Transformer services for the metals industry
Ensuring reliability and uptime for your production-critical assets
Your electric furnaces are at the heart of your operation and keeping them running efficiently means higher production with lower costs.

Our team has vast experience working alongside the metal industry and we have developed innovative technologies and services to reduce your downtime and lower your energy costs.

Running an electric arc furnace places a larger amount of stress on your transformers than most other applications. This causes transformer problems such as tap changer coking, overheating and gassing.

These challenges are why ABB offers a number of services tailored to the metals industry:

- Providing greater visibility of your assets’ performance and health with ABB’s Transformer Intelligence™ platform
- More exhaustive routine maintenance procedures
- Vacuum tap changer retrofits to allow for more tap switching operations between maintenance
- Dry-type bushing replacements for higher reliability
- Transformer repairs for a fast and cost-effective solution to resuming production
- Local presence and innovative solutions that cost you less
Transformer Intelligence™

Greater visibility of your assets’ performance and health.

ABB’s Transformer Intelligence platform allows for better management of your transformer assets, enabling critical maintenance decisions and life-cycle planning.

Leverage today’s precision electronics to collect data from your transformer’s vital signs via our Sensor Technologies.

The raw data is then rendered into useful insights of your individual transformers through our Monitoring and Diagnostics offer.

Your organization can then opt to harmonize the data from your entire fleet with a powerful analytical software that incorporates over 100 years of design and service experience. This powerful Asset Management Solution provides predictive and prescriptive maintenance procedures so you can better deploy resources.

Should you opt to skip the analytical approach or simply need advice, our Expert Services teams are always present to assist you with all matters pertaining to your assets.
Intensive routine maintenance

When basic routine maintenance doesn’t make the cut – operate with confidence knowing your transformers are maintained according to how they are used.

**ABB’s maintenance expertise**
Transformers operating in the metals industry are often used more intensively. We recognize this and offer tailored services to ensure your transformers provide continuous production.
- Years of ABB design expertise position our experts as the best suited option for maintenance operations regardless of the original manufacturer
- ABB stands by its maintenance routine to assure your peace of mind that these critical assets are properly maintained
- For intensive production, every piece counts: authentic ABB parts offer reliability, performance, value and safety for your day-to-day operations
- ABB’s innovative maintenance solutions are quick operations that minimize your production downtime
Tap changer maintenance and overhauls

Reliable tap changers for a demanding industry.

Benefits of using ABB tap changers
Consistency is key. A reliable tap changer will regulate your furnace’s input to ensure efficient and stable production.

ABB’s tap changers operate with arc-quenching vacuum interrupters resulting in more switching thus longer lifetimes.

Proper tap changer maintenance is crucial since over 30% of transformer failures are due to tap changer issues¹. This number increases dramatically in industries that intensively use tap changers such as arc furnace applications.

An ABB retrofit will result in a tap changer that is:
• Built to last with the best technology and quality materials
• Easiest to maintain by using open designs and the absence of special tools
• Rigorously tested to secure excellent performance particularly under strenuous operation
• Continuously supported through spare parts availability
Bushing replacements

Upgrade to the latest technology and mitigate risk.

Replacing a high-voltage bushing is a critical procedure that should be performed by an experienced transformer service organization. Many factors come into play when selecting a bushing to ensure a perfect fit.

Some advantages of upgrading to a dry-type bushing:
- Reduced risk of explosions and fires due to use of polymer insulators instead of oil-filled porcelain
- Lower maintenance due to no leakage of oil and a hydrophobic surface that reduces the need for cleaning
- Can be stored and transported at any angle
- Lower weight and size allow for quicker installation
Transformer repairs

Faster repairs for less downtime and lower costs – trusted expertise to reduce costly production delays.

**Factory and onsite repairs**

Before recommending whether a transformer should be repaired onsite, in a workshop or simply replaced, ABB performs technical and economical analyses and will execute the solution depending on what factors are most important to you.

**ABB’s transformer repairs are:**

- Backed by the largest original design database
- Compliant with the same strict quality controls applicable to new transformers
- Treated to lower moisture content levels to factory dryness standards due to ABB’s exclusive Low Frequency Heating (LFH) technology
- Rigorously tested in factory or onsite with our TrafoSiteTesting solution
Digital transformer service contract
Do more. Together.

Cut complexity, get expert support and stay informed
- Get assigned a single point of contact for prioritized local service via exclusive e-mail and 24/7 phone support
- Receive a bank of 10 hours per enrolled transformer to enable rapid response and technical consulting
- Benefit from a yearly site inspection conducted by an ABB expert, including one condition assessment report
- Save against ABB published labor rates for the applicable calendar year (maintenance, inspection, testing and diagnostic services)
- Save on transformer-specific parts
- Keep track of your service history and reports using myABB Portal
- Receive notifications on latest cybersecurity patches and software updates

+25 Countries with transformer service units

~1,300 Employees dedicated to customer services

24/7 Availability with our CUBE follow-the-sun service

> 100k Transformer installed base
The ABB transformer service team
Local teams with global expertise

Further leveraging ABB’s expertise
Our local service teams are constantly innovating to provide support in the best ways possible.
- TXplore™ submersible robot conducts visual inspections without the personnel risk and extended downtimes
- Oil reclamation and de-gassing leaves oil better than new
- Mature Transformer Maintenance Program (MTMP) lets our experts evaluate and deliver a health report for all your assets
- Onsite testing allows us to verify the integrity of your transformer at a regular interval, after a fault or when you are notified of the need via the Ellipse condition monitoring platform
- Our extensive transformer design and manufacturing experience allows us to identify the condition of critical assets and determine actions that lower risk and optimize maintenance budgets
- Training courses to ensure the continuous development of your team by gaining insightful knowledge for operating, maintaining and repairing your transformers

1. Oil remains cleaner longer when compared to conventional dump and fill.
Additional information
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