

The innoelectric Battery System in use

To eliminate existing disadvantages of lead acid technology in the field of working machines innoelectric offers an innovative solution based on lithium-ion technology. The lithium-ion battery system is a drop-in replacement for lead acid batteries of 24 V working machines. Although the size and weight of innoelectric's solution is adapted to four 6 V lead acid batteries, the innoelectric Battery System is characterized by much higher usable capacity and operation range regarding temperature and charging power.

Numerous battery systems are in use throughout Europe for several years. In the following two exemplary working days with innoelectric's lithium-ion battery systems are shown. The innoelectric Battery System IN24/288LFP was installed in a Jekko Micrane SPX 424 C++ instead of lead acid batteries.

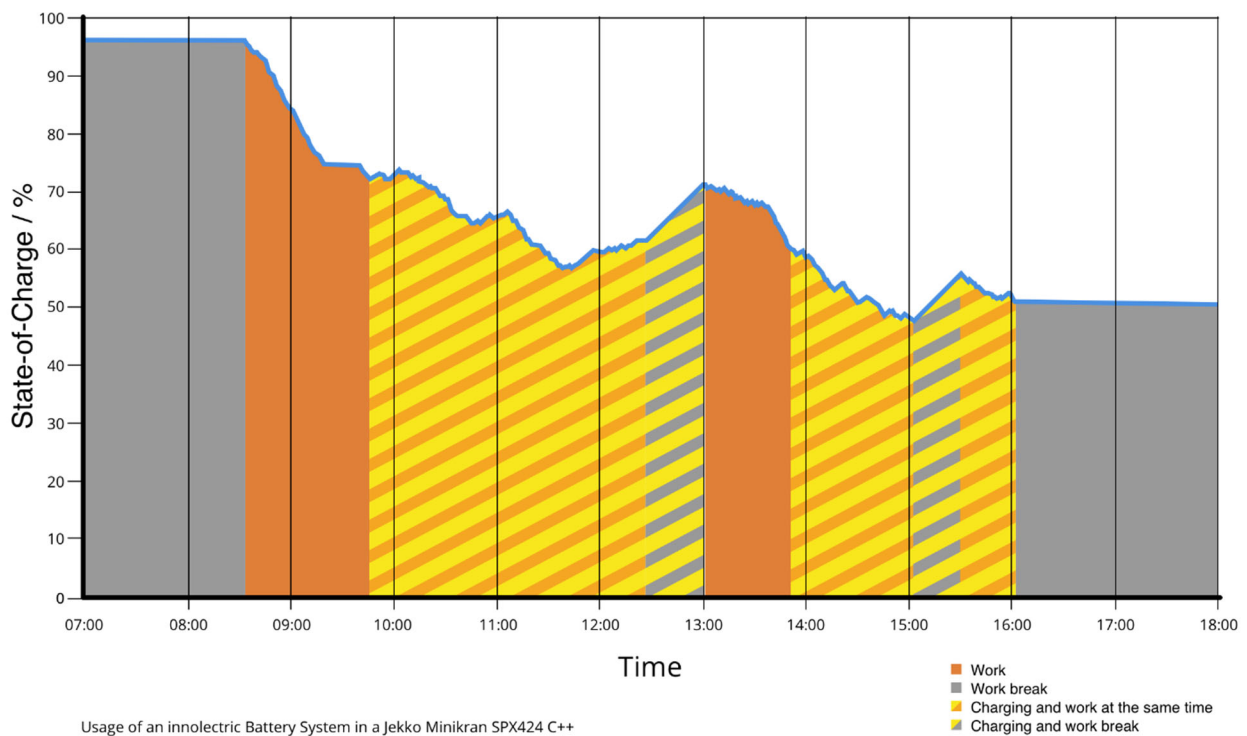
Work on two successive days

Operating profile of the Micrane

Working day 1

- 08:30 - 12:20 hours In use, temporarily simultaneous charging of the batteries
- 12:20 - 13:00 hours Lunch break, simultaneous charging of the batteries
- 13:00 - 15:00 hours In use, temporarily simultaneous charging of the batteries
- 15:00 - 15:30 hours Break, simultaneous charging
- 15:30 - 16:00 hours In use, simultaneous charging

