

Alcad



Alcad Stationary Ni-Cd batteries

▲ World-class services
to ensure your business success

Delivering quality

ALCAD

When reliability and safety are a must, you can rely on Alcad's services.

- ▲ **Alcad nickel-cadmium (Ni-Cd) batteries** deliver high performance, reliability and long life for business-critical industrial applications in harsh environments, especially in extremely hot or cold climates. They provide stationary back-up power that protects UPS and control systems and starts generators and engines in a wide range of installations across the world.

Our world-class products come with the backing of a world-class through-life service philosophy. Highly trained and experienced global service teams support you at every stage, from initial enquiry, through project design and delivery to after sales. This makes battery sizing, ordering and installation as simple and easy as possible.

- ▲ **Global service network delivers Alcad quality support wherever you need it**

Our global network of Alcad Certified Service Stations has been carefully selected and trained to deliver the highest possible level of local customer support. They offer a wide range of technical services including:

- installation of new batteries, commissioning and testing
- preventive and corrective maintenance
- fast-response troubleshooting
- removal of existing batteries

Visit www.alcad.com to know more about our products and services, and to contact our sales offices.





▲ Alcad offers a comprehensive suite of services delivered worldwide

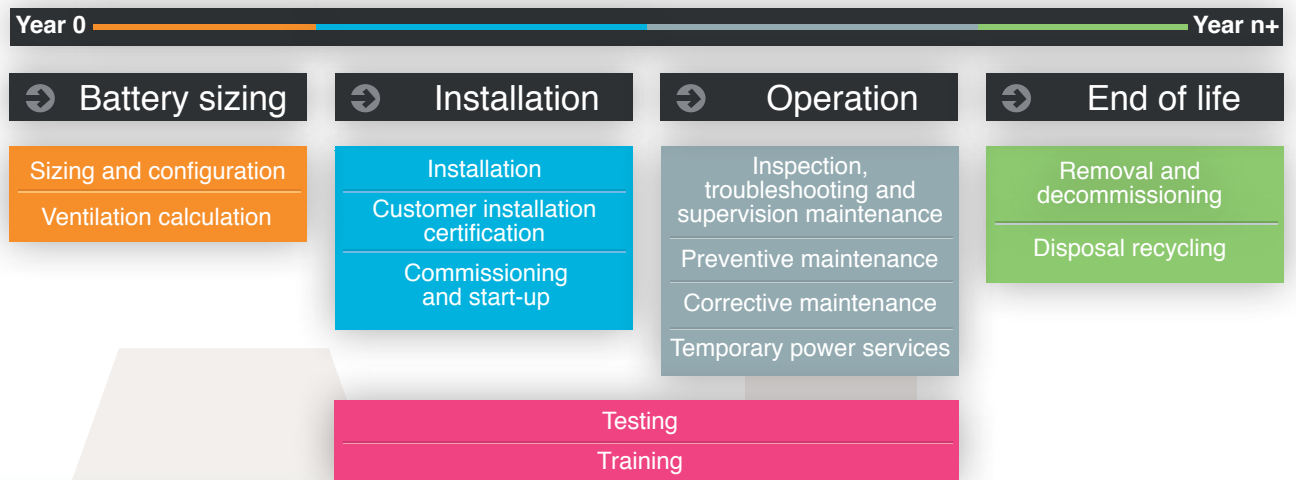
Alcad's focus on world-class products backed up by a wide array of services ensures that your battery is not only the most robust and reliable available, it is also maintained in optimum condition.

Our support enables you to enjoy the best return on your investment throughout an extended service life. At each step of your battery life cycle, Alcad is your ideal partner.

- ▲ Installation, customer installation certification, commissioning and start-up
- ▲ Preventive maintenance
- ▲ Inspection, troubleshooting, testing and supervision
- ▲ Corrective maintenance
- ▲ End of life, removal, decommissioning, recycling
- ▲ Customer training



Alcad offers world-class service before and



Installation

- Ni-Cd batteries (DC voltages, all applications)
- Battery racks (non-seismic and seismic)
- Battery cabinets – enclosures
- Battery spill containment systems

Customer installation certification

- Visit to site to ensure that the battery has been installed according to manufacturer's recommendations
- Detailed report provided upon completion

Commissioning and start-up

- Site visit to commission and start-up batteries
- Implementation of appropriate factory settings, adjustments and optimization of your systems
- Detailed report provided upon completion



“ Meeting with the technical Alcad experts gave me a better understanding of preventive maintenance and its technical impact on our battery performance. ”

Chief Engineer at an onshore oil & gas plant - Saudi Arabia

after your purchase

Inspection, troubleshooting and supervision maintenance

- Site visit to evaluate the battery condition
- Customer recommendations to maintain system integrity

Preventive maintenance

- Monthly, quarterly, semi-annually, annually
- Following IEEE 1106-2005, IEEE 1184-2006 and factory recommended practices
- Trends collected and analyzed

Corrective maintenance

- On-site intervention by a technician to trouble shoot and repair the battery
- Technical support provided for all major problems with detailed recommendations

Temporary power services

- Installation of temporary batteries for maintenance and test purposes: size is determined according to the existing battery model or load parameters

