generators



Hydro electric power

The need for electrical and other power sources for power tools in the platform has always existed. Lifts have traditionally been fitted with power to the platform options, allowing you to plug the machine into the mains at the base and to power a socket next to the controls. However the fact that this was usually an option, meant that all too often, aerial lifts worked with trailing extension leads, something that is now frowned upon for many reasons.

Aside from the safety issues, this method of supplying power to the platform tethers the machine to an electrical outlet - assuming of course that there is power on site. An early solution was to provide an external generator. However because they often used petrol, it was not always available on site and more critically, they were a target for thieves. Over the past few years an increasing number of rental companies have fitted built-in hydraulic generators to their machines and in particular with Rough Terrain scissor lifts. In the UK The Platform Company was a pioneer in this some seven or eight years ago. It has now become a must have option which appears to be spreading to smaller scissor lifts and even boom lifts. In the USA direct electric drive and better battery life is stimulating the fitment of DC inverters to provide a similar AC power source, although this has not yet become a popular option in Europe.





We spoke to the UK's leading supplier of hydraulic generators, UK Generators, about the pro's and con's of the modern hydraulic generator for aerial lifts.

Benefits of a hydraulic generator platform power pack include:

- 1. An onboard power supply significantly enhances operator productivity.
- Free standing tools integrated into the aerial work platforms relieve job site congestion by reducing individual equipment on site.
- Engine driven generators suffer from the extremely high occurrence of theft and poor worker productivity.
- Belt drive offers an excellent approach if the lifting platform can be adapted though it can be costly.
- The Platform Power Pack hydraulic generator is easy to install and secure and requires no maintenance. As it uses the platform's engine, running costs and noise are reduced.

- By utilising a single power source, on site job noise is reduced along with emissions and fuel consumption.
- 4. With power always on tap within the platform, working conditions are improved by making work less strenuous hence reducing operator fatigue, reducing the chance of injury.
- 5. The Platform Power Pack is virtually maintenance free.

Hydraulic better?

Over the years there have been a range of platform power supplies developed, some better than others.

 Inverters often appear to be a low cost solution but in many cases can be a poor choice due to battery damage and usability issues. Circuit Diagram

The latest power packs can be installed on any engine driven scissor lift or boom where hydraulic flow permits. The pack simply links into the existing platform's hydraulic system pump and a power line to the platform along with the addition of some basic wiring. UK Generators says that typical installation times on new machines can be as low as three hours. Retrofitting to older machines can take a little longer with cables and hoses being different for every machine type. However even the most challenging installation can easily be handled in a standard working day. The cost of a typical system has come down significantly over the years as they have become more of an 'off the shelf' product. Depending on size - normally between 3KVA and 6KVA - prices range from £500 to £1,500 all in.