

ABB Power Electronics

Product Life Cycle Management Committed to operational reliability

Power and productivity
for a better world™



Optimized performance

Experts supporting experts

We are committed to the reliability of your operations. Which is why we make every possible effort to maximize your production uptime – and thereby lower your life cycle costs. Our Product Life Cycle Management model also provides you with the opportunities and support to ensure you reach this goal.



Improving operational reliability

Product Life Cycle Management supports asset management and budgeting by providing information at the right time. Implementation of a life cycle strategy improves operational reliability.



Maximizing production uptime

Operational reliability means non-stop processes. Accordingly, the systematic application of the Product Life Cycle Management model will maximize production uptime.



Lowering life cycle costs

Maximum production uptime minimizes failure costs and therefore reduces overall operational expenditure. In other words, Product Life Cycle Management lowers life cycle costs.

Product Life Cycle Management

Improving the reliability of your operations

ABB Power Electronics life cycle phases



Complete life cycle services ————— Limited life cycle services —————

Services and support		Services and support	
Full range of life cycle services and support is available.		Limited range of life cycle services and support is available.	Migration support is available.
Product and spares		Spares	
Product and spare parts are available.	Although the product has been replaced by a new active product, it may be available as a spare part or for extension purposes. Product life cycle enhancements are supported through upgrade and retrofit solutions. Spare parts are available.	Product is no longer available. Migration to the active product generation is recommended. Spare parts are available as long as materials can be obtained.	Product is no longer available. Migration to the active product generation is recommended. Spare parts are no longer available.

Increasing know-how and ever greater possibilities are driving rapid advances in technology. In addition, users demand high availability and smooth performance. The result is Product Life Cycle Management, developed by ABB to improve the reliability of operations and support the serviceability of your production assets.

At the heart of ABB's services is Product Life Cycle Management, a four-phase model based on the know-how and experience acquired by ABB during four decades in local and global markets. All services relating to ABB's Power Electronic Systems are planned according to this model.

Product Life Cycle Management allows us to inform users about the life cycle status of their equipment in the form of a proactive life cycle communication. These life cycle announcements and life cycle notes are issued by ABB as an integral part of the Product Life Cycle Management model with its four phases:

Active phase

The active phase starts when the product is launched. Here, state-of-the-art products are sold on the market and fully supported with spare parts, a range of life cycle services and product design enhancements.

Classic phase

Throughout the classic phase, ABB customers continue to benefit from complete life cycle services. The classic phase is closely linked to ABB's research and development work to provide ongoing support while developing future product generations. During this phase, ABB guarantees the availability of its life cycle services, product support and spare parts. In addition, ABB issues a life cycle announcement with information on the current life cycle status. In a follow-up step, ABB will send a life cycle note prior to transferring the product into the limited phase.

Limited phase

In the limited phase, development of the product has come to an end. Spare parts are available as long as components and materials can be obtained. Towards the end of the limited phase, services gradually become obsolete. As in the classic phase, ABB issues a life cycle announcement with current life cycle status information and will also send a life cycle note prior to the product becoming obsolete.

Obsolete phase

The ABB product is transferred to the obsolete phase when the provision of services is no longer possible at a reasonable cost, or when ABB can no longer support the product technically, or when the old technology is no longer available.

Life cycle communication

Providing updates

ABB Power Electronics life cycle communication

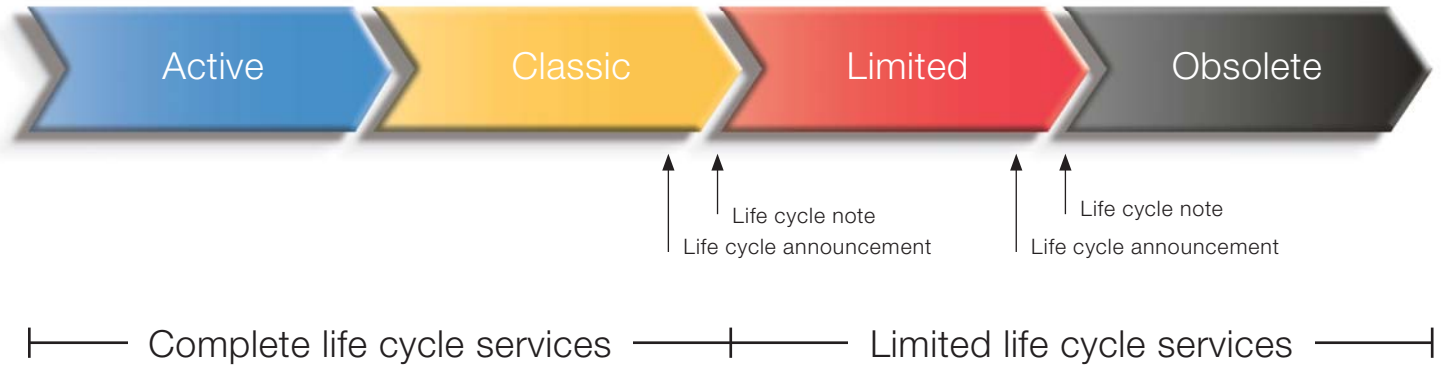


ABB maintenance is straightforward. As a rule, life cycle costs can be minimized by following ABB's maintenance schedules, which are available for every product and based on ABB's Product Life Cycle Management model.