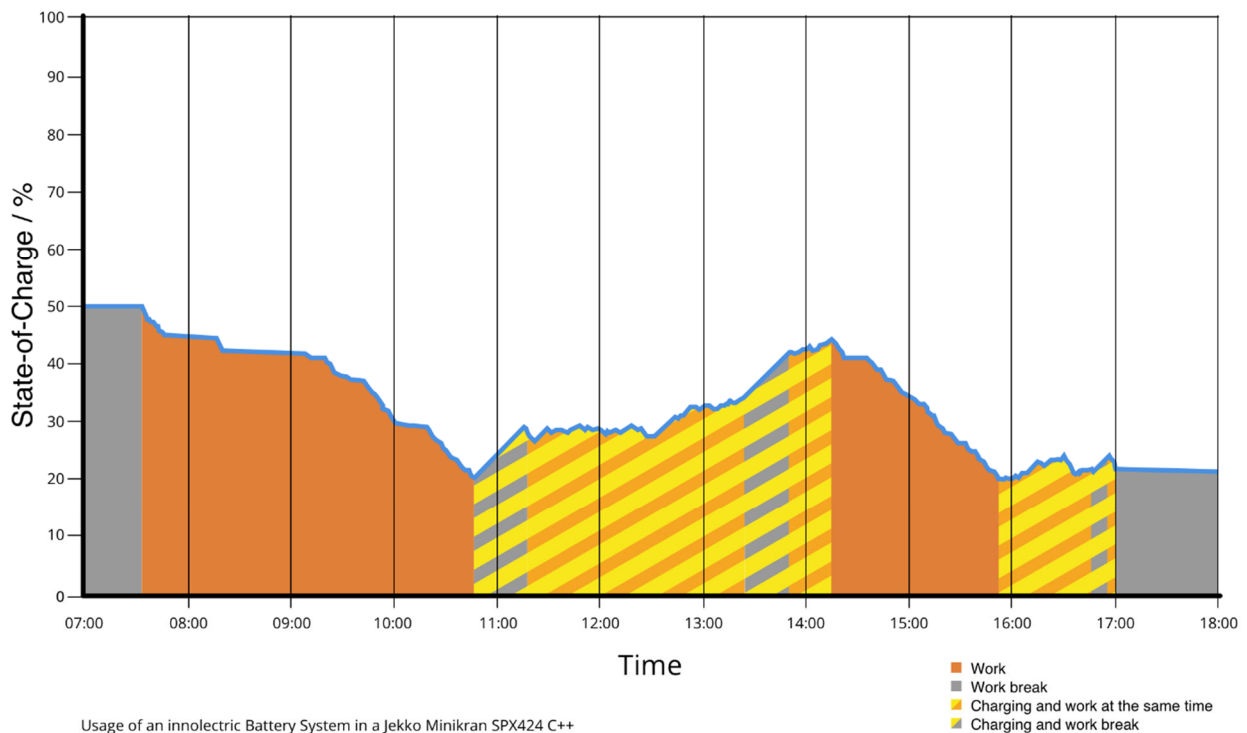
The state-of-charge at the end of the working day values on 51 %.



Working day 2

- 07:30 - 10:50 hours In use
- 10:50 - 11:15 hours Break, simultaneous charging
- 11.15 - 13:30 hours In use, temporarily simultaneous charging of the batteries
- 13:30 - 13:50 hours Lunch break, simultaneous charging of the batteries
- 13:50 - 17:00 hours In use, temporarily simultaneous charging of the batteries

Even at the end of the second working day the state-of-charge values on 21 %.



Conclusion

The exemplary working days show: A minicrane or other machinery equipped with lithium-ion battery systems by innoelectric can be in use for two working days in a row if used properly. This is true even in the case of a failure or missing charging options at the end of the first working day.

Thus shows the advantages compared with lead acid batteries. They are due to their lower capacity not able to make it until the end of the day. Even if the state-of-charge of the lead acid batteries is theoretically high enough, the battery must be charged overnight. Otherwise no use is possible during the next working day.

For further information please visit our website www.innoelectric.ag.

Do you have questions about our products and services or do you need a specific offer?
Contact us by e-mail at sales@innoelectric.ag. We will be pleased to assist you.