that operators now have a wider choice than ever when it comes to selecting the

most environmentally friendly and cost-effective machines. And that technology is advancing all the time as manufacturers work to cut emissions and increase machine efficiency even more.

Here at Molson, we're constantly monitoring the market to ensure that we bring our customers the very latest technology and the widest possible choice when it comes to specifying their next equipment purchase. From traditional diesel to state of the art electric, and everything in between, you can count on Molson to find the machine to meet your needs in every way.

To find out more about hybrid technology and how it can cut costs for your company, contact your local Molson depot today or complete our online contact form.