The internal life cycle review takes into account factors like the availability of necessary resources and the state of know-how relating to technical support. As a result, it is possible to forecast the phase change within the life cycle of a product. ABB will then recommend control upgrades and retrofits in order to improve performance and extend equipment lifetimes.

ABB's life cycle communication concept is built on two main devices: in a first step, ABB will issue the life cycle announcement containing the latest life cycle status information. This is to update customers about the life cycle status of the equipment according to the four-phase model.

When the product approaches a life cycle phase change with associated limitations to life cycle services, ABB will issue a life cycle note. End-users are thus kept fully informed about the status of their equipment.

Life cycle announcement

This communication provides early information about the current equipment status based on the four-phase life cycle model.

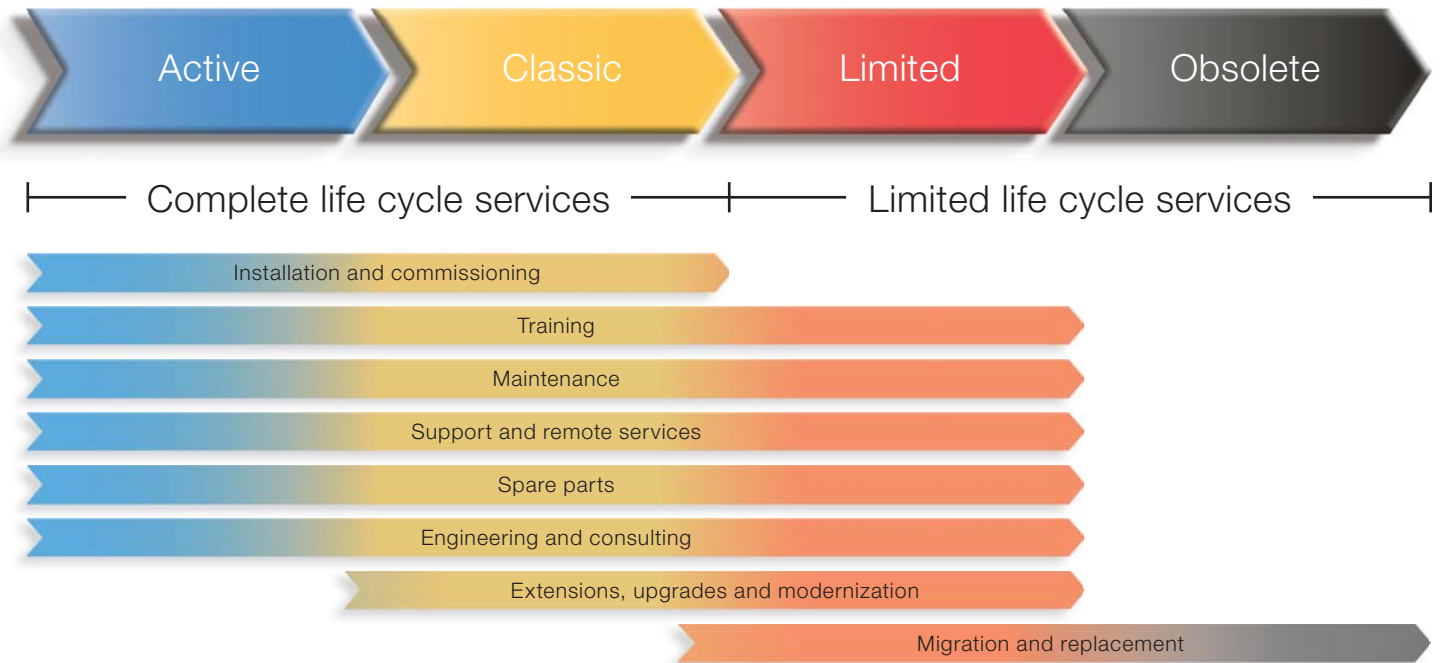
Life cycle note

In a second step, ABB will issue a life cycle note in order to highlight the point in time when your system is transferred into a phase with limited life cycle services.

Life cycle services

Maximizing service and product support

ABB Power Electronics life cycle support



Installation and commissioning

ABB and its channel partners offer professional installation and start-up services.

Training

Training services ensure that ABB's expertise in complex equipment operation is passed on to customer maintenance crews, helping them achieve maximum performance. We offer a full range of courses for classroom and on-site training as well as web-based training (e-learning).

Maintenance

Regular on-site preventive maintenance, carried out in good time by certified field service engineers, maximizes equipment reliability. Maintenance schedules help customers plan their maintenance budgets and control operational costs.

Support and remote services

On-site technical assistance together with advanced product and application support via telephone or e-mail offer fast failure analysis and rectification. Remote equipment monitoring enables ABB to provide expert on-line access for improved accuracy when carrying out condition assessment, wear trend prediction and long-term data analysis tasks.

