9 steps to optimizing MEGADRIVE-LCI operation



1. Understand the challenges

Traditional LCI drive control methods can be highly sensitive to grid voltage sags leading to loss of torque during the sag, causing application to stop.

2. Conduct front-end engineering and design (FEED)

ABB's expertise and approach mitigates any risk via detailed preparation and planning, encompassing all aspects of engineering and logistical risk management.



3. Analyze applications fully

Select, dimension and determine ways to extend life of extruders, propulsion systems, blowers, pumps and fans.



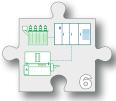
4. Perform failure mode and effects analysis (FMEA)

FMEA determines drive system resilience by measuring and evaluating the potential for failure throughout its life cycle.



5. Implement findings

Prevent failure by implementing redundant circuits through to optimizing component maintenance plans.



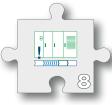
6. Maximize performance through model predictive torque control (MPTC)

MPTC is based on a specific model for the converter and motor, predicting and optimizing future behavior of drive based on customer process requirements and restrictions - brings unprecedented availability based on the process requirements.



7. Consider ongoing expert support

Step-by-step assistance during rollout helps ensure the advanced solution will operate as predicted and beyond the earlier boundary limitations.



8. Proactively manage obsolescence risks

Be aware of when drive system is approaching end of its useful life and consider upgrades and retrofits – before production is negatively impacted.



9. Optimize return on investment

Good housekeeping ensures:

- Consistent productivity
- High reliability
- Increased safety
- Energy efficiency