Testing

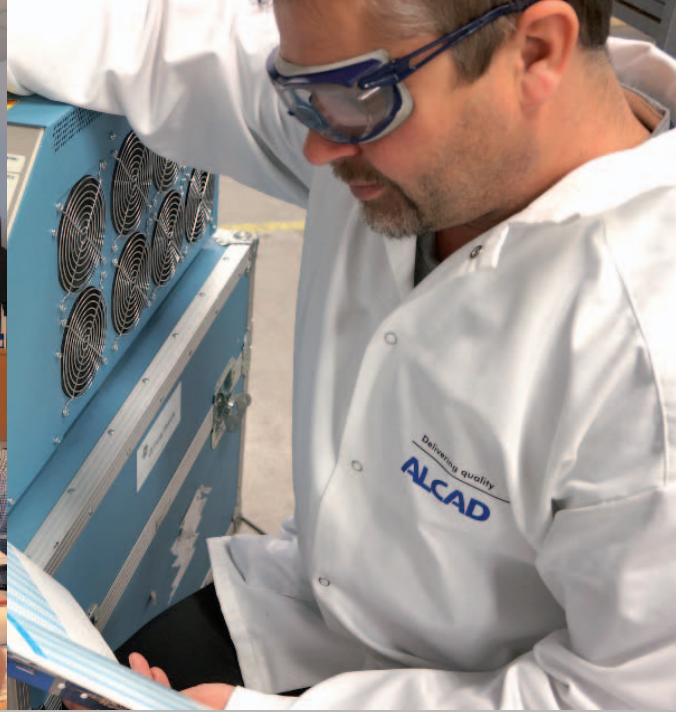
- Site visit to supervise customer's testing or maintenance
- Recommendations to prepare the existing system(s) for testing or maintenance
- On site battery discharge testing: acceptance, performance, service and capacity testing (IEC 60623 and/or IEC 62259)

Removal and decommissioning

- Teardown and removal of the existing battery at site
- Removal of batteries, battery racks and battery cabinets

Disposal recycling

- Disposal of batteries in accordance with local state and federal regulations, appropriate reclamation or recycling certificate(s) provided
- Disposal of batteries, battery racks and battery cabinets



▲ Better battery sizing for improved performance

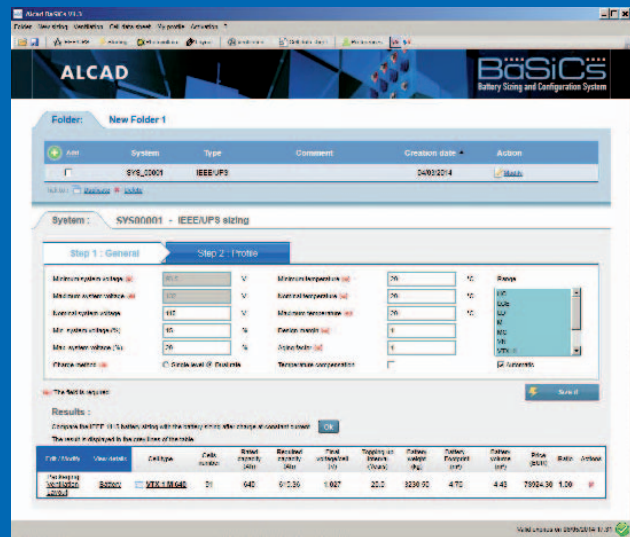
Our BaSiCs battery sizing and configuration system for stationary applications is an offline tool that helps you quickly and easily find the battery solution that fits your needs perfectly.

With layouts and cell datasheets completely integrated, a few clicks are all it takes to find what you need and to share the information with your local Alcad sales representative.

Installation of this application is very simple.

Only a few clicks are needed from our website:

<http://www.alcad.com/tools/battery-sizing>



▲ Get trained for optimum safety and uptime

Alcad has developed a comprehensive training programme to ensure that technicians and engineers have the right skills and expertise to properly install and maintain our batteries.

These courses cover basic and advanced levels, with a special focus on installation and maintenance guidelines and standards to ensure maximum power system performance and reliability.

“

The ‘battery step by step’ training course helped me in a number of ways, including structuring the knowledge I already had and learning about how to install and maintain our battery.”

Technical Manager at a contracting company - Venezuela



All course include theory and hands-on practice.
The courses can be delivered at customer sites worldwide or through one of our global facilities, by expert trainers who make the difference.

Get the right training to:

- ensure that system installation and maintenance practices are safe and reliable
- comply with legal safety standards and minimise risk of failure
- properly size the battery and charger or inverter for each application
- use proper troubleshooting method in problem solving

→ Battery fundamentals



1 day training package

To learn the fundamentals on Ni-Cd stationary batteries

- battery fundamentals
- battery technologies
- charging and discharging principles
- water consumption and ventilation
- battery sizing

→ Operation and maintenance



2 day training package

To learn how to install, operate and maintain Ni-Cd batteries for maximum service life

- 1 day package +
- battery installation
- safety rules
- battery capacity and service tests
- maintenance and troubleshooting
- hands-on training

Download full programmes and register on-line at: <http://www.alcad.com/tools/training-courses>
Customised training programmes are also provided to suit specific customer needs.

Feeling responsible for the environment

Alcad is committed to protecting and preserving the environment. We are engaged in a sustained effort to use resources responsibly and to act in a way that clearly demonstrates our great respect for the planet.

The Alcad plant in Oskarshamn, Sweden, has its own in-house recycling facility

Our collection network receives and dispatches customers' batteries at the end of their lives, taking them to fully approved recycling facilities in compliance with the laws governing trans-boundary waste shipments. Alcad has long-standing partnerships with collection companies in most European Union countries, in North America and all countries where this system can be implemented. The list of our collection points is available on the Alcad website.



www.alcad.com

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Document N°AS.1
Edition: April 2014
Photo credits: Alcad, Fotolia
Cap Interactif -14 01 470
Printed on PEFC paper
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