Spare parts

ABB's spare part services aim to provide customers with the right spare part at the right place at the right time. ABB provides genuine spare parts and spare part kits, accompanied by the relevant documentation. In addition to new spare parts, ABB offers exchange units and reconditioned parts.

Engineering and consulting

Site-specific assessments to establish equipment performance and condition plus high-level technical analyses serve as a basis for decisions on the tactical implementation of improvements and the development of strategies for extending equipment operating life.

Extensions, upgrades and modernization

ABB's upgrade and modernization services are time- and cost-effective solutions that improve the reliability of operations and extend the life cycle of operational equipment at minimal cost. The service includes advice on viable options while taking into account technological developments and the life cycle of existing equipment. New technologies can improve and extend the functionality of existing equipment at a favorable cost. In many cases, a step-by-step upgrade will enhance the reliability, availability, maintainability and safety of operations.

Migration and replacement

At the end of a product's life, replacement or migration to the next product generation is necessary. ABB can advise on the best active products and system components and also make recommendations on the proper disposal of the legacy product.

Product Life Cycle Management

Ensuring full service support



Complete life cycle services ——— Limited life cycle services ———

Systematic product maintenance for enhanced reliability and performance

Preventive maintenance and reconditioning schedules are designed to ensure product reliability and optimum performance, as represented by the horizontal orange line.

If preventive maintenance and reconditioning are neglected, the product's performance and reliability deteriorate mainly through component aging and wear.

However, at a suitable point in its life cycle, as shown by the yellow line, a product's reliability and performance can be enhanced by upgrades, retrofits or replacements, thus ensuring that the product remains in the active or classic phase as described above.



Reliability of operations

ABB's life cycle services reduce the probability of interrupted operation and maintain performance at the intended levels. Product Life Cycle Management thus improves the reliability of operations and provides the basis for maximized process uptime and business success.

Availability of product support

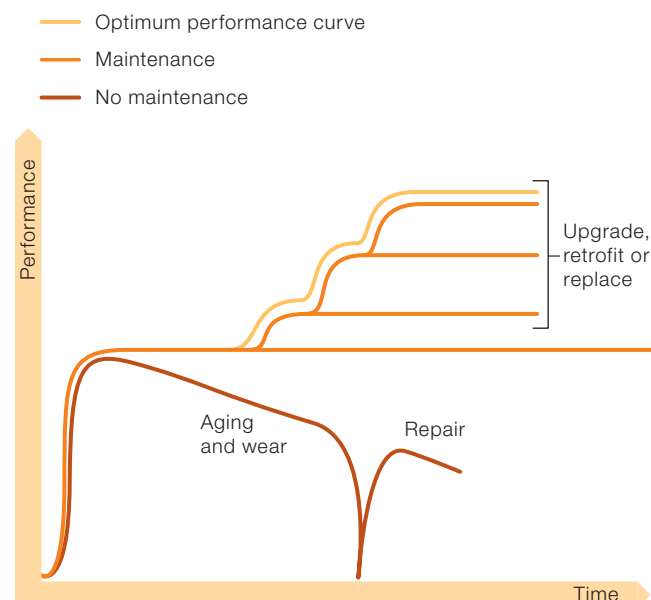
With Product Life Cycle Management, ABB provides an overview of component and parts status and the resources required. The resultant improvement in the availability of support services allows a rapid response to any issue. Life cycle services create opportunities to keep products and systems within a phase where product support is guaranteed and therefore prevent extended lead times when assistance is required.

Maintainability of products and systems

During the active and classic phases, ABB guarantees the availability of life cycle services. Active application of life cycle management safeguards full maintainability and serviceability. As a result, product lifetime is prolonged and the return on investment (ROI) is increased.

Safety of production assets

Applied life cycle services ensure the safety of production assets by supporting rapid fault diagnosis and providing both know-how and resources for appropriate remedial action. Furthermore, by providing state-of-the-art technology, Product Life Cycle Management will increase both the security of production and the safety of personnel.



One partner
Anytime, anywhere



With offices in over 90 countries, ABB is well placed to offer the best technical advice and local support around the clock. ABB's worldwide presence is built on strong local companies. By combining the experience and know-how acquired in local and global markets, we ensure that our customers in all industries get the most out of our products. For further details about all our services, please contact your nearest ABB office or ABB Power Electronics systems channel partner, or go to: www.abb.com/powerelectronics.

Success story: control upgrade

Replacement of the rectifier control by a state-of-the-art ABB AC 800PEC control system has resulted in an extension of the planned lifetime of the rectifier system, a shorter mean time to repair and lower repair costs. These results were realized because the control system has been restored to the active life cycle phase and is fully supported by ABB. Accordingly, production output has been increased and the customer now intends to replace the control system on a second rectifier.



Success story: industrial production

After delivery of three new ABB installations, the customer turned to ABB for advice on old rectifiers that had been supplied by a competitor. During the summer, due to the lack of cooling capacity, they could not be operated at full power. ABB analyzed the system and proposed an optimized cooling solution. The new cooling system was dimensioned, manufactured, installed and commissioned by ABB. As a result, plant productivity has been increased substantially – and the customer can now operate the rectifiers year-round at 100 % power.

Contact your local service center

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